



RAZER VIPER 8K^{HZ}

MASTER GUIDE

Attain the next level of absolute control with the **Razer Viper 8K^{Hz}**—an ambidextrous esports gaming mouse with true 8000Hz polling rate for the fastest speed and lowest latency ever achieved. Upgraded with 2nd-Gen Razer™ Optical Switches, it's time to rise to the occasion and leave it all on the floor.

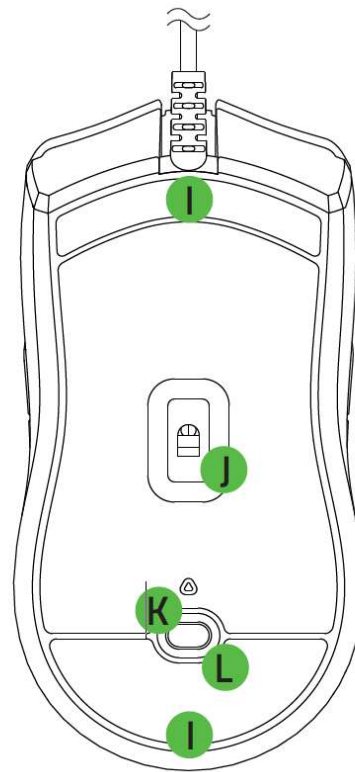
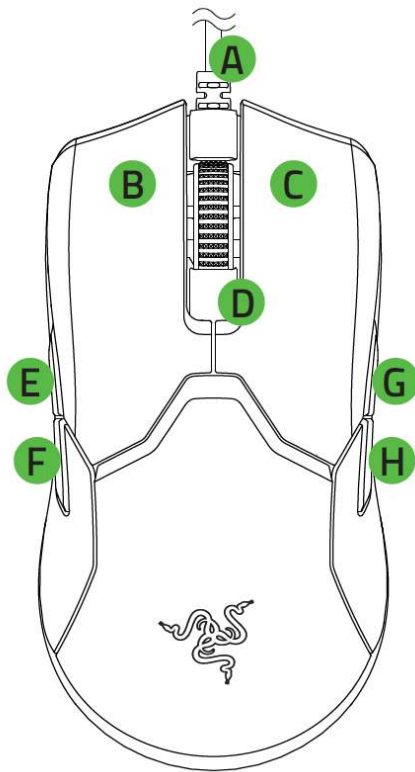
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1. WHAT'S INSIDE / WHAT'S NEEDED

WHAT'S INSIDE

- Razer Viper 8K^{HZ}



- A. Razer™ Speedflex cable
- B. Left mouse button
- C. Right mouse button
- D. Scroll wheel
- E. Mouse button 5
- F. Mouse button 4
- G. Mouse button 7

- H. Mouse button 6
- I. Ultraslick mouse feet
- J. Razer™ Focus+ 20K DPI Optical Sensor
- K. DPI indicator
- L. DPI cycle button

- Important Product Information Guide



The DPI stages are as follows: 400, 800, 1600 (default), 2400 and 3200. The DPI stages can be customized using Razer Synapse.

WHAT'S NEEDED

PRODUCT REQUIREMENTS

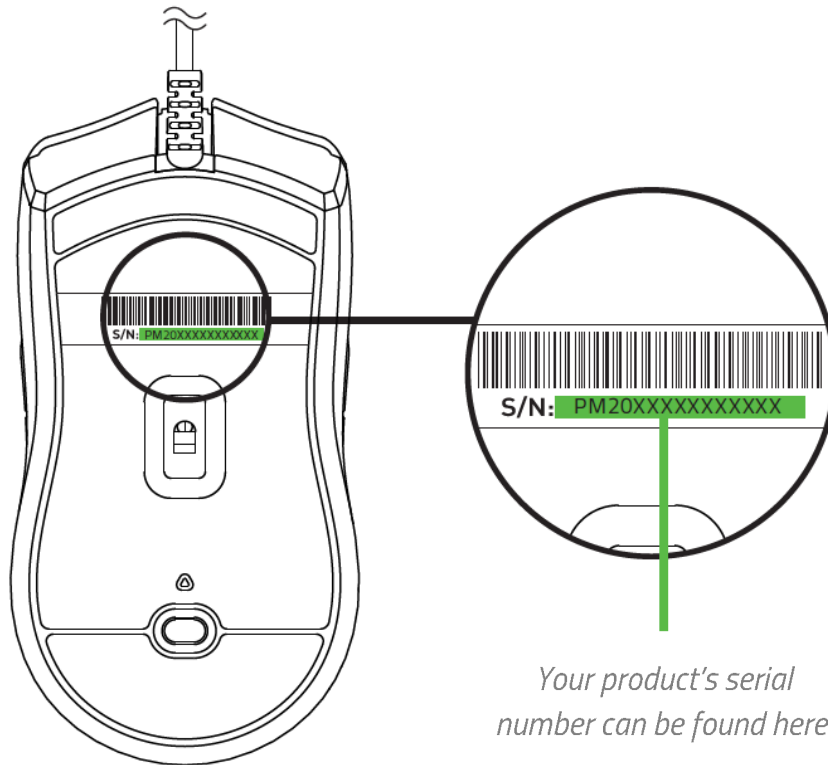
- Direct USB connection to a PC

RAZER SYNAPSE REQUIREMENTS

- Windows® 8 64-bit (or higher)
- Internet connection for software installation

2. LET'S GET YOU COVERED

You've got a great device in your hands, complete with a 2-year limited warranty coverage. Now maximize its potential and score exclusive Razer benefits by registering at razerid.razer.com



Got a question? Ask the Razer Support Team at support.razer.com

3. TECHNICAL SPECIFICATIONS

TECHNICAL SPECIFICATIONS

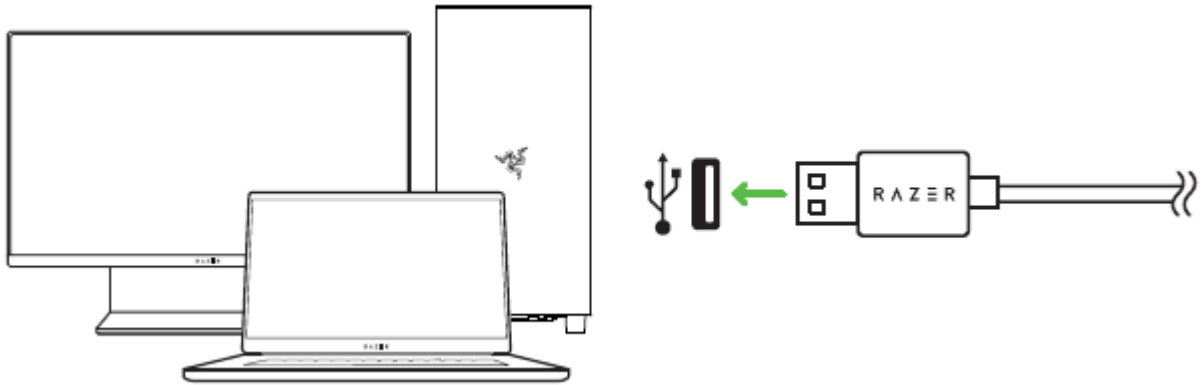
- True 20,000 DPI Focus+ optical sensor
- Up to 650 inches per second (IPS) / 50 G acceleration / industry best 99.6% resolution accuracy
- True 8000Hz (0.125ms) polling rate
- Razer™ Optical Mouse Switches rated for 70 million clicks
- True ambidextrous design with ultra-durable integrated rubber side grips
- 100% PTFE mouse feet
- Gaming-grade tactile scroll wheel
- On-The-Fly Sensitivity Adjustment (Default stages : 400/800/1600/2400/3200)
- Hybrid Cloud storage and on-board memory (4+1 profiles)
- Razer Chroma™ RGB lighting with true 16.8 million customizable color options
- 7+1 programmable buttons
- Advanced Lift-off/Landing distance customization
- Razer Synapse 3 enabled
- 1.8 m / 6 ft Speedflex cable

APPROXIMATE SIZE & WEIGHT

- Length: 126.73 mm / 4.99 in
- Width: 57.6 mm / 2.27 in
- Height: 1.49 mm / 37.81 in
- Weight: 71 g / 2.5 oz (excluding cable)

4. PERSONALIZE YOUR MOUSE

1. Connect your Razer device to the USB port of your computer.



To optimize the polling rate of your Razer Viper 8K^{Hz}, it's highly recommended that you connect the device directly to a USB 2.0 or USB 3.0 port of your computer. Connecting the device to a USB hub, switch or extender may affect its performance.

