



RAZER KIYO PRO ULTRA

MASTER GUIDE

Better image quality starts with bigger sensors. So go for the best with the **Razer Kiyo Pro Ultra**—featuring the largest sensor ever in a webcam. Paired with an ultra-large aperture lens for excellent low-light performance, witness DSLR-like detail and clarity that outclasses all other 4K webcams.

CONTENTS

1. WHAT'S INSIDE 3

2. WHAT'S NEEDED 4

3. LET'S GET YOU COVERED 4

4. TECHNICAL SPECIFICATIONS..... 5

5. SETTING UP YOUR RAZER KIYO PRO ULTRA..... 6

6. USING YOUR CAMERA..... 9

7. CONFIGURING YOUR RAZER KIYO PRO ULTRA VIA RAZER SYNAPSE..... 11

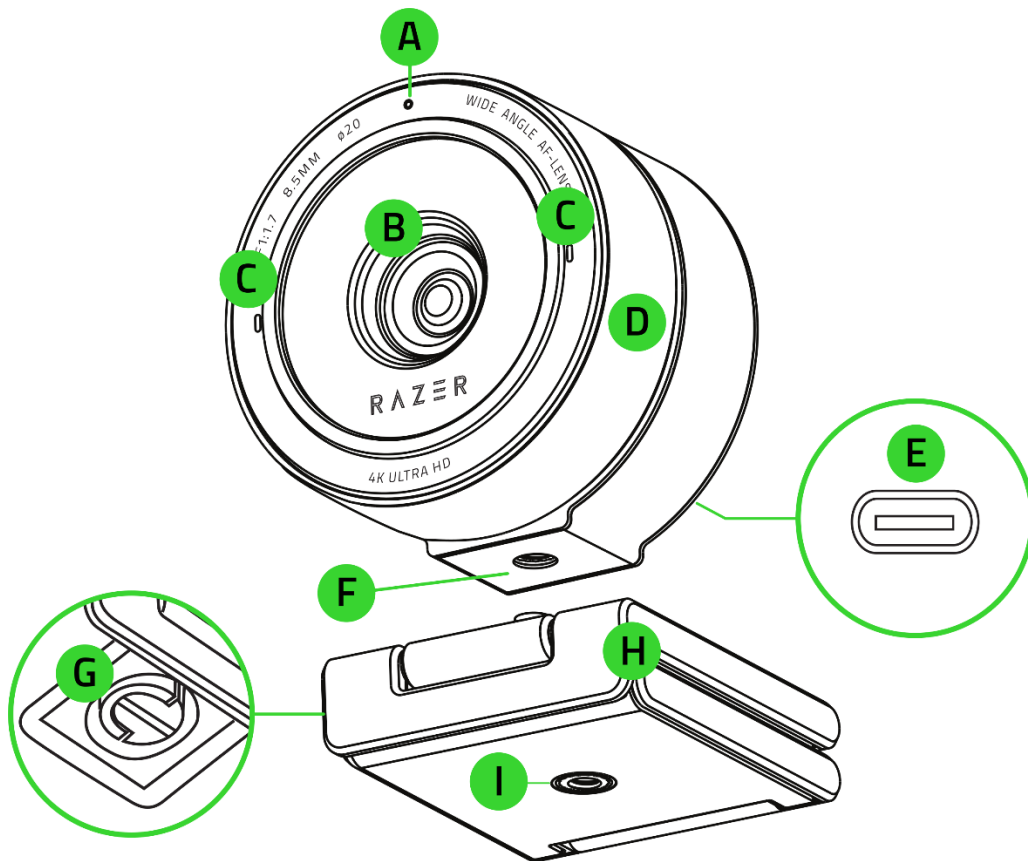
8. SAFETY AND MAINTENANCE 22

9. LEGALESE 23



1. WHAT'S INSIDE

- Razer Kiyo Pro Ultra



A. Status indicator

B. 8.3 MP Auto Focus lens with built-in shutter

C. Built-in microphones

D. Privacy shutter dial

E. USB Type C port

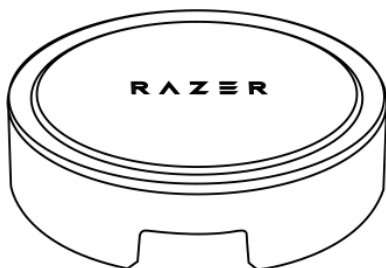
F. Camera thread mount

G. Stand lock knob

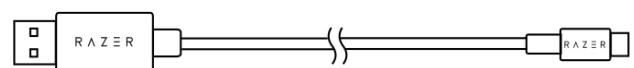
H. Detachable stand

I. Stand thread mount

- Lens cover



- USB Type A to USB Type C cable



- Important Product Information Guide

2. WHAT'S NEEDED

PRODUCT REQUIREMENTS

- Direct USB Type A port connection to a PC

RAZER SYNAPSE REQUIREMENTS

- Windows® 10 64-bit (or higher)
- Internet connection for software installation

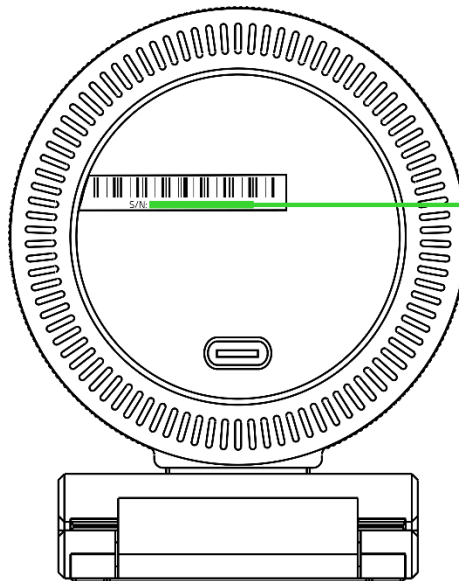
**Windows® 10 and direct USB 3.0 port connection is recommended to maximize streaming and/or recording performance.*

3. LET'S GET YOU COVERED



Register your product and score exclusive benefits

razerid.razer.com/warranty



*Your product's
serial number can
be found here.*

4. TECHNICAL SPECIFICATIONS

CAMERA

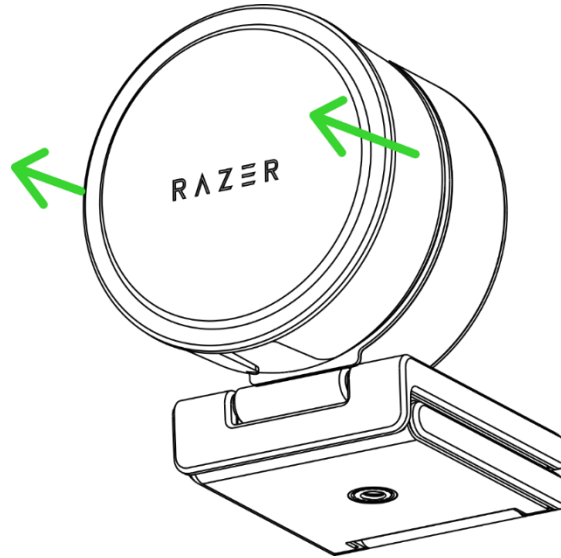
- Connection type: USB 3.0
- Image resolution: 8.3 Megapixels
- Video resolution: 4K @30FPS / 1440p @30FPS / 1080p @ 60/30/24FPS / 720p @ 60/30 FPS / 480p @ 60/30FPS / 360p @ 60/30FPS
- Video encoding:
 - YUY2 & NV12 (uncompressed)
 - MJPEG, H264 codec (compressed)
- Still image resolution: 3840 x 2160
- Image quality settings customization: Yes
- Diagonal Field of View (FOV): LDC Off - 82°, LDC On - 72°
- Focus type(s): Auto
- Focus range: 10 cm ~ ∞ (Optimized for 50 cm to 200 cm)
- Aperture: f/1.7
- Focal length: 8.5 mm
- Sensor: IMX585 with Sony STARVIS - 2 technology
- Mounting options: L-shape joint, Tripod mount
- Cable length: 1.5 meters braided cable

