



4K 30fps



Dual-camera  
Collaboration



Intelligent  
Tracking



Automatic  
Program  
Direct



Automatic  
Generate  
Whiteboard  
Video Stream



# Dual-lens 4K Intelligent Teaching Camera

## MODEL: LVC051E

LUXVIEW

AV SMART SYSTEM



## MAIN FEATURES

### 4K UHD VIDEO QUALITY

The camera utilizes a 1/2.7" high-quality 4K CMOS sensor with 8.31 Megapixels, providing an ultra-clear video teaching experience.

### Dual Lens

Use panoramic lens+close-up lens, 8-megapixel close-up lens, and 5-megapixel wide-angle panoramic lens, which can not only cover the entire classroom, but also provide high-definition close-up screens.

### Ultra Special Camera

The 8-megapixel 21° Teacher Machine Speed The clarity is equivalent to the sharpness of the 42° lens at 34 million pixels. The close-up of the 44° student machine is equivalent to the definition of the 95° lens under 58 million pixels

### Intelligent Teaching Tracking

The built-in leading image recognition and tracking algorithm can achieve a smooth and natural tracking effect without any auxiliary positioning camera or tracking the host. Different cameras before production can achieve teacher tracking or student tracking. It can output a panoramic view of up to 5m and 4K close-up screens at the same time.

### Micro PTZ

The newly designed micro-mechanical gimbal can reach  $\pm 40^\circ$  horizontally. With the automatic close-up close-up lens (teacher machine), it is easier for teachers to clearly enter the country. At the same time, it supports electronic gimbal, which is more large and see more clearly. Seamless combination of mechanical gimbal and electronic gimbal reduction reduces the tiny rotation of the mechanical gimbal.

### Multi-interface Output

Support multiple video output interfaces such as POE, USB 3.0, and 3G-SDI interface<sup>1</sup> to meet various video input requirements such as recording and broadcasting hosts and large screen OPS.

### POE and POC Front Line

At the same time, the two-way order output (YUY2, MJPEG, and H.264 are allowed) to reduce the pressure of the host code. (The second road only supports H.264).

### Built-in Guide

Support external and built-in conductors to meet the needs of different recording hosts and interactive terminals. Teacher machine and student machine matching can output multi-lane-driven pipes from the network or USB interface.

## Camera Spec of Close-up Camera

|                         |   |
|-------------------------|---|
| Sensor                  | 1/2.7 inches, CMOS, Effective Pixels: 8.31 Megapixels |
| Scanning Mode           | Progressive   |
| Type of Lens Mount      | M12   |
| Student Close -up Lens  | f=7.2mm, Horizontal FOV: 44°                          |
| Teacher Close -up Lens  | f=16mm, Horizontal FOV: 21°                           |
| Digital Zoom            | 2x  |
| Minimum Illumination    | 0.5 Lux @ (F2.0, AGC ON)                              |
| Shutter                 | 1/30s ~ 1/10000s                                      |
| White Balance           | Auto, Indoor, Outdoor, One Push, Manual, VAR          |
| Digital Noise Reduction | 2D&3D Digital Noise Reduction                         |
| Backlight Compensation  | Support   |
| Automatic Focus         | Teacher Machine Speed Line Support                    |
| Pan Angle               | ±40°  |
| Tilt Angle              | +5° ~ -30°  |
| Maximum Rotation Speed  | 60°   |
| Image Flip              | Support   |
| Image Freeze            | Support   |
| Preset Position         | 255   |
| Preset Accuracy         | 0.5°  |

## Camera Spec of Panoramic Camera

|                         |   |
|-------------------------|---|
| Sensor                  | 1/2.7 inches, CMOS, Effective Pixels: 4.68 Megapixels |
| Scanning Mode           | Progressive   |
| Type of Lens Mount      | M12   |
| Student Close -up Lens  | f=2.2mm, Horizontal FOV: 110°                         |
| Teacher Close -up Lens  | f=7.2mm, Horizontal FOV: 44°                          |
| Minimum Illumination    | 0.5 Lux @ (F2.0, AGC ON)                              |
| Shutter                 | 1/30s ~ 1/10000s                                      |
| White Balance           | Auto, Indoor, Outdoor, One Push, Manual, VAR          |
| Digital Noise Reduction | 2D&3D Digital Noise Reduction                         |

|                        |            |
|------------------------|------------|
| Backlight Compensation | Support    |
| Tilt Angle             | +0° ~ -24° |
| Image Flip             | Support    |
| Image Freeze           | Support    |

## Audio

|                            |  |
|----------------------------|--|
| Built -in Array Microphone | 4 Microfen array, 100Hz to 16kHz frequency response  |
| Simulation Audio Input     | 1 x LINE In  |
| Simulation Audio Output    | 1 x LINE Out   |
| Digital Audio Interface    | 1 x USB audio input output;<br>1 x SDI audio output;<br>1 x network audio input output, supports 1588 -based audio clock synchronization |