2. Change your mouse's DPI to match your playstyle with a press of the DPI cycle button or fine-tune your own sensitivity setting using the Razer Synapse app. [Learn more about Sensitivity](#)



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

5. CONFIGURING YOUR RAZER VIPER 8K^{HZ}

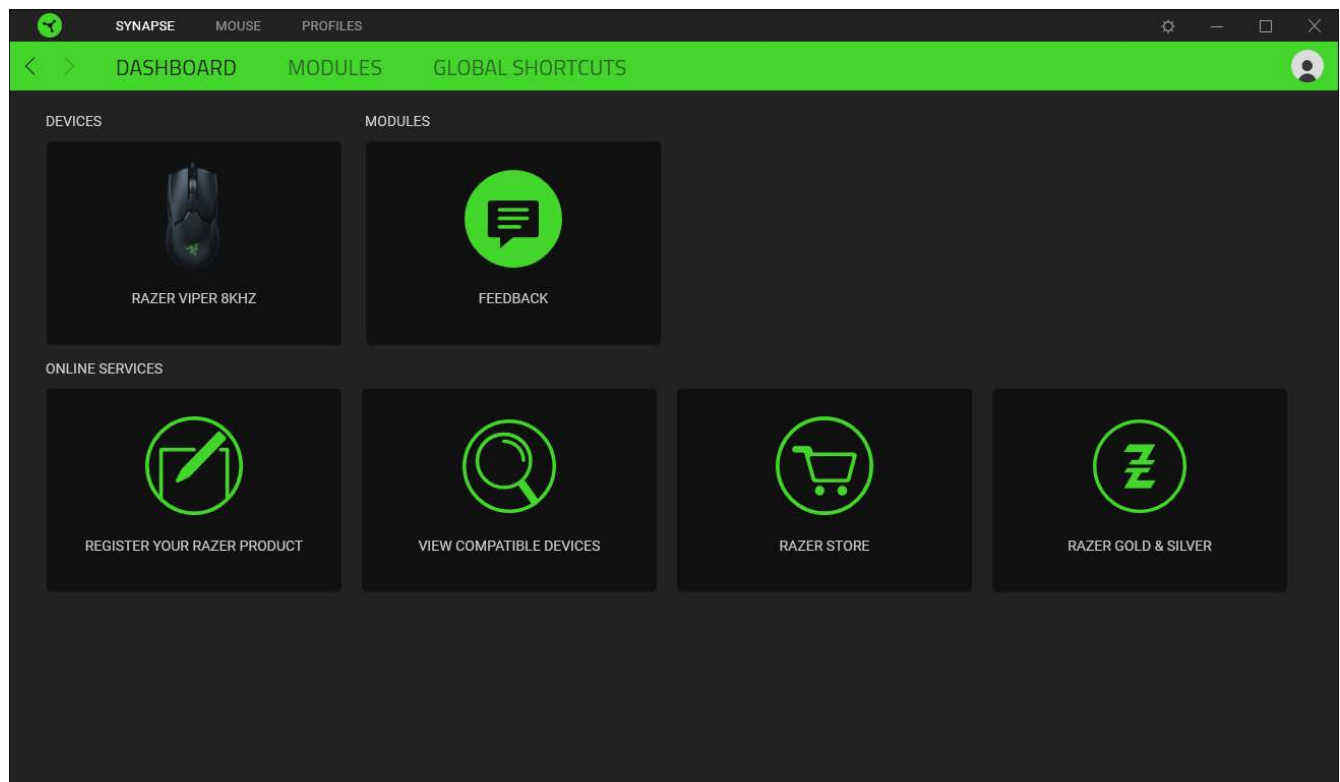
i Internet connection is required for installation, updates and cloud-based features. Registering for a Razer ID account is recommended, but optional. All listed features are subject to change based on the current software version, connected device(s), and supported apps and software.