MICROPHONE

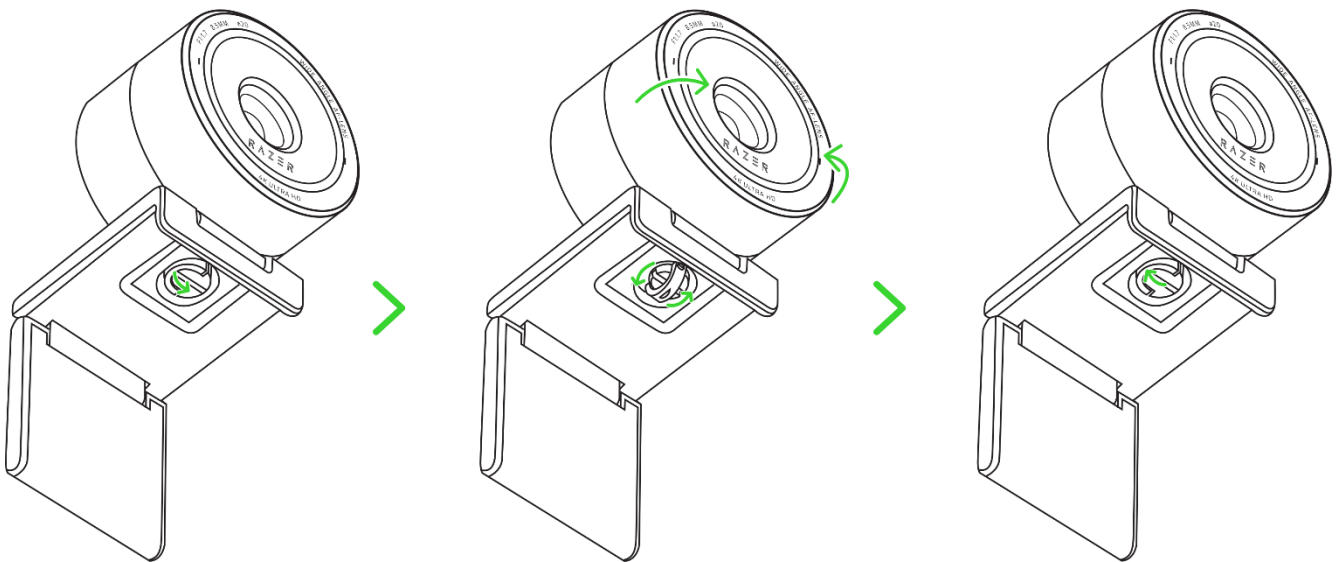
- Channels: Stereo
- Audio codec: 16-bit 48 kHz
- Polar patterns: Omni-directional
- Sensitivity: -26dB FS

5. SETTING UP YOUR RAZER KIYO PRO ULTRA

1. Remove the lens cover from the camera.

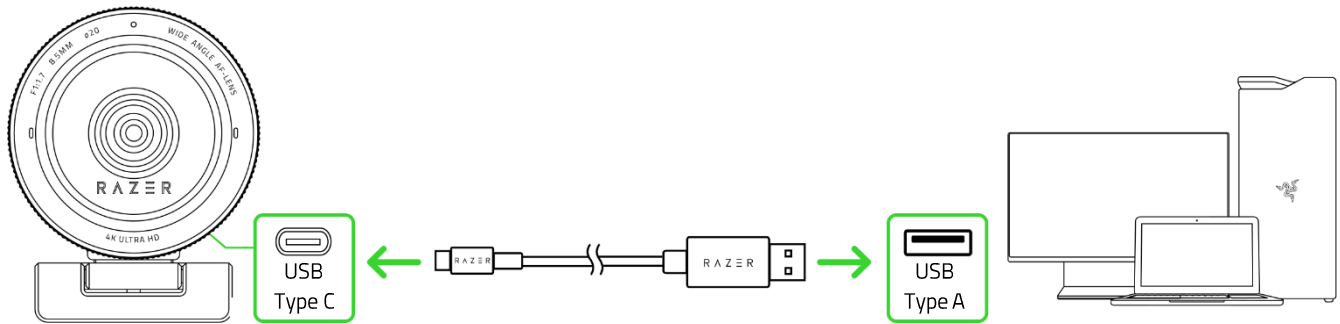


2. Adjust the pan and tilt angle of the camera on the stand as needed.



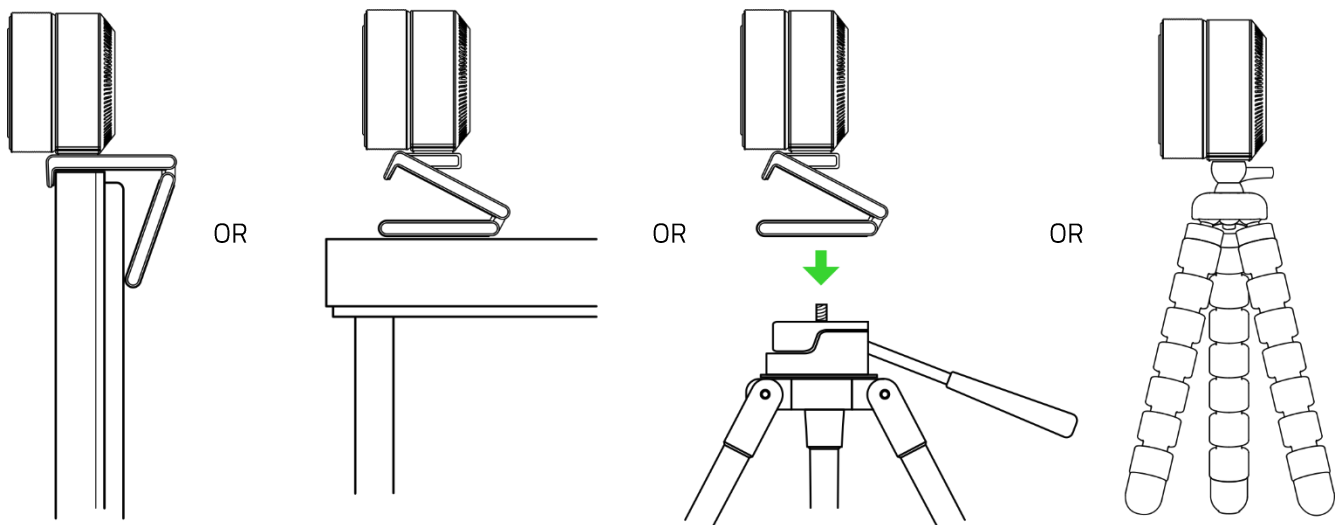
i Loosen or tighten the stand lock knob appropriately for your desired pan angle. Before adjustment, it's recommended that you tilt the camera slightly to adjust its pan angle to avoid scratching the stand's surface.

