4K UHD USB Camera

BizEye 90



User Manual

AV Access

Table of Contents

Introduction **2**

Overview 2

Features 2

Package Contents 2

Panel 3

Installation and Application **3**

Application **4**

Gesture Control **4**

AI Tracking Mode Switching 4

Zoom In/Out 5

BizEye Tool Control **6**

Specifications **10**

Warranty **12**

Introduction

Overview

This product is a 4K Ultra HD USB camera featuring an ultra-wide-angle, distortion-free lens. It supports high-quality video output up to 4K@30 fps and offers automatic color correction and white balance for consistent performance in various lighting conditions, including natural sunlight. The built-in noise-reducing microphone ensures clear audio pickup within a range of up to 3 meters.

The camera is easy to install and fully plug-and-play. It is compatible with major operating systems such as Windows 10/11 and macOS, and works seamlessly with popular video conferencing and streaming platforms, including OBS (Open Broadcaster Software) and XSplit Broadcaster—making it ideal for a wide range of applications.

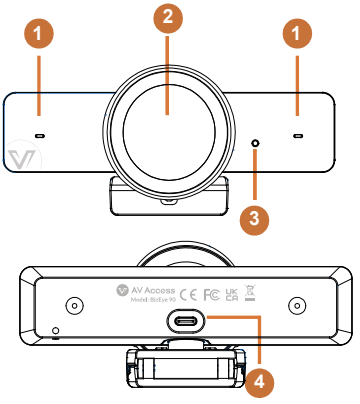
Features

- Supports 4K Ultra HD up to 4K@30fps encoding output, and down-compatible with 1080p and 720p.
- Supports MJPEG, NV12, H.264 and H.265 video compression to comply with most application platforms.
- Full functional USB 3.0 / USB 2.0 connection, power supply, video and audio all in one via USB 3.0 Type-A to Type-C cable.
- 120° ultra-wide-angle distortion-less lens.
- Built-in auto noise reducing mic, which can pick up clear sound in the distance of 3m.
- Fully supports UC and web conferencing platform, like Skype business, Zoom, WebEx, etc.
- Auto Framing / Presenter Tracking /Individuals Gallery based on AI technology makes meetings more intimate and friendly.
- Supports ePTZ with a maximum of 5x digital Zoom.
- Supports gesture control and BizEye tool control.
- Equips multiple-purpose mounting clip for easy installation on the top of a laptop, a display or a universal tripod.

Package Contents

- USB Camera x 1
- USB 3.0 Type-A to USB Type-C Cable x 1
- User Manual x 1

Panel

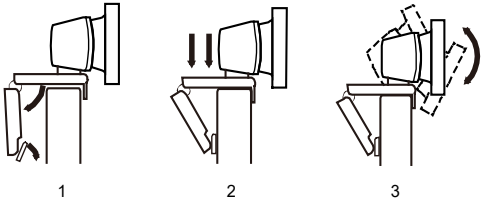


1. Microphone
2. Camera Lens
3. Status LED
   - When USB camera is powered on, the LED will light white for 6 seconds and off.
   - When USB camera is transferring data, the LED will light white constantly.
4. USB Type-C port

Installation and Application

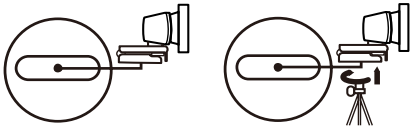
For placement on a monitor

1. Place your webcam on a computer, laptop or monitor at a position or angle you desire.
2. Adjust the webcam to make sure the foot on the universal mounting clip is flush with the back of your device.
3. Manually adjust the webcam up/down to the best position to frame yourself.



For placement on a tripod

1. Locate the 1/4 inch tripod thread on the bottom of the webcam.
2. Secure the webcam on your tripod by twisting it into the 1/4 inch thread.



1 2

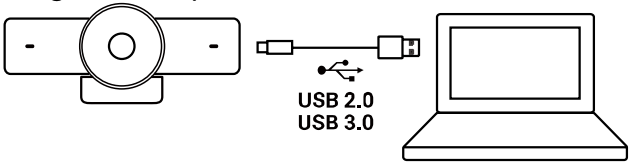
3. Place your webcam with the tripod anywhere you desire to the best position to frame yourself.

Note:

- Tripod is not included in the package.
- For best performance, install this device within the height of 100cm above the desktop is recommended.

Application

Connect the USB-C port of this device to the USB-A port on your computer using the cable provided.



Note: After this device is connected to a computer, its camera and microphone can be detected by the system and specific application in the name of the following:

Camera Name: BizEye 90 | **Microphone Name:** BizEye 90

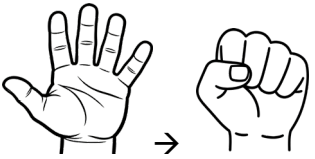
Gesture Control

The camera supports gesture control. Gesture control is enabled by default, and can be set to disable/enable via BizEye Tool.