SYNAPSE TAB

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

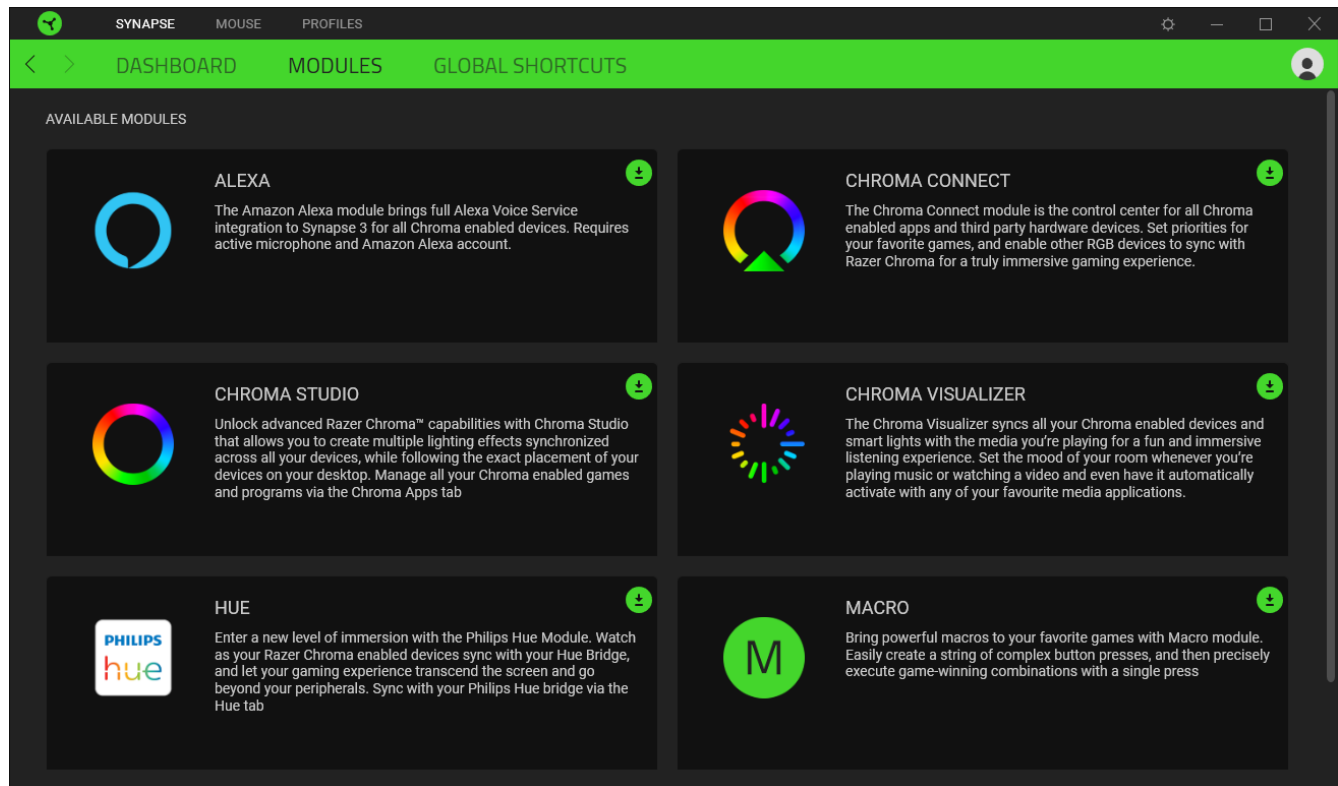
Dashboard

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



Modules

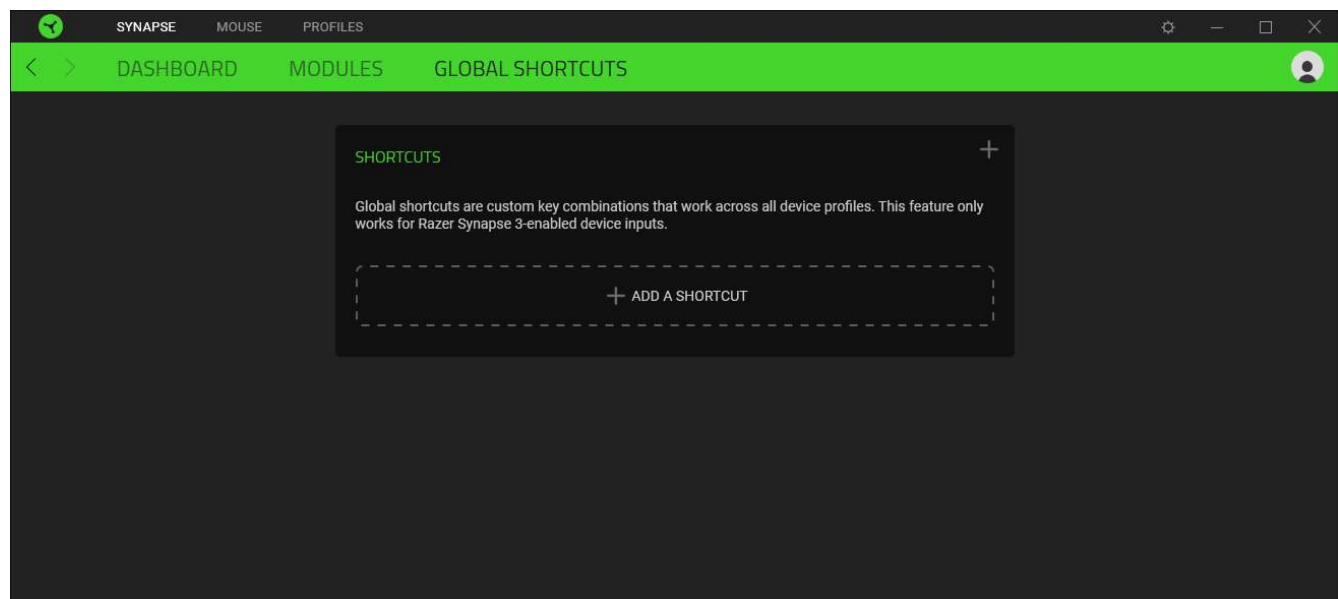
The Modules subtab displays all installed and available modules for installation.



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.*

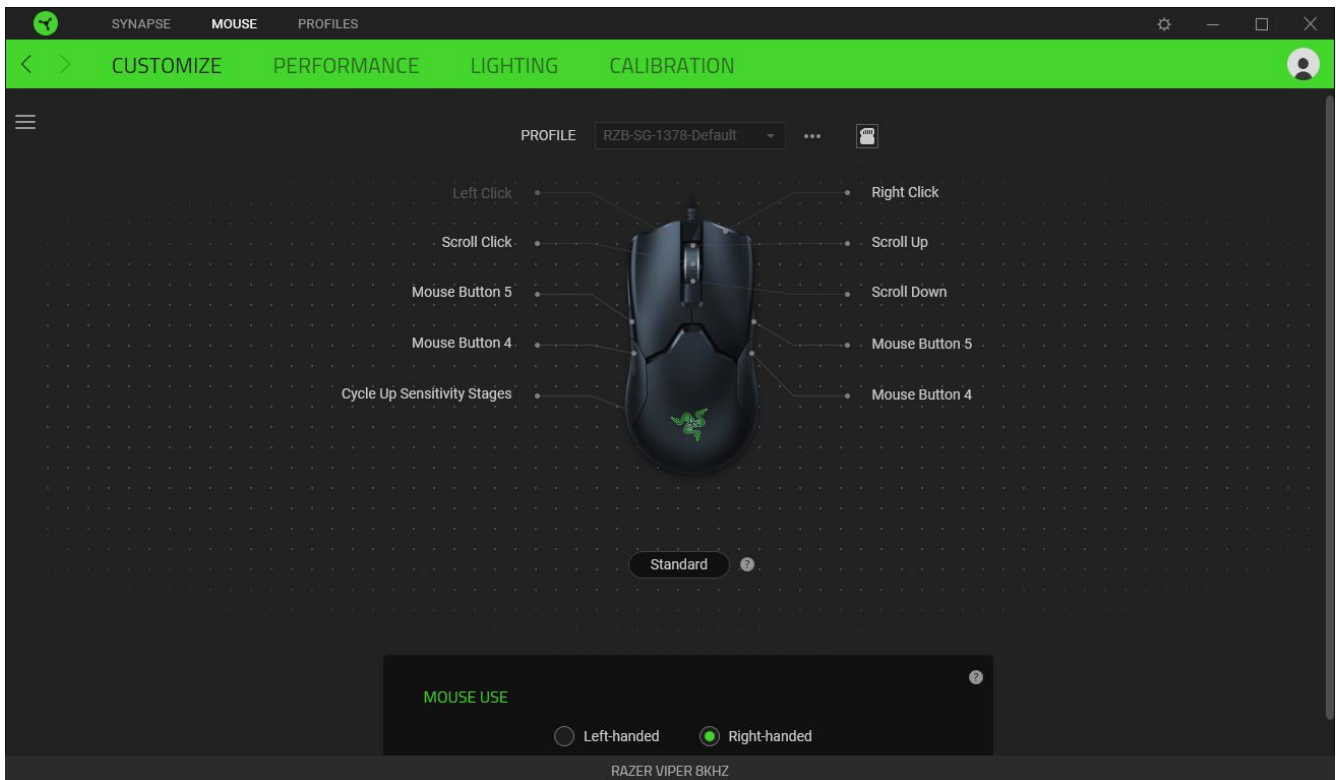


MOUSE TAB

The Mouse tab is the main tab for your Razer Viper 8K^{Hz}. From here, you can change your device's settings such as button assignment, DPI sensitivity, and lighting. Changes made under this tab are automatically saved to your system and cloud storage.

Customize

The Customize subtab is for modifying your mouse's button assignments.