3. Connect the camera to any of the USB ports on your PC using the USB Type A to USB Type C cable.



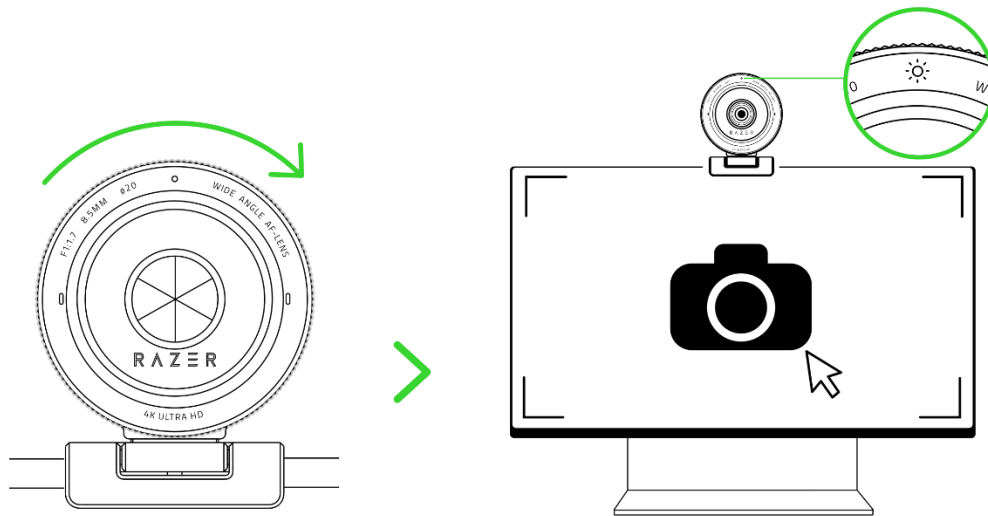
i Use only the USB Type A to USB Type C cable included in the package. Connect the camera directly to a USB 3.0 port on your PC to optimize the camera's streaming and recording performance. Connecting to a USB 2.0 port, USB hub, switch, or extender may affect performance.

4. Depending on your setup, you may position the camera on top of a monitor or table, attach it to a tripod (not included) using its thread mount, or detach the stand* to affix it directly to a tripod.



**When detaching the camera from the stand, make sure to tilt the camera slightly first to avoid scratching the stand's surface.*

5. Rotate the privacy shutter dial clockwise to uncover the camera's lens and launch any camera application. The camera's status indicator will light up, indicating that the camera is active.



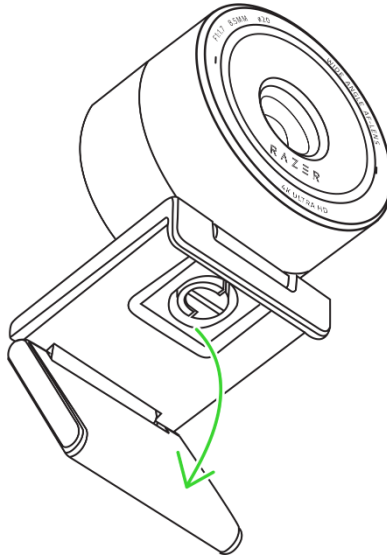
6. Use the Razer Synapse* app to customize the camera's settings, such as its ISO, shutter speed, Advanced Live Face Tracking, FoV, and more.

* Install Razer Synapse when prompted or download the installer from razer.com/synapse

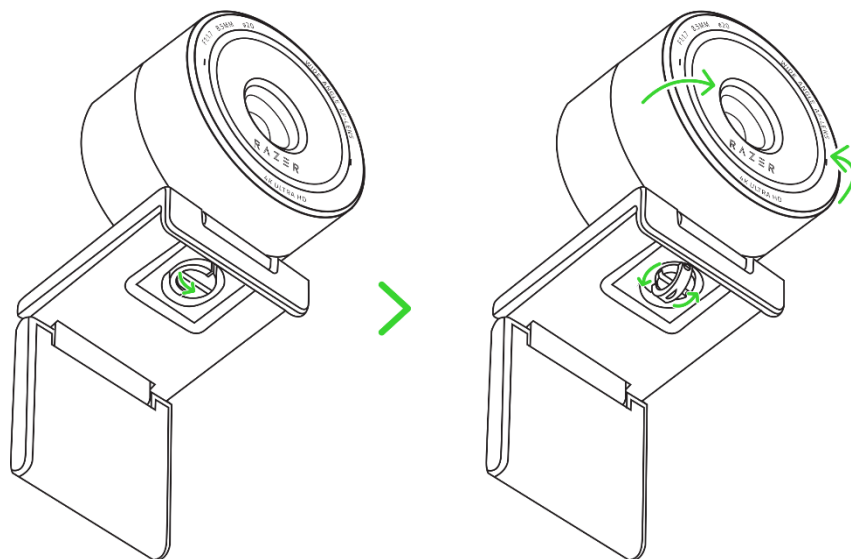
6. USING YOUR CAMERA

ADJUSTING THE CAMERA'S PAN ANGLE

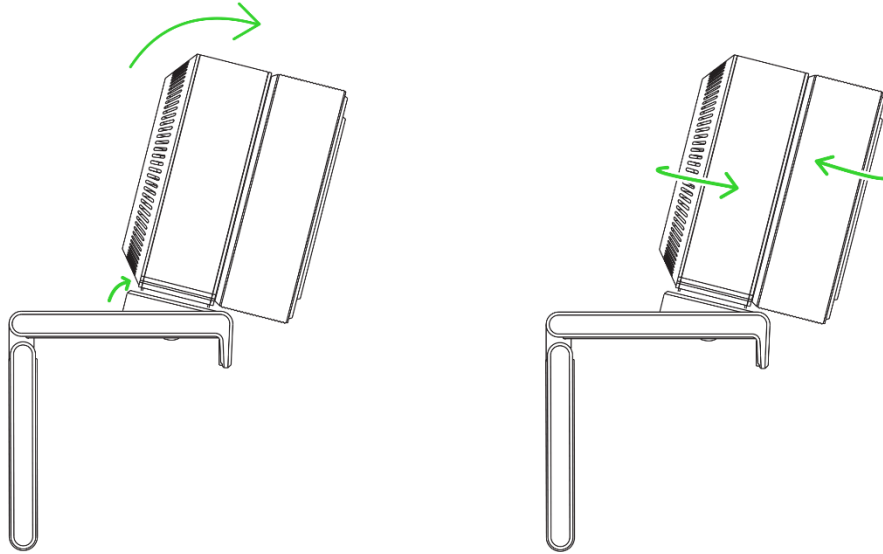
1. Extend the camera stand to access the stand lock knob.



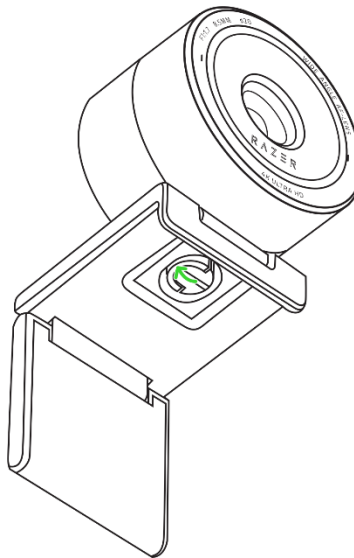
2. Pull down the stand lock knob's handle and rotate to loosen or tighten the camera appropriately from the stand.