AI Tracking Mode Switching

Use the hand gesture sequence shown below to switch the AI Tracking modes.

Perform the gestures in the following order:



The AI tracking mode will switch as the follow sequence:
Auto Framing → Presenter Tracking → Individuals Gallery → Off → Auto Framing …

For example, when the current mode is Auto Framing, perform the complete gesture sequence once to switch to Presenter Tracking. Each gesture must be clearly recognized by the camera. Once all gestures in the sequence are successfully recognized, the camera will switch to the next AI tracking mode immediately.

To switch to another mode, lower your hand and perform the complete gesture sequence again.

Zoom In/Out

When the AI Tracking mode is set to off (in manual mode), users can use "L"-shaped hand gesture (thumb and index finger extended to form an "L"-shaped gesture, as shown below) to control digital zoom.



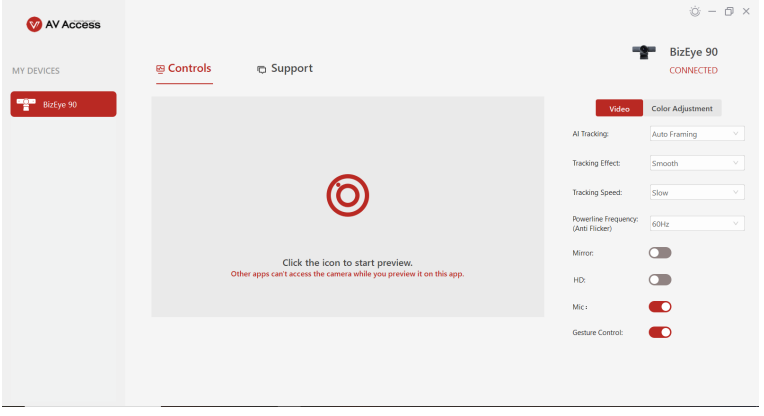
The zoom magnification changes in the following sequence:
100% → 150% → 200% → 150% → 100%...
Make sure the gesture is clearly recognized by the camera and held steady for about 2 seconds each time to trigger the next zoom level.

For example:
If the current view is 100%, perform the "L"-shaped hand gesture and hold it for 2 seconds until the camera fully recognizes the gesture. The image will then zoom in to 150%.
Lower your hand and perform the "L"-shaped gesture again. The image

will then zoom in to 200%.

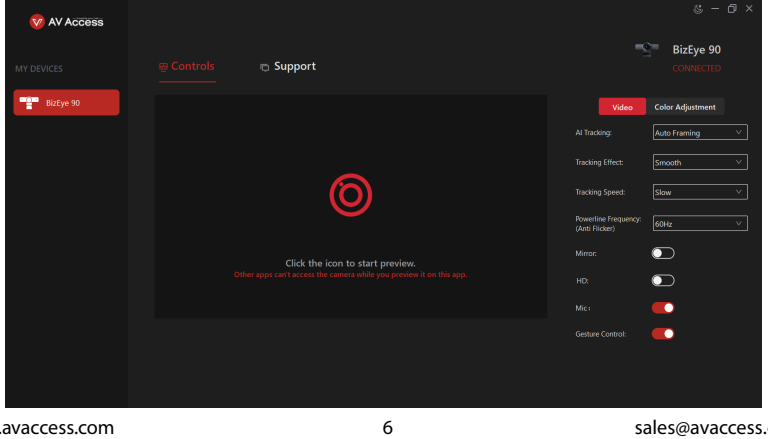
BizEye Tool Control

The camera supports control using BizEye tool. Please download and install the tool from the official website (www.avaccess.com).
Download and install the tool on your computer, and launch it. Enable the device is connected to the computer. Main interface is as follows:



BizEye Tool Instruction

- MY DEVICES: Shows the current connected camera.
- / : Click to set the tool interface to switch between night and day mode (switch the interface background color), the default mode is day mode (as the above figure). Night mode is as follows:



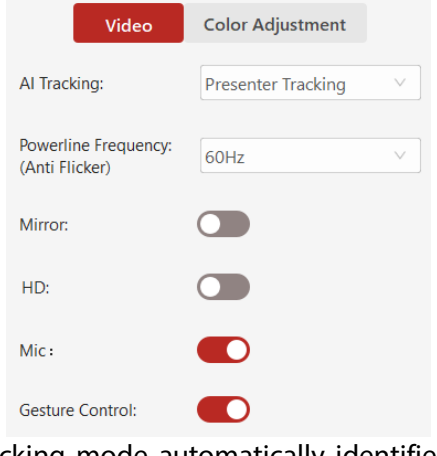
1. Controls

1) Preview Button: Click to start preview mode, where the video feed from the camera will be displayed in this frame for real-time preview (note that the camera will be unavailable for use in other software during preview). All settings will be reflected live in this view. To exit preview mode, simply move the mouse to the center of the screen and click the red square ( ).

