

## Sharp A824U

Professional Advanced LCD Laser Installation Projector

# Datasheet



### Precision, Clarity, Enduring Performance

Delivering consistent, reliable performance with vivid colour and clarity, the Sharp A Series is engineered for fixed installations that require dependable image quality and low maintenance.

With precise white point calibration and an extended colour space, the A Series uses 12-bit colour signal processing to achieve rich saturation and deep contrast, perfect for detailed visual content in education, public displays, and simulation environments. Its super-silent operation makes it well suited to acoustically sensitive spaces such as lecture halls, museums, and control rooms.

The sealed optical engine, rated IP5X against dust ingress, maintains stable image quality and sustained brightness over time. The filter-less LCD design combined with a laser light source removes the need for lamp replacements, minimising service costs and enabling up to 20,000 hours of operation.

Installation is streamlined with Sharp's ProAssist software, enabling remote setup and adjustment even when the projector is inaccessible. Wide lens shift, along with advanced features such as HDBaseT-out, blending, and stacking capabilities, ensures flexible integration in complex environments.

### Benefits

**No lamp replacement** – up to 20,000 h maintenance free operation possible due to Laser Light

Source.

**No filter service required** – a completely sealed optical laser LCD engine allows a filter-free design. Brilliant colour brightness is maintained and servicing costs need no longer feature in your budget.

**Super Silent operation** – patented sealed light engine incorporating innovative fan design not only protects against dust ingress but dramatically reduces noise.

**Impress with vivid colour & contrast** – brilliant white and wide colour space with high dynamic contrast supporting HDR10 standard via HDMI interface.

**Incredible visualisation capabilities** – impressive free tilt and portrait installation capability, unique geometric adjustment, tiling and camera based blending.

## Product Information

|               |                                                        |
|---------------|--------------------------------------------------------|
| Product Name  | Sharp A824U                                            |
| Product Group | Professional Advanced LCD Laser Installation Projector |
| Order Code    | 60006245 (B), 60006243 (W)                             |

## Image

|                                      |                                                                                              |                                                                |                                                           |                                 |
|--------------------------------------|----------------------------------------------------------------------------------------------|----------------------------------------------------------------|-----------------------------------------------------------|---------------------------------|
| Projection Technology                | 3LCD Technology                                                                              |                                                                |                                                           |                                 |
| Native Resolution                    | 1920 x 1200 (WUXGA)                                                                          |                                                                |                                                           |                                 |
| Aspect Ratio                         | 16:10                                                                                        |                                                                |                                                           |                                 |
| Contrast Ratio                       | 3000000:1                                                                                    |                                                                |                                                           |                                 |
| Brightness                           | 7500 Lumen (approx. 80% in Eco Mode), with std. optional lense; compliant with ISO21118-2012 |                                                                |                                                           |                                 |
| Brightness (Boost Mode)              | 8200 Lumen                                                                                   |                                                                |                                                           |                                 |
| Lamp                                 | Laser Light Source                                                                           |                                                                |                                                           |                                 |
| Light Source Life [hrs]              | 20000 <sup>1</sup>                                                                           |                                                                |                                                           |                                 |
| Lens                                 | 5 motorized lens options                                                                     |                                                                |                                                           |                                 |
| Lense Adjustment                     | Motorized                                                                                    |                                                                |                                                           |                                 |
| Lens shift                           | H:±20, V:+10,-50                                                                             |                                                                |                                                           |                                 |
| Keystone correction                  | +/- 40° manual horizontal / +/- 40° manual vertical                                          |                                                                |                                                           |                                 |
| Projection Factor                    | depending on lens selection (std. option XP-41ZL at 1.3-3.02:1)                              |                                                                |                                                           |                                 |
| Projection Distance [m]              | 0.7 – 50.9                                                                                   |                                                                |                                                           |                                 |
| Screen Size (diagonal) [cm] / [inch] | Maximum: 1,270 / 500"; Minimum: 101.6 / 40"                                                  |                                                                |                                                           |                                 |
| Zoom                                 | Motorized and manual (depending on lens)                                                     |                                                                |                                                           |                                 |
| Focus Adjustment                     | Motorized and manual (depending on lens)                                                     |                                                                |                                                           |                                 |
| Supported Resolutions                | 1080i/50/60;<br>1080p/24/25/30/<br>50/60;<br>1920x1200 (WUXGA) -<br>640x480 (VGA);           | 2560 x 1600 (WQXGA);<br>2560p/1080;<br>3840 x 2160 (4KUHD/60); | 4096 x 2160 (4k/ 60);<br>480i/60;<br>480p/60;<br>576i/50; | 576p/50;<br>720p/50;<br>720p/60 |
| Frequency                            | Digital Frequency: Horizontal: 15/24 - 153 kHz; Vertical: 24-120 Hz                          |                                                                |                                                           |                                 |

## Connectivity

|         |                                                                                                            |
|---------|------------------------------------------------------------------------------------------------------------|
| Digital | Input: 1 x HDBaseT; 2 x HDMI™ supporting HDCP 2.2<br>Output: 1 x HDBaseT supporting HDCP 2.2               |
| Audio   | Input: 1 x HDBaseT audio support; 2 x HDMI audio support<br>Output: 1 x 3.5 mm Stereo Mini Jack (variable) |

|         |                                                                                       |
|---------|---------------------------------------------------------------------------------------|
| Control | Input: 1 x 3.5 mm Stereo Mini Jack (Wired Remote); 1 x D-Sub 9 pin (RS-232), Ethernet |
| LAN     | 1 x RJ45                                                                              |
| USB     | 1 x Type A (USB 2.0 high speed)                                                       |
| 3D Sync | Output: 1 x Mini DIN 3pin                                                             |