3. Slightly tilt the camera and adjust its pan angle as needed.



4. Fasten the stand lock knob to hold the desired pan angle and push down its handle.



7. CONFIGURING YOUR RAZER KIYO PRO ULTRA VIA RAZER SYNAPSE

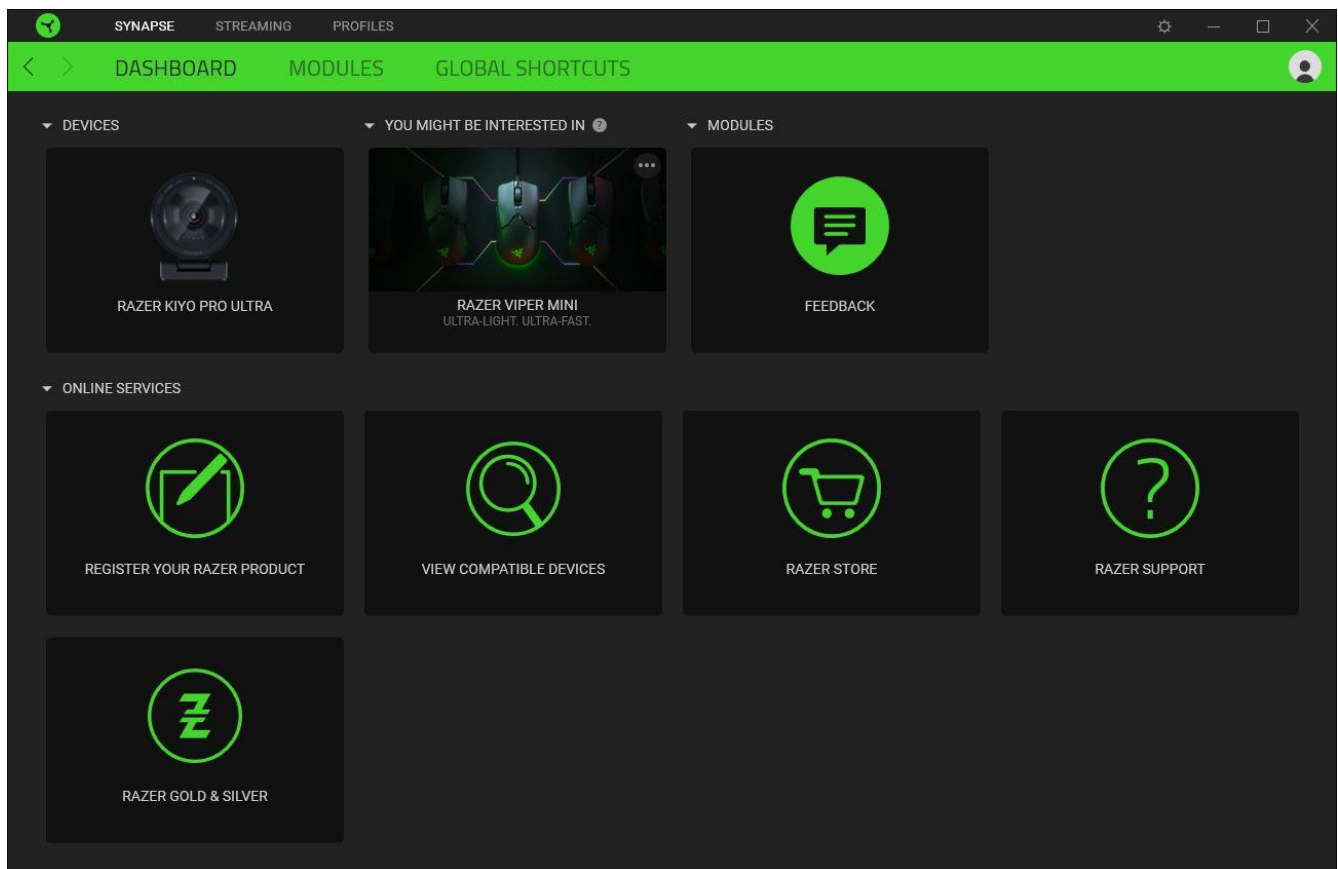
- i** *Internet connection is required for installation, updates, and cloud-based features. Registering for a Razer ID account is recommended but optional. All listed features are subject to change based on the current software version, the connected device(s), and supported apps and software.*

SYNAPSE TAB

The Synapse tab is your default tab when you first launch Razer Synapse. This tab allows you to navigate the Dashboard subtab.

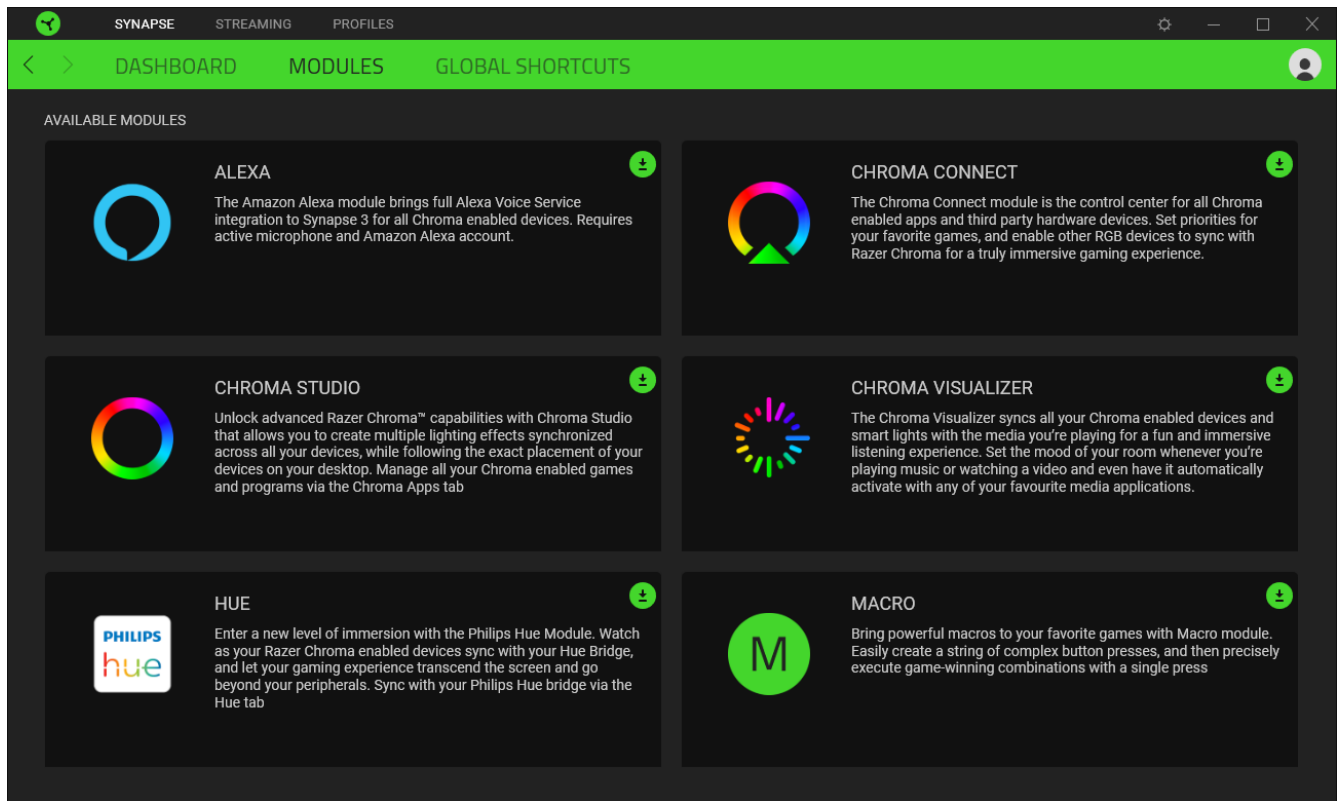
Dashboard

The Dashboard subtab is an overview of your Razer Synapse, where you can access all your Razer devices, modules, and online services.