2) Video

- AI Tracking: Click to select an AI tracking mode from the drop-down menu, the tracking modes include Auto Framing, Presenter Tracking, Individuals Gallery and Off.
  - When set AI tracking mode to "Auto Framing" (default): The optical AI lens will monitor in real-time the positional changes of individuals in the meeting venue, automatically adjusting angles and focal lengths to ensure that the target person is framed while maintaining optimal clarity of their facial features.
    - Tracking Effect: Select tracking effect from the drop-down menu. The camera supports two tracking effect, Smooth or Immediate. The default setting is "Smooth".
    - Tracking speed: Select tracking speed from the drop-down menu. The camera supports three tracking speed, Fast, Normal, and Slow. The default setting is "Slow".

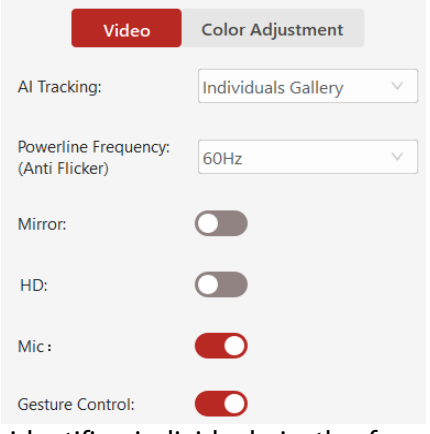
  - When set AI tracking mode to "Presenter Tracking":



This AI tracking mode automatically identifies the first speaker

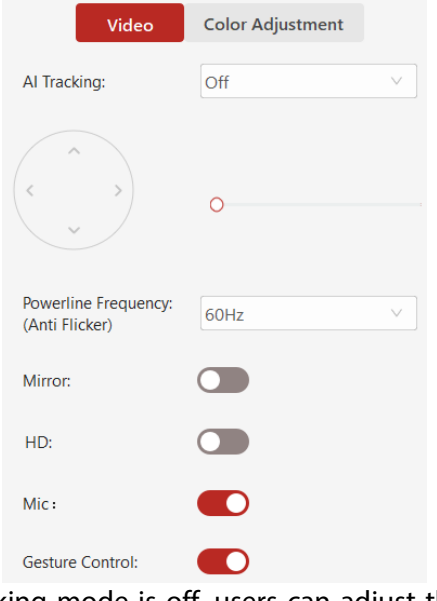
and continuously tracks the presenter in real-time.

- When set AI tracking mode to "Individuals Gallery":



This mode identifies individuals in the frame and generates a multi-view display in left-to-right order. When more than four people are detected in the frame, the tracking mode will automatically switch to "Auto Framing" mode.

- When set AI tracking mode to "off":

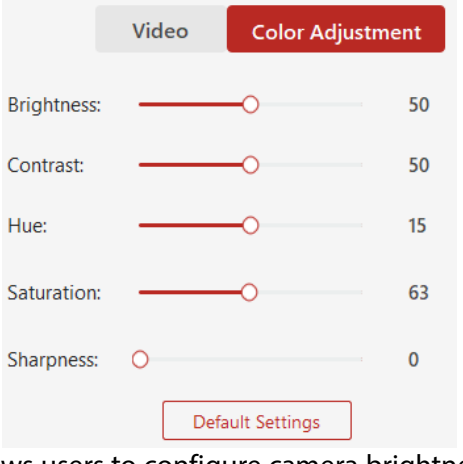


- When tracking mode is off, users can adjust the focal length to

zoom in or out of the scene by moving the circular slider. To pan the camera view up, down, left, or right, click the respective arrow keys on the left side.

- Powerline Frequency (Anti Flicker): Set the camera's AC frequency (50Hz or 60Hz, default 50Hz) to match the corresponding environment's frequency, to prevent flickering during recording.
- Mirror: Set enable/disable the function of rotating horizontally the camera image by 180 degrees. Default setting: disable.
- HD: Click to turn on or off the high-definition camera view (default is off). The state change will automatically restart the device to apply the setting. To ensure better compatibility, users may try turning this feature off.
- Mic: Click to set mic to enable or disable. Default setting: enable.
- Gesture Control: Set to enable or disable gesture control function. Default setting: Enable.