## USB Spec

|                                  |  |
|----------------------------------|--|
| Operating System Supported       | Windows® 7 ( Only support 1080P and below ),<br>Windows 8.1 and above version ;<br>macOS™ 10.10 and above version ;<br>Google™ Chromebook™ Version 29.0.1547.70<br>and above version ;<br>Linux ( Need to support UVC) |
| Hardware Requirements            | 2.4 GHz Intel® Core 2 DUO processor or higher;<br>2 GB memory or higher;<br>USB 3.0 or USB 2.0 interface   |
| Color System / Compression       | YUY2 / MJPEG / H.264   |
| Video Format                     | Maximum 4K and other different frame rates and resolution video formats  |
| USB Video Communication Protocol | UVC 1.1  |
| USB Audio                        | The maximum 48K sampling rate, supports UAC1.0   |
| UVC PTZ Control                  | Support  |

## Network Spec

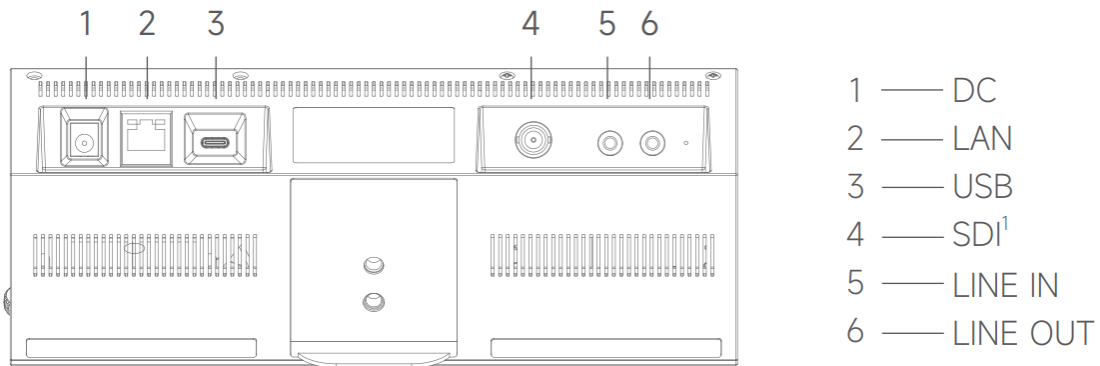
|                          |  |
|--------------------------|--|
| Video Compression        | H.265 / H.264 / MJPEG  |
| Video Stream             | First Stream, Second Stream,<br>Third Stream, Fourth Stream                      |
| First Stream Resolution  | 3840x2160, 1920x1080,1280x720 etc.   |
| Second Stream Resolution | 2880x1620, 1920x1080,1920x1080 etc.  |
| Third Stream Resolution  | 1920X1080,1280x720,1024x576,960x540 etc.   |
| Fourth Stream Resolution | 1920x1080,1280x720,1024x576,960x540 etc.   |
| Video Bit Rate           | 32Kbps ~ 16384Kbps   |
| Bit Rate Control         | VBR, CBR   |
| Frame Rate               | 25/30fps   |
| Audio Compression        | AAC/G.711A   |
| Audio Bit Rate           | 96Kbps、 128Kbps、 256Kbps   |
| Protocols                | TCP/IP, HTTP,HTTPS,NDI,SRT,RTSP, RTMP, Onvif, DHCP,<br>GB/T 28181. Multicast etc |

## I/O

|                               |  |
|-------------------------------|--|
| USB Interfaces                | 1 x USB 3.0: TYPE-C  |
| HD Interfaces                 | 1 x SDI, Support 1080P60, Support PoC (Optional)                               |
| Network Interface             | 1 x RJ45: 10M / 100M adaptive Ethernet; PoE+ supported, Support NDI (Optional) |
| Audio Interface               | 1 x LINE In: 3.5mm Jack  |
| Power Interface               | DC005 type (DC 12V)  |
| Reset Button                  | RESET  |
| Infrared Interface (Optional) | Support  |
| Indicator Light               | POWER , STANDBY  |

## Generic Spec

|                       |  |
|-----------------------|--|
| Input Voltage         | DC 12V/PoE (802.3af)/ PoC1               |
| Input Current         | 1A (Max.)                                |
| Operating Temperature | 0° C ~ 40° C                             |
| Storage Temperature   | -40° C ~ 60° C                           |
| Power Consumption     | 12W (Max.)                               |
| Dimension             | 242.05mm (W) × 86.03mm (D) × 70.55mm (H) |
| Net Weight            | TBD                                      |



## Disclaimer

Affected by product configuration and manufacturing process, the actual body size/body weight may be different, please refer to the actual product. The product images in this specification are for illustrative purposes only. The actual product effect (including but not limited to appearance, color, size) may be slightly different, please refer to the actual product.

In order to provide accurate specifications as far as possible, the text description and picture effects of this specification may be adjusted and revised in real time, so as to match the actual product performance, specifications and other information.

© 2024 LUXVIEW The logo and other LUXVIEW marks are owned by LUXVIEW and may be registered. All other trademarks are the properties of their respective owners. LUXVIEW assumes no responsibility for any errors that may appear in this publication. Product, pricing and feature information contained herein is subject to change without notice