Modules

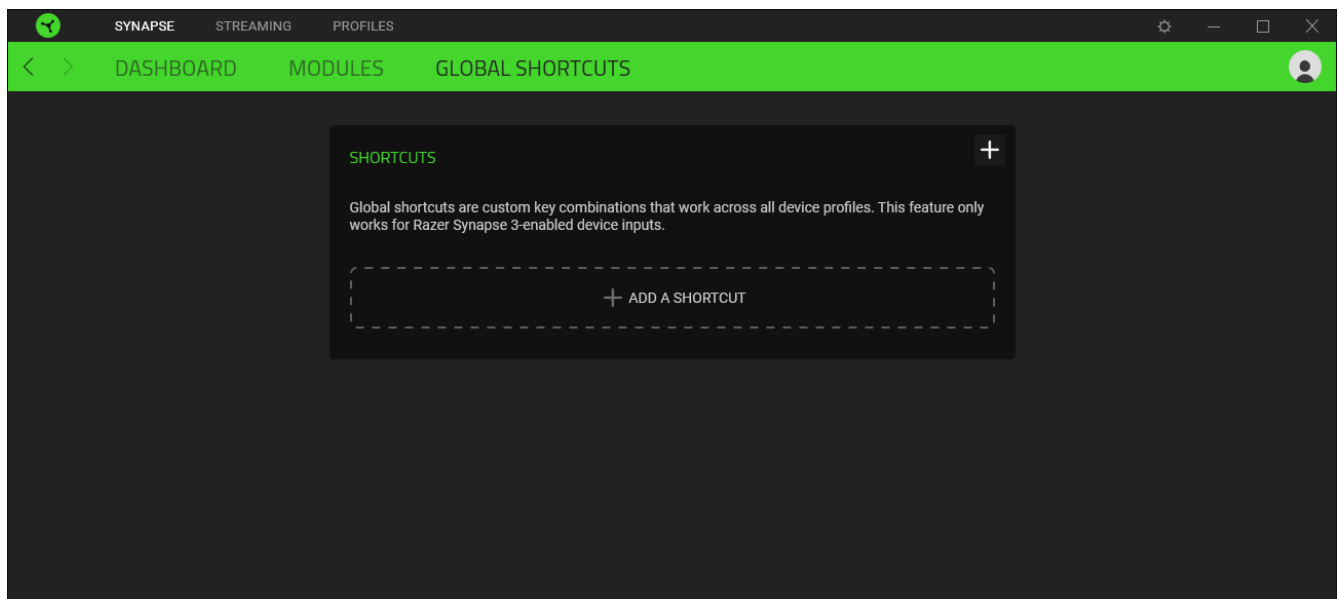
The Modules subtab displays all installed and available modules for installation.



Global Shortcuts

Bind operations or Razer Synapse functions to custom key-combinations from any Razer Synapse-enabled device inputs, which apply across all device profiles. [Learn more about Profiles](#)

 *Only Razer Synapse-enabled device inputs will be recognized.*

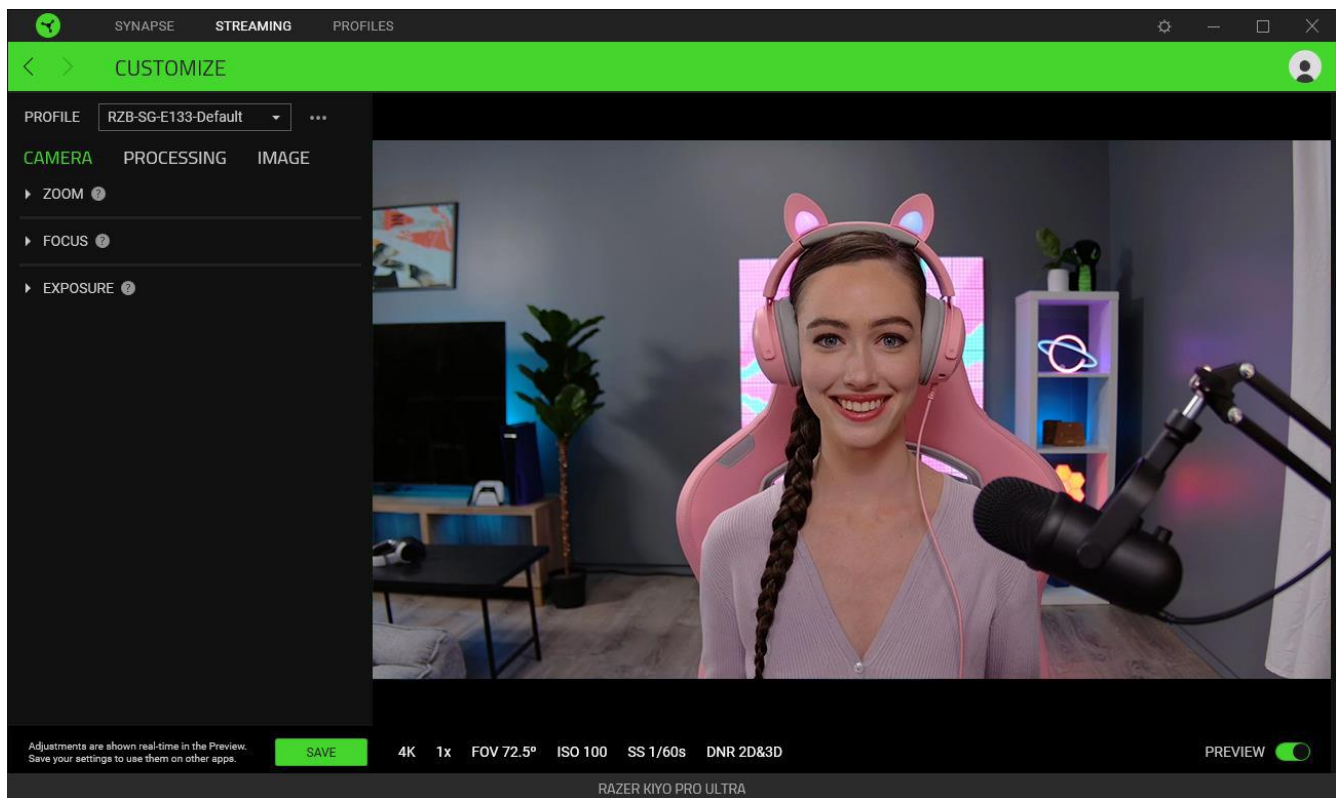


STREAMING TAB

The Streaming tab is the main tab for your Razer Kiyo Pro Ultra. From here, you'll be able to view the camera's feed and customize its capture settings. Changes made under this tab are automatically saved to your system and cloud storage.

Customize

The Customize subtab is the main subtab for your camera, where you'll be able to see its real-time preview and tweak capture settings, such as zoom and focus modes, image processing, and color adjustments.



Profile

A Profile is a data storage for keeping all your Razer devices' settings. By default, the profile name is based on your system's name. Press the profile's corresponding Miscellaneous button (●●●) to add, import, rename, duplicate, export, delete, or reset a profile to its default.