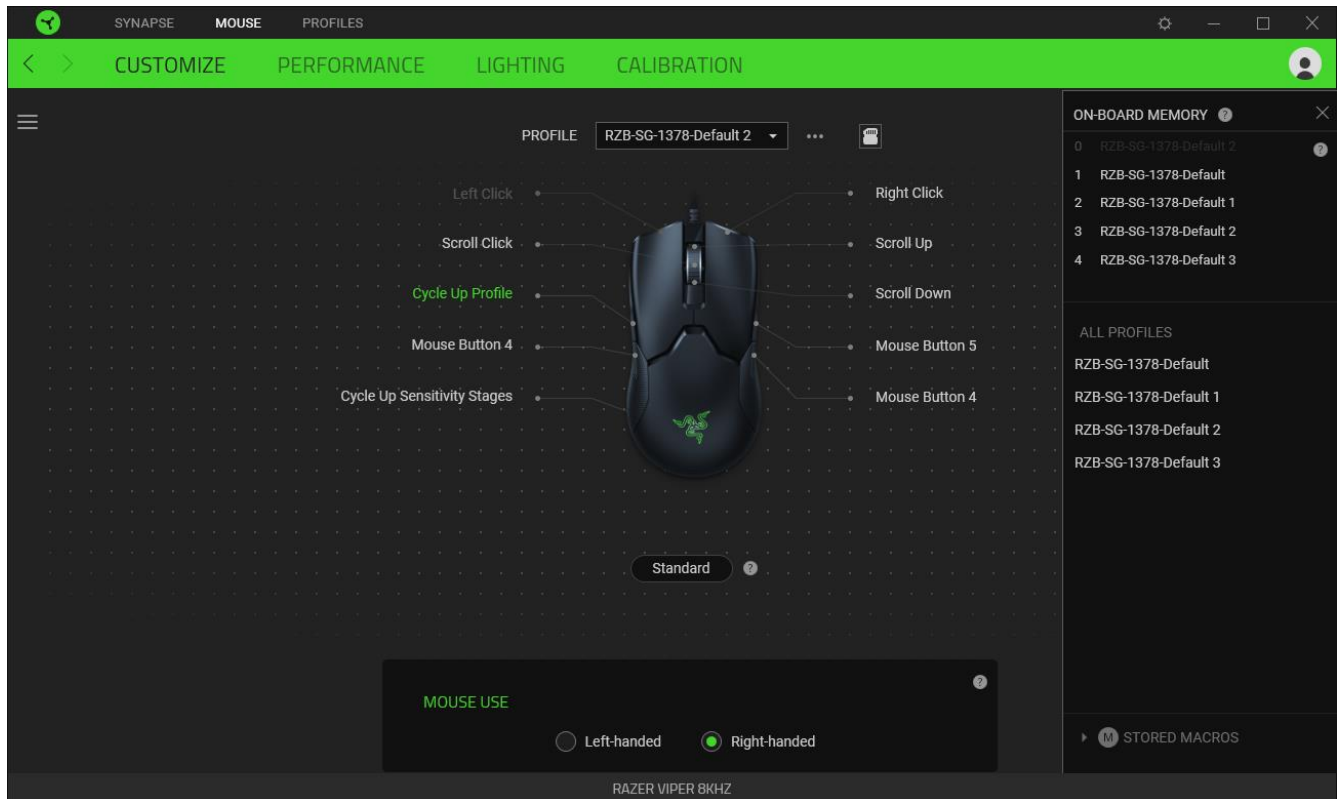


Profile

Profile is a data storage for keeping all your Razer peripheral's settings. By default, the profile name is based on your system's name. To add, rename, duplicate, or delete a profile, simply press the Miscellaneous button (●●●).

Stored Profiles

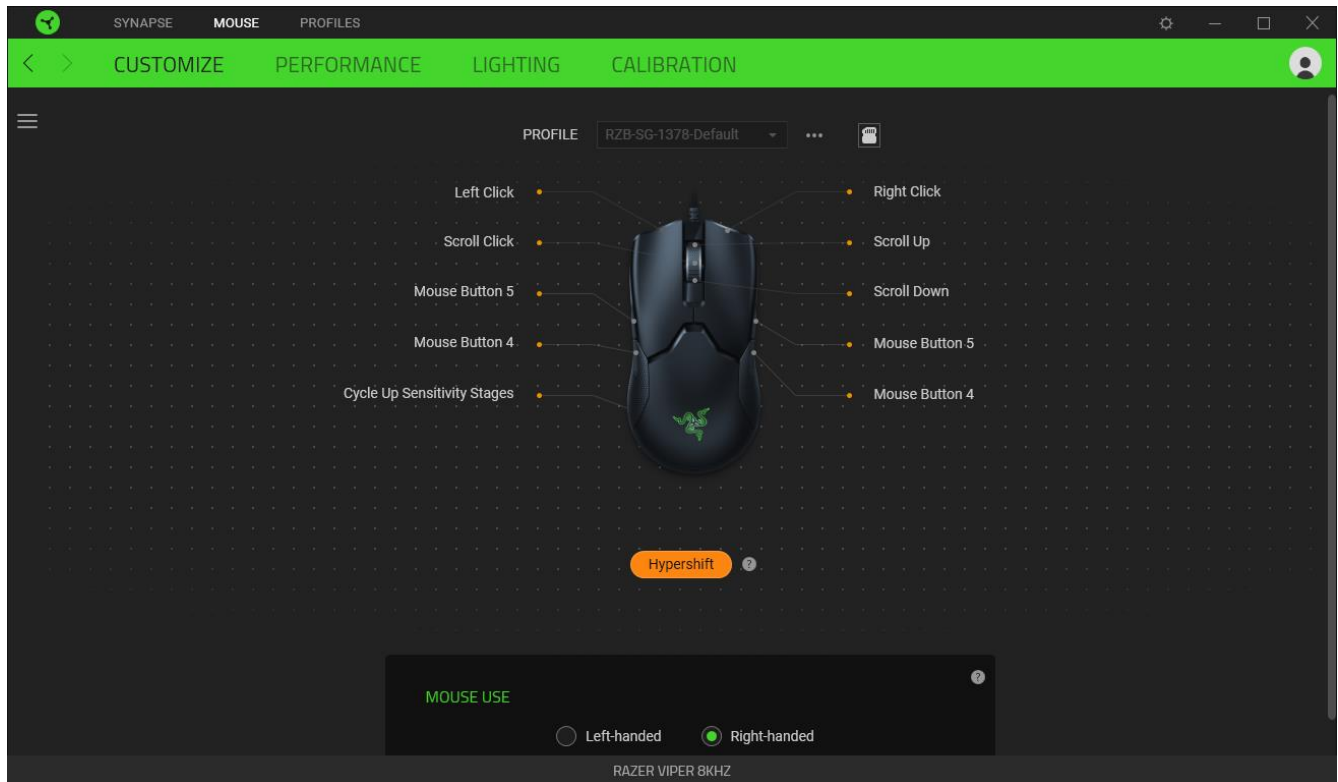
Your Razer Viper 8K^{HZ} can store up to 5 profiles from the Razer Synapse app, allowing you to use these profiles even on systems without the app installed. To assign a profile to any of the available on-board memory slots, click the On-board Profiles button (📁) and drag the profile that you want to assign to the preferred memory slot.



i When using this feature, assigning a Cycle Up Profile function to the same mouse button across all profiles is recommended. This will allow you to continuously switch between all onboard memory profiles even when Razer Synapse is not present.