## Remote Control

|                |                                                                                                                                                                                                        |
|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Remote Control | Audio Control; Digital Zoom; Geometric Correction; ID Select; ID set; Power (On-OFF); Select (up, down, left, right); Shutter function; Source Select; Test Picture; Zoom/Focus and Lens Shift Control |
|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## Electrical

|                       |                                                                     |
|-----------------------|---------------------------------------------------------------------|
| Power Supply          | 100-240 V AC; 50 - 60 Hz                                            |
| Power Consumption [W] | 615 (Normal) / 560 (Eco) / 0.8 (Network Stand-by) / 0.28 (Stand-by) |

## Mechanical

|                             |                                         |
|-----------------------------|-----------------------------------------|
| Dimensions (W x H x D) [mm] | 599 x 208 x 490 (without lens and feet) |
| Weight [kg]                 | 24.1                                    |
| Fan Noise [dB (A)]          | 28 / 34 (Eco / Normal)                  |
| Colour Versions             | Black; White                            |

## Environmental Conditions

|                            |                         |
|----------------------------|-------------------------|
| Operating Temperature [°C] | 0 to 40                 |
| Operating Humidity [%]     | 20 to 80 non-condensing |
| Storage Temperature [°C]   | -10 to 50               |
| Storage Humidity [%]       | 20 to 80 non-condensing |

## Ergonomics

|                       |                                        |
|-----------------------|----------------------------------------|
| Safety and Ergonomics | CE; EAC; ErP; RoHS; TUEV Type Approved |
|-----------------------|----------------------------------------|

## Additional Features

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Special Characteristics | 3D ready; 4K/60Hz interfaces; AMX Beacon; Built-in Display/Multiscreen Splitter; Cinema Quality Picture (CQP) Processing for best image quality; Crestron RoomView; DICOM simulation; Digital 3D Reform™; Direct Power-Off Function; Edge Blending Function; Free Tilt; Geometric Correction; HDBaseT; HDBaseT-out signal connection; HDR10 Support; High Altitude Mode; Hollywood Quality Video Processing for best image quality; HTTP Browser Control; IP5X/IP6X rated; Keystone Correction (H=±40°, V=±40°); LAN control; Lens Memory; Lens Shift (vertical +0.5 max/-0.1 max, horizontal ± 0.3 max.); Light Source Adjustment; Manual Wall Color Correction; Multi-Screen compensation mode; NaViSet Administrator 2; Optional User Logo; OSD with 27 languages; Password Security System; PIP/Side by Side, HDMI - Input; PJ LINK; Portrait Setting; Rec2020 to Rec709 colour conversion; RS-232 Control; Seamless Switching; Stacking Function; Test Pattern; Timer-Function; UHD player support; Up to 20,000 hrs Light Source Life |
|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## Green Features

|                      |                                                                                                                                           |
|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| Energy Efficiency    | ECO scheduler; Intelligent power management; Less than 0.3W stand-by power; Longer light source life; Software scheduling; Timer function |
| Ecological Materials | 100% recyclable packaging; Downloadable manuals                                                                                           |
| Ecological Standards | ErP compliant                                                                                                                             |

## Warranty

|              |                                          |
|--------------|------------------------------------------|
| Projectors   | 3 years pan-European service             |
| Light Source | 3 years or 10000h (whatever comes first) |

## Shipping Content

|                   |                                                                       |
|-------------------|-----------------------------------------------------------------------|
| Shipping Contents | IR Remote Control (RD-480E); Power Cord; Projector; Quick Setup Guide |
|-------------------|-----------------------------------------------------------------------|

## Optional Accessories

|                      |                                                                                                                                                     |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| Optional Accessories | 5 optional bayonet lenses; Cable Cover (XP-13CV-W, XP-13CV-B); Universal Ceiling Mounts (PJ02UCMPF)                                                 |
| Lenses - motorized   | XP-40ZL/NP40ZL (0.79-1.11:1); XP-41ZL/NP41ZL (1.3-3.02:1); XP-43ZL/NP43ZL (2.99-5.93:1); XP-44ML-A/NP44ML-PA4 (0.32:1); XP-50ZL/NP50ZL (0.6-0.75:1) |

<sup>1</sup> 50% of initial brightness at the end of specified laser life time at 25 degree ambient temperature.

\* This product has been equipped with a laser module and is classified as Class1 of IEC60825-1 Ed3 2014 and is classified as RG3 of IEC62471-5 Ed1 2015.

DO NOT LOOK DIRECTLY INTO THE BEAM.



RoHS



TUEV Type Approved



ErP



CE

This document is © 2025 Sharp NEC Display Solutions Europe GmbH.

All rights reserved in favour of their respective owners. All hardware and software names are brand names and/or registered trademarks of the respective manufacturers. All specifications are subject to change without notice. Errors and omissions are excepted. 16.10.2025