Preview

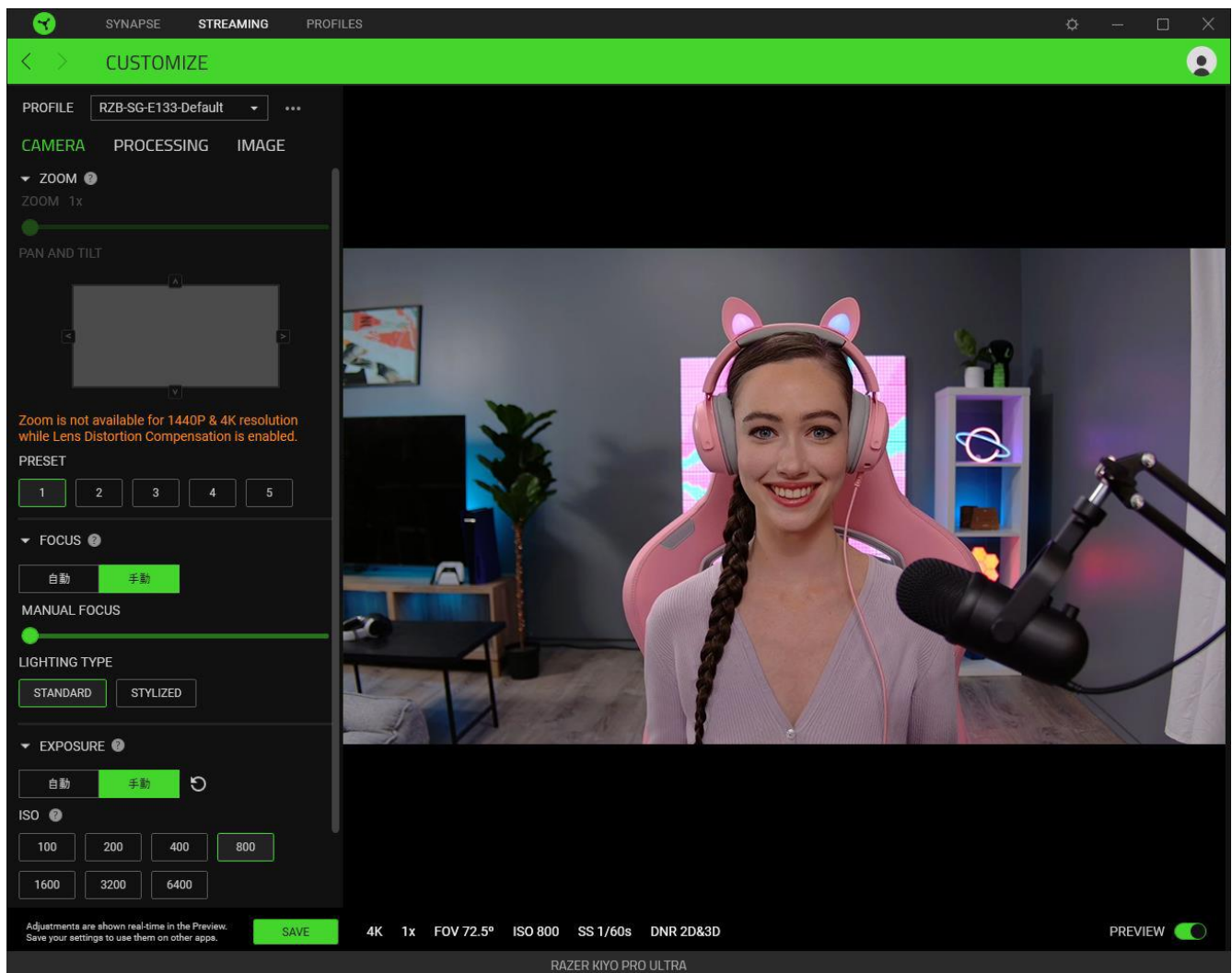
The Preview displays the camera's real-time display when you enable the Preview toggle. It also shows several camera settings at the bottom, such as Resolution, Zoom and FoV, ISO, and Shutter speed.

Save

Save and store Razer Synapse settings to your camera and use them on other applications.

Camera

Set and control how close a subject is to the camera, how it will track a subject and determines how light or dark its captures are.



i To begin customizing the camera's settings, you must first enable the Preview toggle. Other apps won't be able to use the camera when it's active on Razer Synapse.

Zoom

Adjust how close a subject is or how wide the camera's capture area is using the zoom slider and control which portion is zoomed in using Pan and Tilt.

i This feature is unavailable when Lens Distortion Compensation is enabled on 1440p (or higher) resolution. The camera's current zoom status is indicated at the bottom of the Preview.

Focus

Control how the camera focuses on a subject and how quickly it will search for focus points on set room lighting.

- **Focus.** Switch between Automatic and Manual focus. When set to Manual, you'll be able to adjust the camera's focus manually using a slider. Setting the Focus to Auto will allow the camera to automatically focus on subjects using the following settings below.
 - **Mode.** Fine-tune how the camera focuses on a subject. Use Standard for default focus and Face for the camera to focus on a subject's face.
 - **Tracking.** Adjust how quickly the camera will search for focus points. Passive is suggested for low-lit scenes where a subject is still or stationary, and Responsive is best used for a moving subject (in good contrast) as this setting searches more frequently for focus points.
- **Lighting type.** Determine the current lighting of a subject. Use Standard for naturally-lit scenes and Stylized for color-lit rooms.

Exposure

Set how the camera evaluates how exposed a subject is by allowing it to automatically adjust the highlights and shadows of its captures or manually adjust the camera's sensitivity to lighting. When enabled, the following camera settings can be adjusted:

- **Metering.** Determine how the camera automatically evaluates a scene to expose a subject.
 - **Average.** The camera will evaluate the overall scene as a basis of a subject's exposure settings.
 - **Center.** The camera will evaluate exposure settings using the entire scene, focusing more on the center.
 - **Face.** The exposure setting is evaluated using the detected face of a subject in the scene.
- **Compensation.** Customize the camera's suggested exposure settings using the slider.