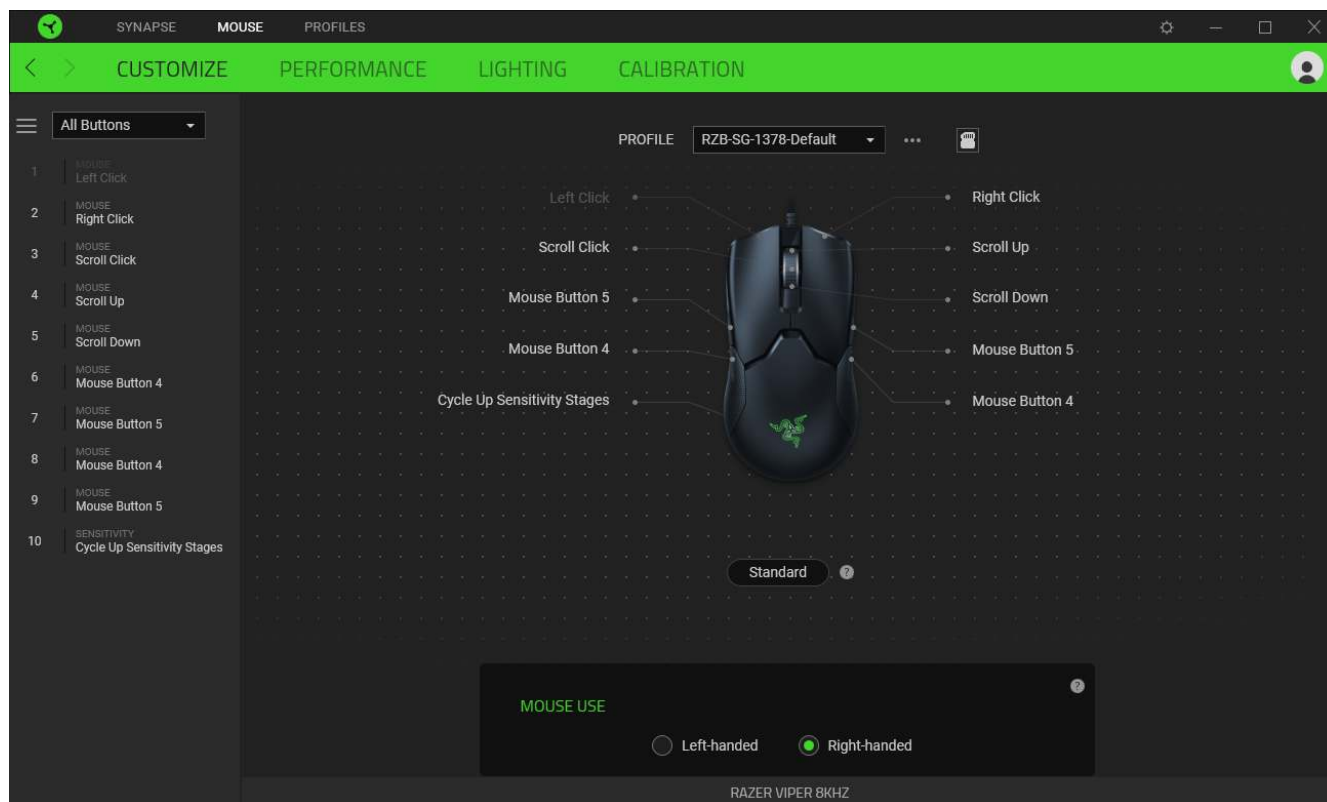
Hypershift

Hypershift mode is a secondary set of button assignments that is activated when the Hypershift key is held down. By default, the Hypershift key is assigned to the fn key of your Razer Synapse supported keyboard however, you can also assign any mouse button as a Hypershift key.

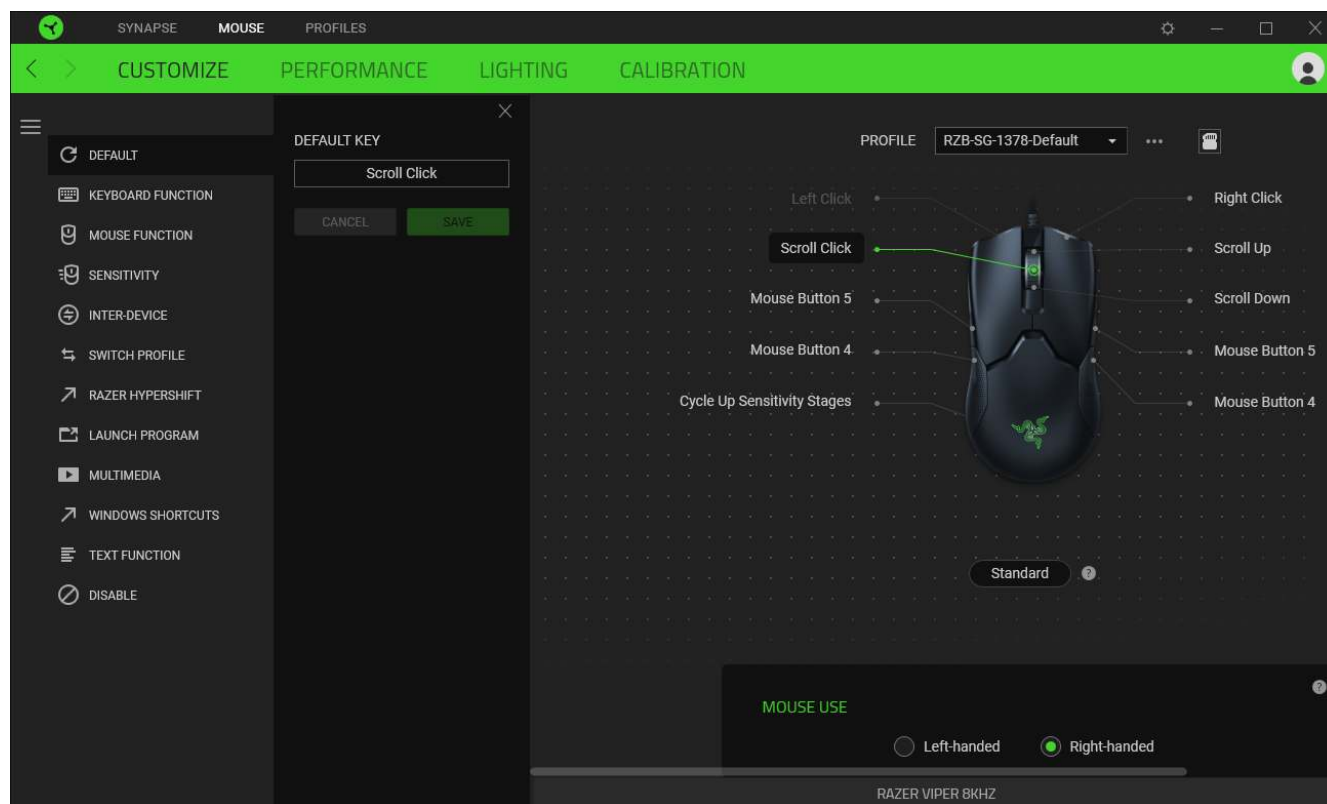


Sidebar

Clicking the Sidebar button (☰) will reveal all current button assignments for your Razer Viper 8K^{Hz}.



Alternatively, you can skip to a specific button assignment by selecting it on the Customize tab.



Upon selecting a button assignment, you may then change it to one of the following functions:

Default

This option enables you to return the mouse button to its original setting.

Keyboard Function

This option changes the button assignment into a keyboard function. You can also choose to enable Turbo mode which allows you to emulate a repeated keyboard function while the button is held down.

Mouse Function

This option substitutes the current button assignment into another mouse function. Listed below are the functions which you can choose from:

- Left Click - Performs a left mouse click using the assigned button.
- Right Click - Performs a right mouse click using the assigned button.
- Scroll Click - Activates the universal scrolling function.
- Double Click - Performs a double left click using the assigned button.
- Mouse Button 4 - Performs a "Backward" command for most internet browsers.
- Mouse Button 5 - Performs a "Forward" command for most internet browsers.
- Scroll Up - Performs a "Scroll Up" command using the assigned button.
- Scroll Down - Performs a "Scroll Down" command using the assigned button.
- Scroll Left - Performs a "Scroll Left" command using the assigned button.
- Scroll Right - Performs a "Scroll Right" command using the assigned button.

You can also choose to enable Turbo mode in some of the mouse functions which allow you to emulate repeatedly pressing and releasing said function while the button is held down.

Sensitivity

This function allows you to manipulate the DPI setting of your Razer Viper 8K^{HZ} with a touch of a button. Listed below are the Sensitivity options and their description:

- Sensitivity Clutch - Changes the sensitivity to a predefined DPI while the designated button is held down. Releasing the button will return it to the previous sensitivity.
- Sensitivity Stage Up - Increases the current sensitivity by one stage.