3) Color Adjustment:



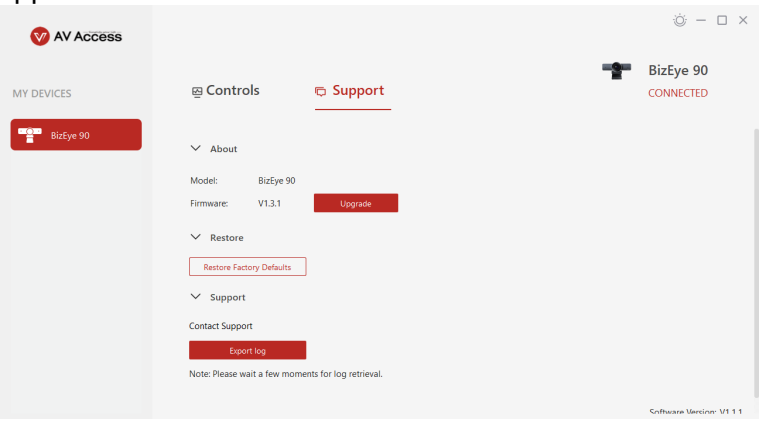
This interface allows users to configure camera brightness, contrast, hue, saturation and sharpness.

Default setting: Brightness: 50; Contrast: 50; Hue: 15; Saturation: 63; Sharpness: 0.

Use the corresponding slider to adjust the value of each parameter.

Default Setting: Click to reset these parameters to factory defaults.

2. Support



- About: Show model and current firmware version.
- Upgrade: Click to select an upgrade file from local computer to upgrade the firmware.
- Restore: Click “Restore Factory Defaults” to reset the device to factory defaults.
- Support:
  - Contact Support: Hover the mouse over the "Support" text. When it turns red, click it to visit the official website.
  - Export Log: Click “Export log” to export the operation log to local computer.

Specifications

Camera	
Lens	Fixed Focus
Sensor	CMOS, 1/1.8’ ,Effective Pixel: 8.0M
Scanning Mode	Progressive
Viewing Angle	120° (DFOV)
Horizontal Rotation Range	Leftward: 30°, Rightward: 30°
Vertical Rotation Range	Downward: 90°
ePTZ	Supported | 5 x Digital Zoom
Shutter	1/30s ~ 1/10000s
Tracking Mode	Auto Framing (default) / Presenter Tracking / Individuals Gallery /Off **Note:** The tracking mode can be switched among the above modes through AV Access BizEye App. To download this App, visit www.avaccess.com.

Camera	
White Balance	Auto
Backlight Compensation	Auto
Digital Noise Reduction	2D, 3D digital noise reduction

USB	
Operating System	Windows 10/11, Mac OS™ 10.10 or higher
Color / Compression	MJPEG (default) /NV12/H.265/H.264
Resolution and Frame Rate	• MJPEG: 320x240@30fps, 640x360@30fps, 640x480@30fps, 1280x720@30fps (default), 1920x1080@30fps, 3840x2160@30fps • NV12: 320x240@30fps, 640x360@30fps, 640x480@30fps, 1280x720@30fps (default)*, 1920x1080@30fps* • H.265/H.264: 320x240@30fps, 640x360@30fps, 640x480@30fps, 1280x720@30fps (default), 1920x1080@30fps, 3840x2160@30fps **Note**: Resolutions marked with "*" are not supported in USB 2.0 mode.
USB Communication Protocol	UVC 1.1
USB Cable Length	1.8m/5.91ft

Input/Output Interface	
USB Interface	1 x USB Type-C: USB 3.0, up to 5Gbps (USB 3.0 Type-A to USB Type-C cable is recommended)
Mic	2 x Mic

Physical Parameter	
Operating Temperature	0°C ~ 40°C (32°F to 104°F)
Storage Temperature	-20°C ~ 60°C (-4°F to 140°F)
Input Voltage	5V (USB power supply)
Power Consumption	5W (Max)
MTBF	＞30000h
Size	140.3mm x 61.5mm x 73.7mm/5.52" x 2.42" x 2.9" (with Bracket)
Net Weight	0.21 kg/0.46lb (with Bracket)

Warranty

Products are backed by a limited 1-year parts and labor warranty. For the following cases AV Access shall charge for the service(s) claimed for the product if the product is still remediable and the warranty card becomes unenforceable or inapplicable.

1. The original serial number (specified by AV Access) labeled on the product has been removed, erased, replaced, defaced or is illegible.
2. The warranty has expired.
3. The defects are caused by the fact that the product is repaired, dismantled or altered by anyone that is not from an AV Access authorized service partner. The defects are caused by the fact that the product is used or handled improperly, roughly or not as instructed in the applicable User Guide.
4. The defects are caused by any force majeure including but not limited to accidents, fire, earthquake, lightning, tsunami and war.
5. The service, configuration and gifts promised by salesman only but not covered by normal contract.
6. AV Access preserves the right for interpretation of these cases above and to make changes to them at any time without notice.

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If you have any question, please contact us via the following emails:
General Enquiry: sales@avaccess.com
Customer/Technical Support: support@avaccess.com



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