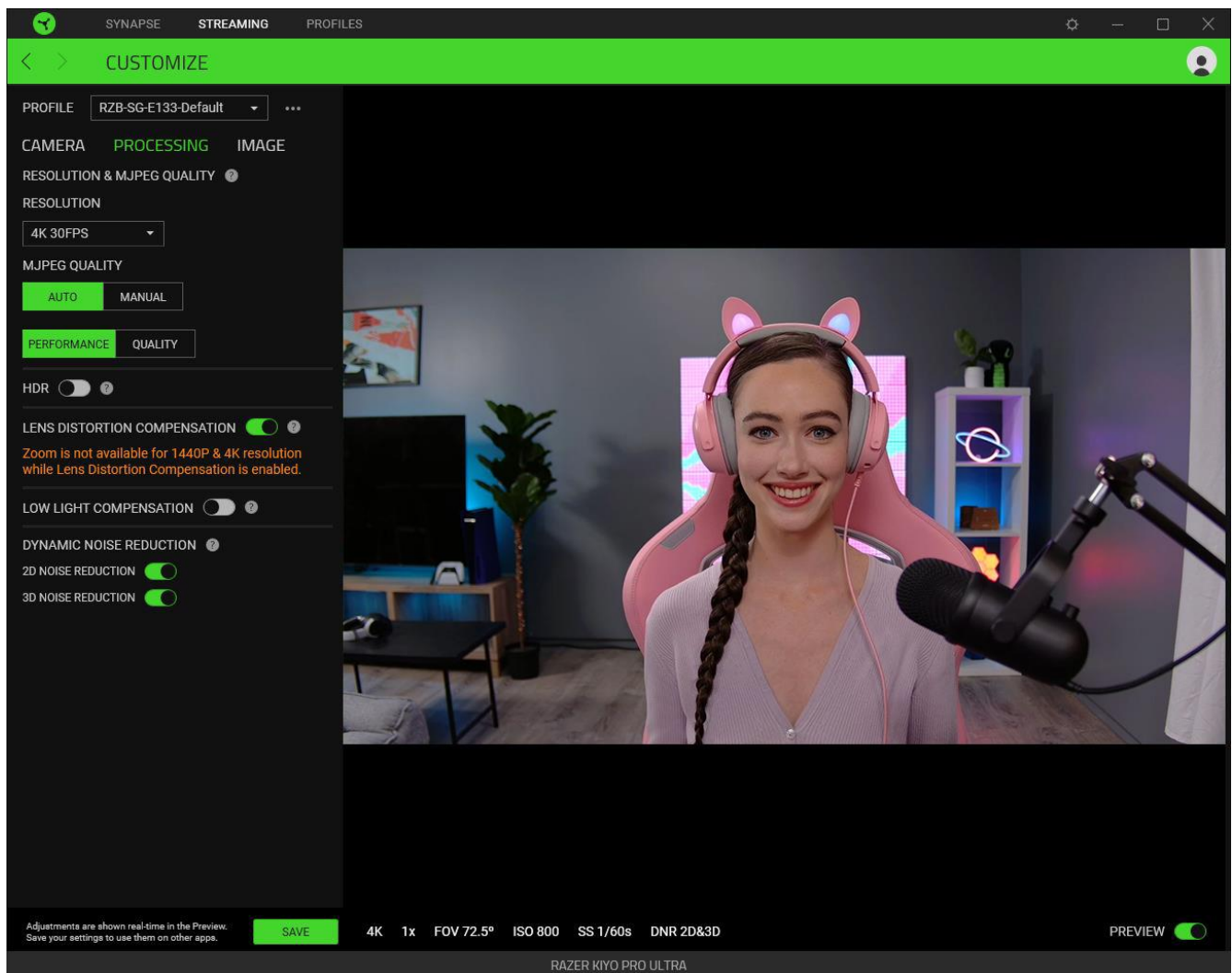
When disabled, you'll be able to adjust how exposure is determined manually:

- **ISO.** Adjust how sensitive the camera's sensor is to light. Using a low ISO setting is suggested to get the maximum image quality on well-lit scenes. A high ISO setting will allow the camera to capture a subject in low-light scenes; however, a grainier output is expected.
- **Shutter Speed.** Determines how long the camera's sensor takes in light. A faster shutter speed is recommended to decrease motion blurs in videos.

 *The camera's current ISO and Shutter Speed status are indicated at the bottom of the Preview.*

Processing

Control the quality of the camera's captures and processing of MJPEG format, brightness and distortion corrections, and noise reduction.



Resolution and MJPEG Quality

Control the quality of the camera's image and video captures.

- **Resolution.** Determine the sharpness, quality and frames per second of the camera's captures using the drop-down options provided.
 *A higher resolution will result in crisp and clear photos and videos and a bigger file size.*
- **MJPEG quality.** Set the camera to focus on Quality or Performance when recording videos in MJPEG format.

By default, this is set to Auto, where you can determine if the camera will record and prioritize Quality or Performance. When set to Manual, you can tweak the camera's MJPEG quality setting using a slider.

HDR

Ramp up the camera's colors and dynamic range in bright or dark scenes while correcting over and underexposed areas.

 *A lower camera frame rate is expected when this feature is enabled.*

Lens distortion compensation

When enabled, the camera will automatically correct any distortion in its captures.

Low light compensation

When enabled, the camera will automatically adjust its brightness when capturing in low-light scenes.

Dynamic Noise Reduction

Enable to reduce noise and artifacts and improve overall image quality in low-light scenes. You should disable these features when using the camera in well-lit scenes.

- **2D Noise Reduction.** Prioritize overall noise reduction.
- **3D Noise Reduction.** Reduce noise in motion-blur scenes.

 *The camera's current noise reduction status are indicated at the bottom of the Preview.*

Image

Customize the camera's image settings using presets and tweak it further by customizing other settings as needed.

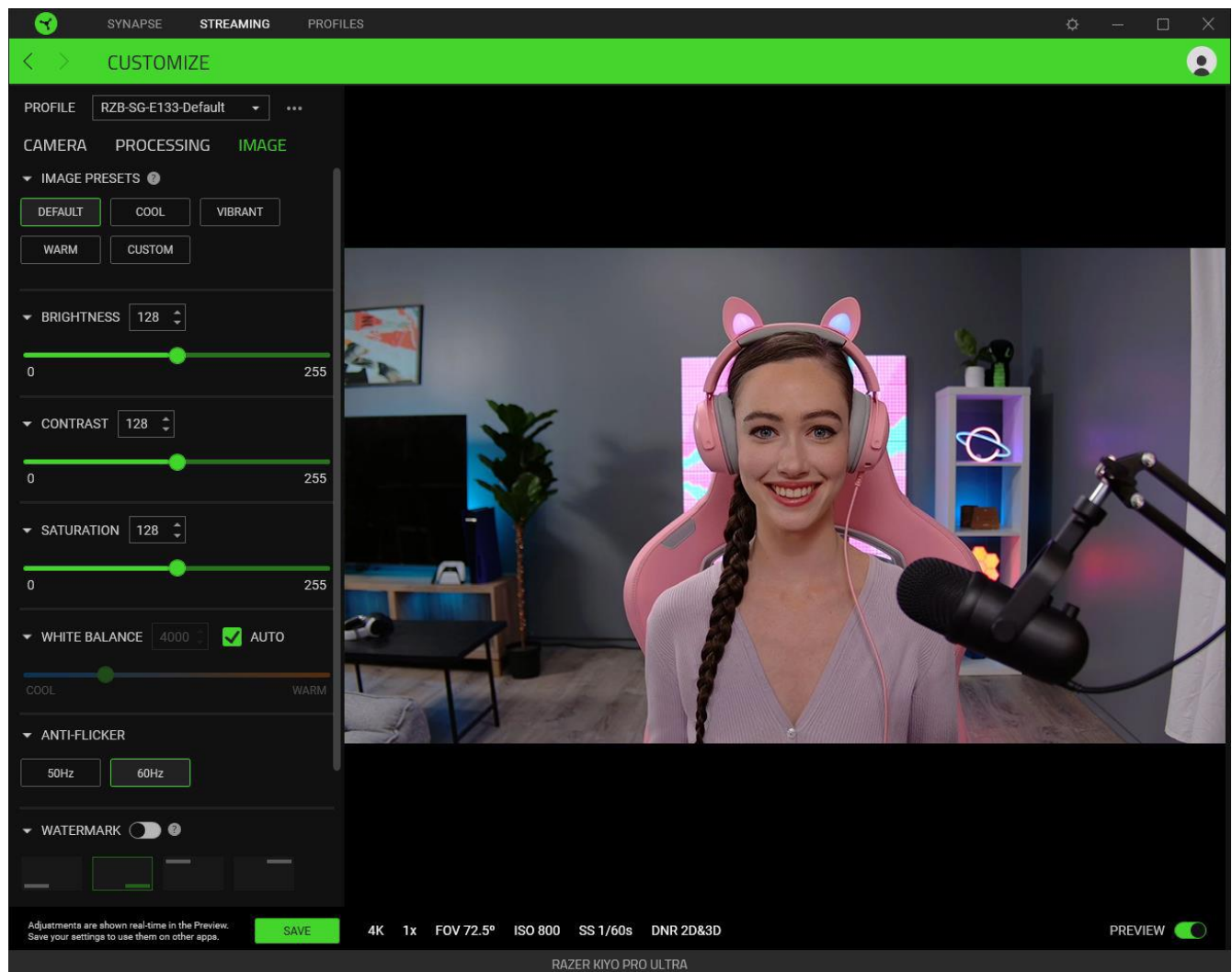


Image presets

Use a pre-customized image setting for the camera.