- Sensitivity Stage Down - Decreases the current sensitivity by one stage.
- On-The-Fly Sensitivity - Pressing the designated button and moving the scroll wheel either up or down will increase or decrease the current DPI respectively.
- Cycle Up Sensitivity Stages - Increases the current sensitivity stage by one. Once it reaches the highest sensitivity stage, it will return to stage 1 when the button is pressed again.
- Cycle Down Sensitivity Stages - Decreases the current sensitivity stage by one. Once it reaches stage 1, it will return to the highest sensitivity stage when the button is pressed again. [Learn more about Sensitivity Stages](#)

M Macro

A Macro is a prerecorded sequence of keystrokes and button presses that is executed with precise timing. By setting the button function to Macro, you can conveniently execute a chain of commands. This function will only be visible when the Macro module is installed.

↔ Inter-device

Inter-device allows you to change the functionality of other Razer Synapse-enabled devices. Some of these functionalities are device-specific such as using your Razer gaming keyboard to change the Sensitivity Stage of your Razer gaming mouse.

↔ Switch Profile

Switch Profile enables you to quickly change profiles and load a new set of button assignments. An on-screen notification will appear whenever you switch profiles.

⚙️ Switch Lighting

Switch Lighting allows you to easily switch between all advanced lighting effects. This function will only be visible when the Chroma Studio module is installed.

↗️ Razer Hypershift

Setting the button to Razer Hypershift will allow you to activate Hypershift mode as long as the button is held down.

🖱️ Launch Program

Launch Program enables you to open an app or a website using the assigned button. When you select Launch Program, two choices will appear which requires you to search for a specific app you want to open, or write the address of the website you want to visit.

Multimedia

This option allows you to assign multimedia controls to your Razer device. Listed below are the multimedia controls you can choose from:

- Volume Down - Decreases the audio output.
- Volume Up - Increases the audio output.
- Mute Volume - Mutes the audio.
- Mic Volume Up - Increases the microphone volume.
- Mic Volume Down - Decreases the microphone volume.
- Mute Mic - Mutes the microphone.
- Mute All - Mutes both microphone and audio output.
- Play / Pause - Play, pause, or resume playback of the current media.
- Previous Track - Play the previous media track.
- Next Track - Play the next media track.

Windows Shortcuts

This option allows you to assign your preferred button into a Windows Operating System shortcut command. For more information, please visit: support.microsoft.com/kb/126449

Text Function

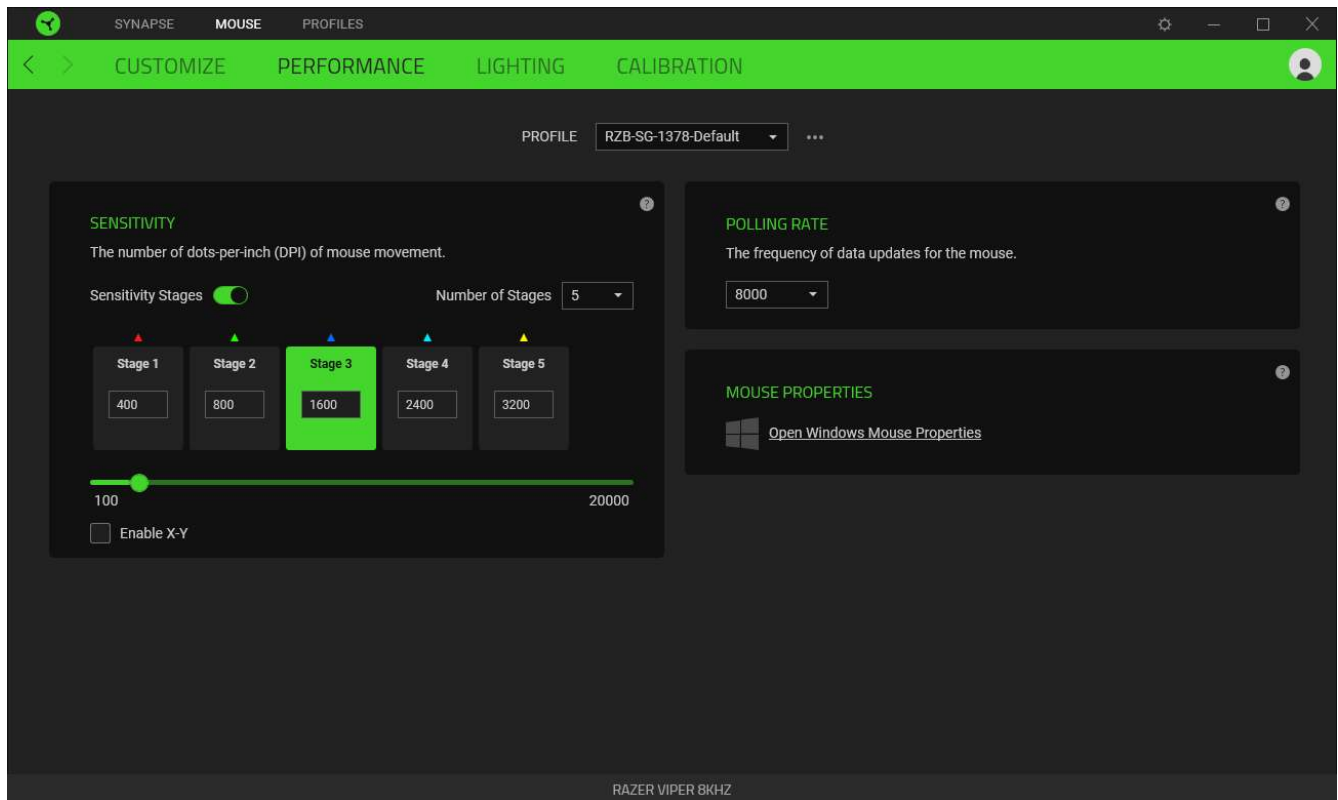
Text Function enables you to type a prewritten text with a touch of a button. Simply write your desired text on the given field and your text will be typed whenever the assigned button is pressed. This function has full Unicode support and you can also insert special symbols from character maps.

Disable

This option renders the assigned button unusable. Use Disable if you do not want to use the selected button or if it interferes with your gaming.

Performance

The Performance subtab allows you to modify the sensitivity, acceleration, and polling rate.



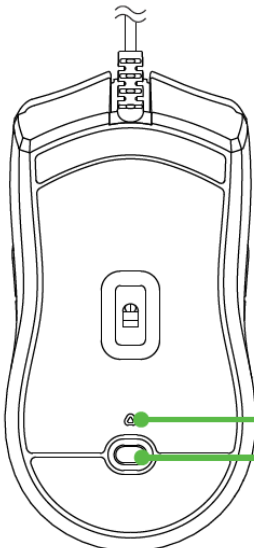
Sensitivity

Sensitivity refers to the distance the cursor will travel based on how far the mouse moved. The higher the DPI, the farther the cursor will travel given the same distance of mouse movement.

Sensitivity Stages

A sensitivity stage is a preset sensitivity value. You can create up to 5 different sensitivity stages which you can cycle through using the DPI cycle button. Pressing the DPI cycle button will cycle through the different sensitivity stages, with the DPI indicator's color showing which DPI is currently selected.

Default DPI stages	Designated color
400	 Red
800	 Green
1600 (Default)	 Blue
2400	 Cyan
3200	 Yellow



The diagram shows the top view of the Razer Viper 8K mouse. A small green dot is labeled 'DPI indicator' and a small circular button is labeled 'DPI cycle button'.

Enable X-Y Sensitivity

By default, the X-axis (horizontal) and Y-axis (vertical) use the same sensitivity values. However, you may set different sensitivity values to each of the axes by selecting the Enable X-Y Sensitivity option.

Polling Rate

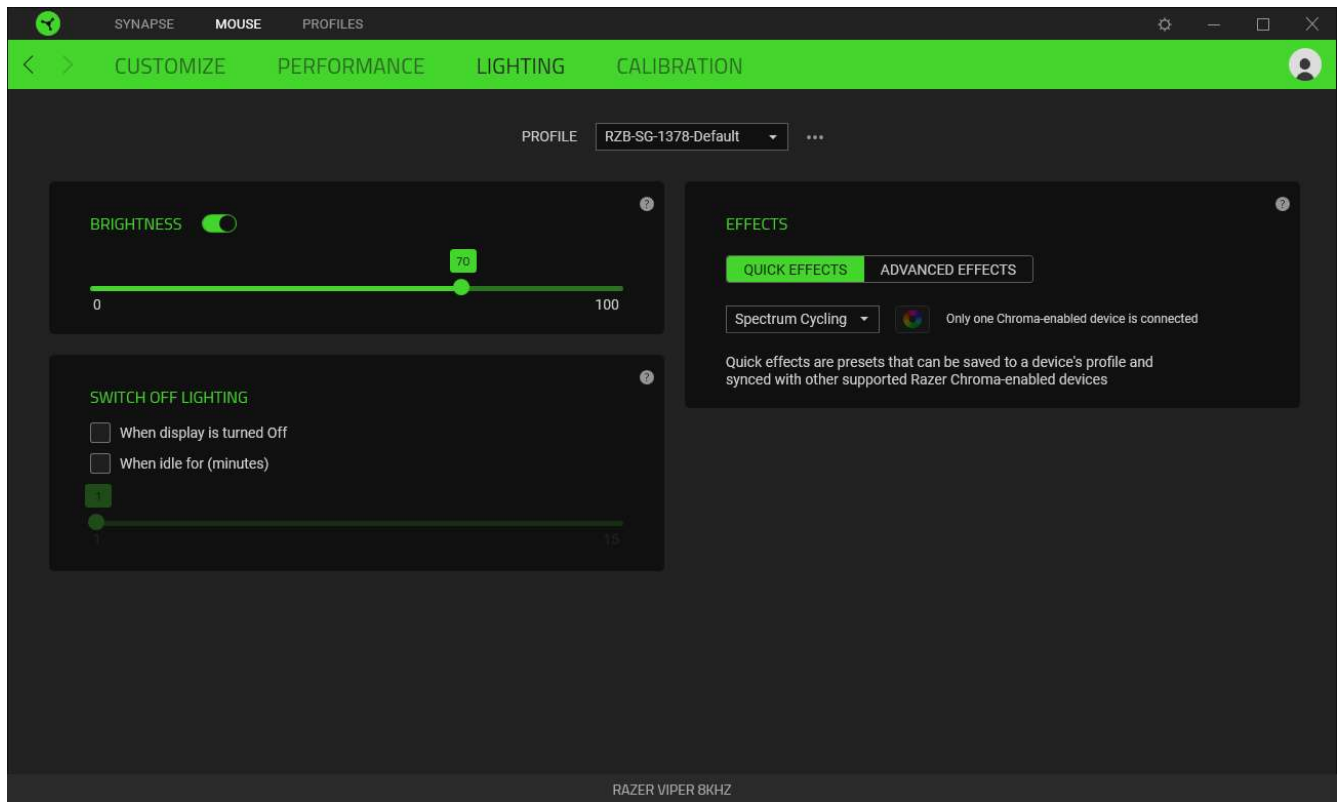
The higher the polling rate, the more often the computer receives information about the status of your mouse, thus increasing the mouse pointer's reaction time. You can switch between the available polling rates on the dropdown menu.

Mouse Properties

From here, you can access the Windows Mouse Properties where you modify operating system settings that can directly affect your Razer Viper 8K^{HZ}.

Lighting

The Lighting subtab enables you to modify your Razer device's light settings.



Brightness

You can turn off your Razer device's lighting by toggling the Brightness option or increase/decrease the luminance using the slider.

Switch Off Lighting

This is a power saving tool which allows you to disable your device's lighting in response to your system's display turning off and/or automatically power down when your Razer Viper 8K^{HZ} has been idle for a set amount of time.

Effects

A number of effects can be selected and applied to your mouse's lighting, as listed here:

	Name	Description	How to set up
	Audio meter	The LEDs will light up according to the audio level with a default spectrum of colors	Select a Color Boost level
	Breathing	The lighting will fade in and out of the selected color(s)	Select up to 2 colors or randomize colors
	Reactive	The LEDs will light up when you click any of the mouse buttons	Select a color and a duration
	Spectrum cycling	The lighting will cycle between 16.8 million colors indefinitely	No further customization required
	Static	The LEDs will remain lit in the selected color	Select a color

If you have other supported Razer Chroma-enabled devices, you can synchronize their quick effects with your Razer device by clicking the Chroma Sync button ().

 *Only devices that support the selected lighting effect will synchronize.*

Advanced Effects

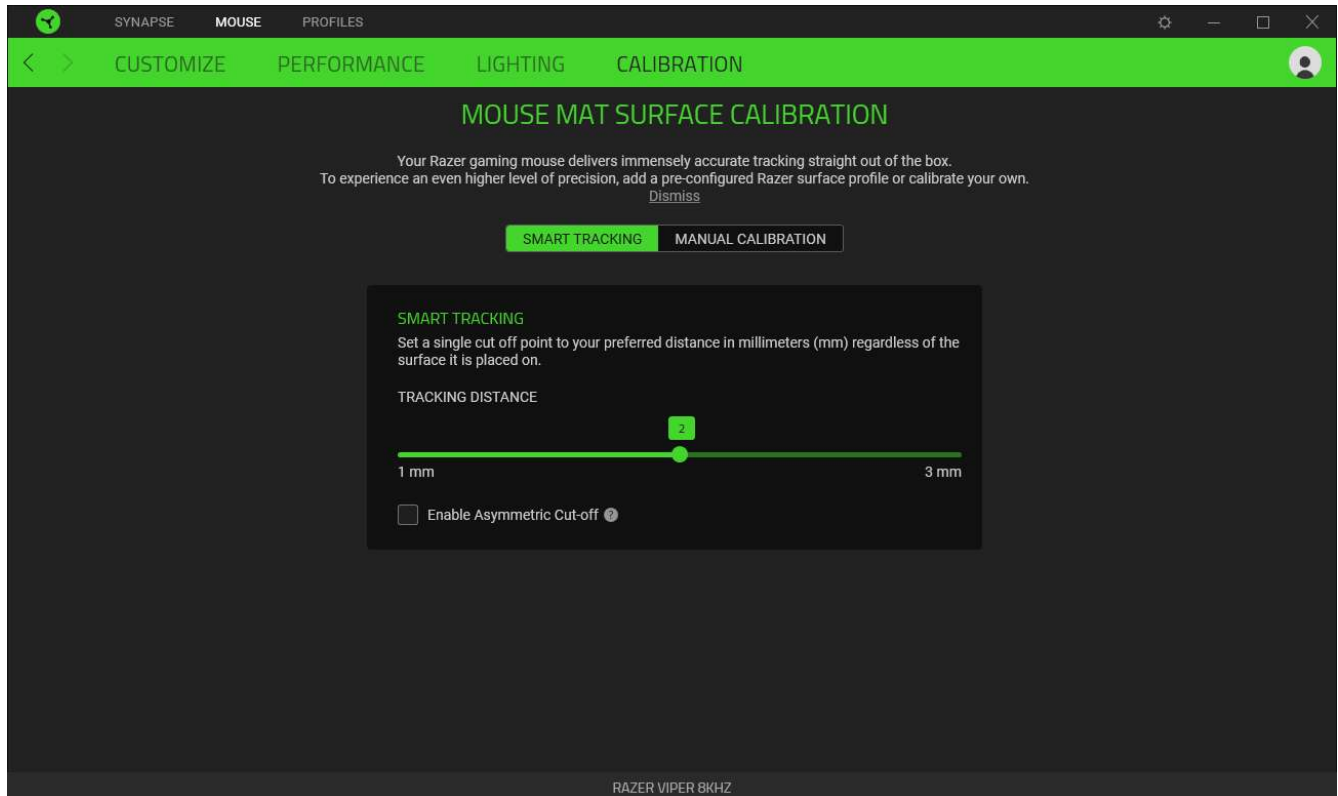
The Advanced Effects option allows you to choose a Chroma Effect you want to use on your Razer Chroma-enabled peripheral. To start making your own Chroma Effect, simply press the Chroma Studio button ().