Brightness

Control the overall brightness of the camera's captures.

Contrast

Highlight the separation of tones within the camera's captures.

Saturation

Change the color intensity of the camera's captures.

White Balance

Control the color temperature of the camera's light source. By default, this is set to Auto, where the camera determines the best color temperature for its captures.

Anti-flicker

Set the camera's frequency to match the correct frequency of your country.

Watermark

Add your Razer device's watermark on all captured images or videos.

Mirrored video

Flips the camera feed to reflect what you see in the mirror in the Preview.

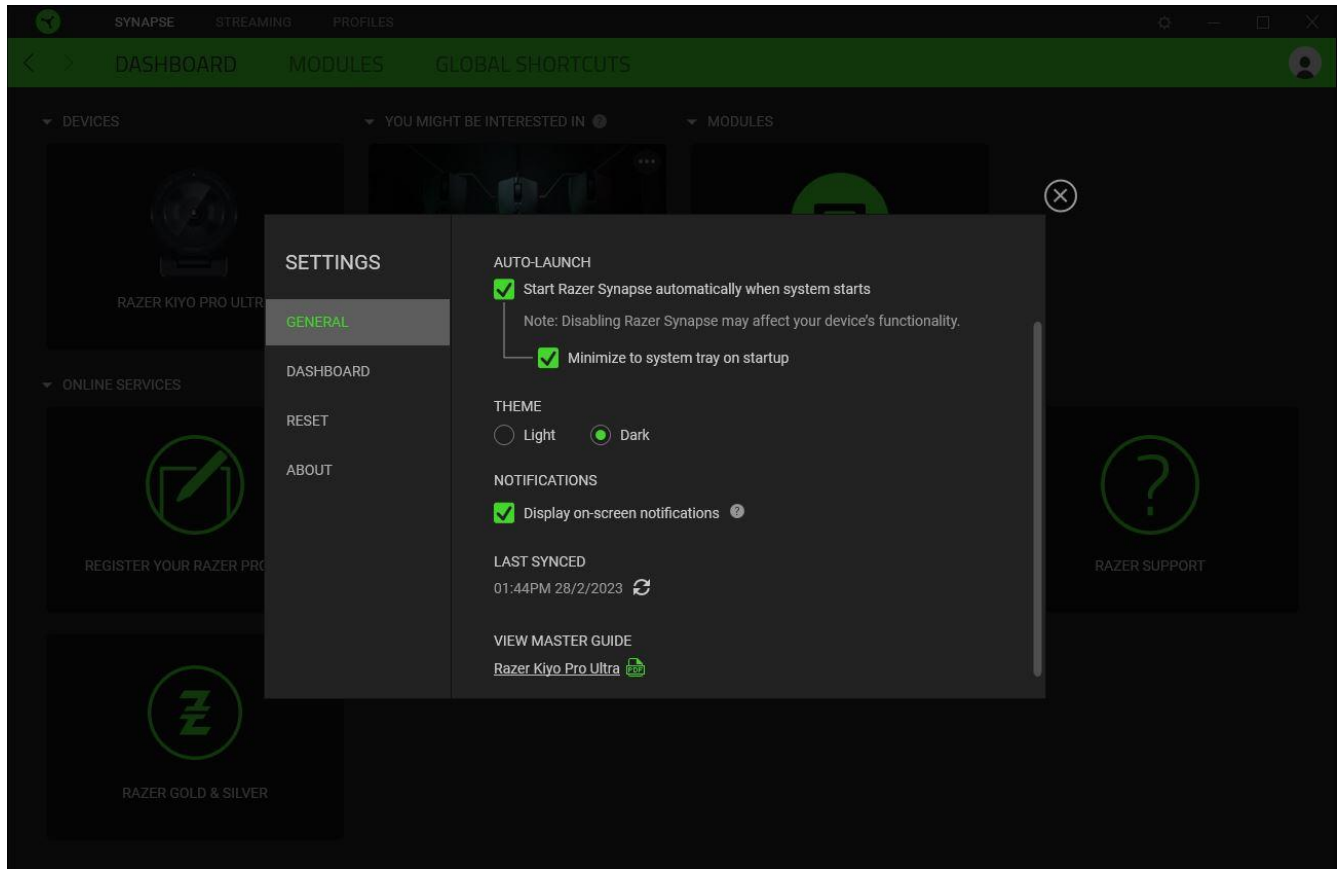
Windows UVC Settings

Open your operating system's camera properties window and customize color corrections and camera controls.

 *Razer Synapse will prompt you to select which setting you want to keep when making changes on the Advanced Settings or other camera apps. Select 'Camera' when prompted to keep changes made from the Advanced Settings or other camera apps.*

SETTINGS WINDOW

The Settings window, accessible by clicking the (⚙️) button on Razer Synapse, enables you to configure the startup behavior and display language of Razer Synapse, view the master guides of each connected Razer device, or perform a factory reset on any connected Razer device.



General tab

The General tab lets you change the software's display language, startup behavior, theme, and on-screen notifications. You may also manually sync your profiles to the cloud (↻️) or view the master guide of all connected Razer devices and installed modules.

Dashboard tab

Use the Dashboard tab to customize which Razer device recommendations based on your setup, and the games you play will appear on the Dashboard.

Reset tab

The Reset tab allows you to perform a factory reset on all connected Razer devices with on-board memory and/or reset Razer Synapse tutorials to acquaint yourself again with Razer Synapse's new features on its next launch.



All profiles stored on the selected device's on-board memory will be erased when you reset a Razer device.

About tab

The About tab displays brief software information and copyright statement, and provides relevant links for its terms of use. You may also use this tab to check for software updates, or as quick access to Razer's social communities.

8. SAFETY AND MAINTENANCE

SAFETY GUIDELINES

To achieve maximum safety while using your Razer Kiyo Pro Ultra, we suggest that you adopt the following guidelines:

- Should you have trouble operating the device properly and troubleshooting does not work, unplug the device and contact the Razer hotline or go to support.razer.com for support.
- Don't take apart the device, and don't attempt to operate it under abnormal current loads. Doing so will void your warranty.
- Don't use or place the device near water, moisture, or other wet surfaces.
- Don't expose the camera and/or its lens under direct sunlight.
- Don't use or place the device near heat, naked flame, or other hot surfaces such as radiators, stoves, fireplaces, and candles.
- Ensure that the camera is always set up on a stable surface and/or firmly affixed on accessories or surfaces using any of its thread mounts or the detachable stand.
- When detaching the camera or adjusting its pan angle, make sure to tilt the camera slightly first to avoid scratching the stand's surface.
- Keep the device away from liquid, humidity, or moisture. Operate the device only within the specific temperature range of 0°C (32°F) to 40°C (104°F). Should the temperature exceed this range, unplug and/or switch off the device to stabilize the temperature to an optimal level.

MAINTENANCE AND USE

The Razer Kiyo Pro Ultra requires minimum maintenance to keep it in optimum condition. Once a month, we recommend you unplug the device from the computer and clean it using a soft cloth or cotton swab to prevent dirt buildup. Do not use soap, harsh cleaning agents, or abrasives.

9. LEGALESE

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