Calibration

The Calibration subtab allows you to optimize your Razer Precision Sensor to any surface for better tracking.

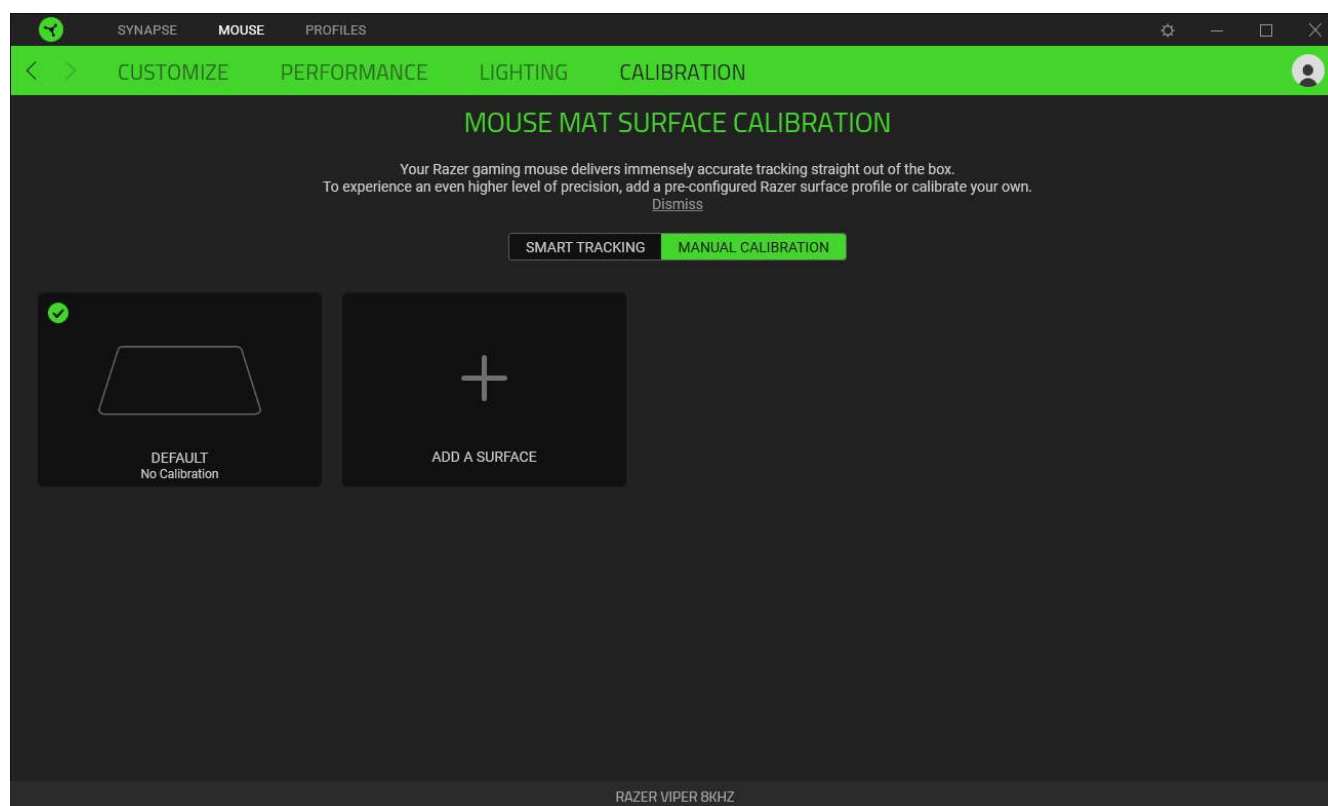
Smart Tracking

Smart Tracking enables you to set the distance at which the sensor stops tracking when it is lifted from its surface to avoid unwanted cursor movement. You may set different values to the lift-off and landing distances by selecting the Enable Asymmetric Cut-Off.



Manual Calibration

To use this feature, you must click the Add A Surface option where you can select from a comprehensive list of Razer mouse mats or add your own mouse mat.

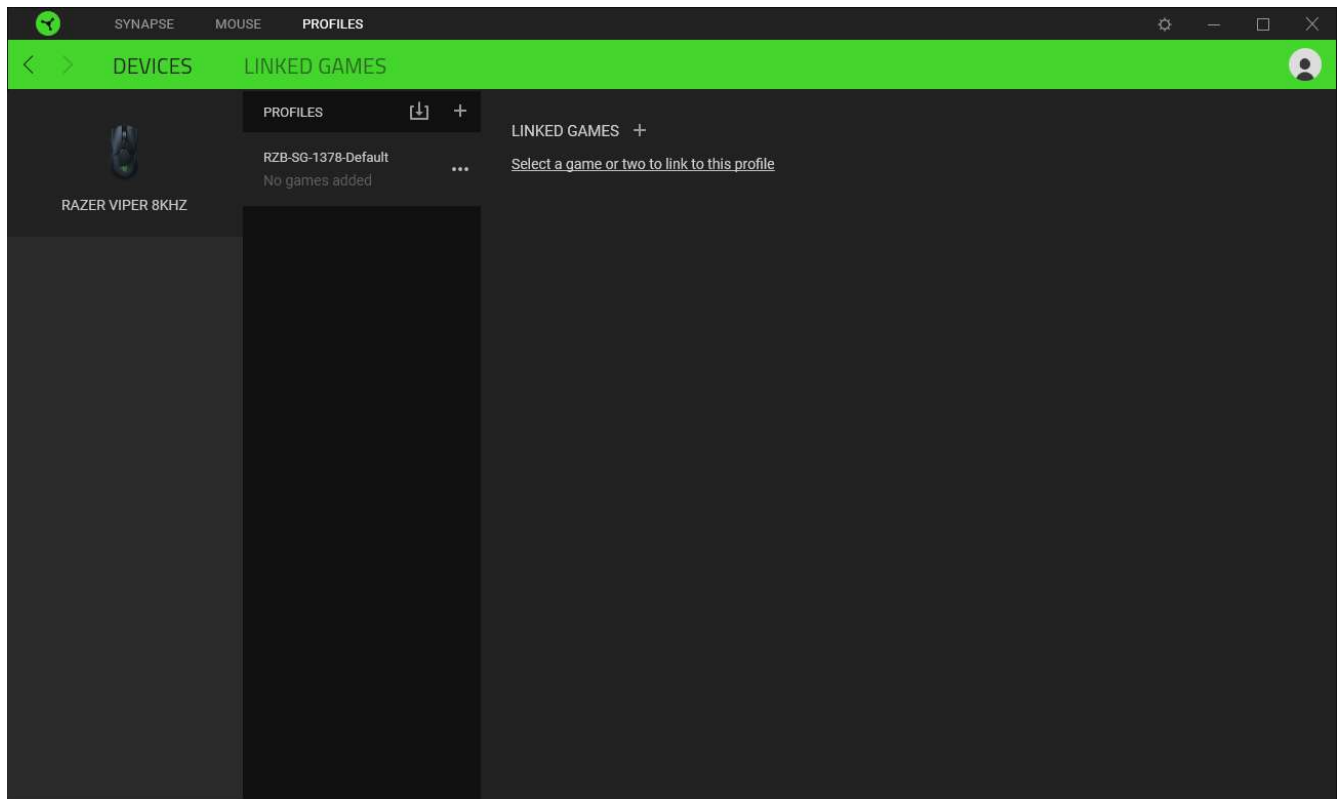


PROFILES TAB

The Profiles tab is a convenient way of managing all your profiles and linking them to your games and applications.

Devices

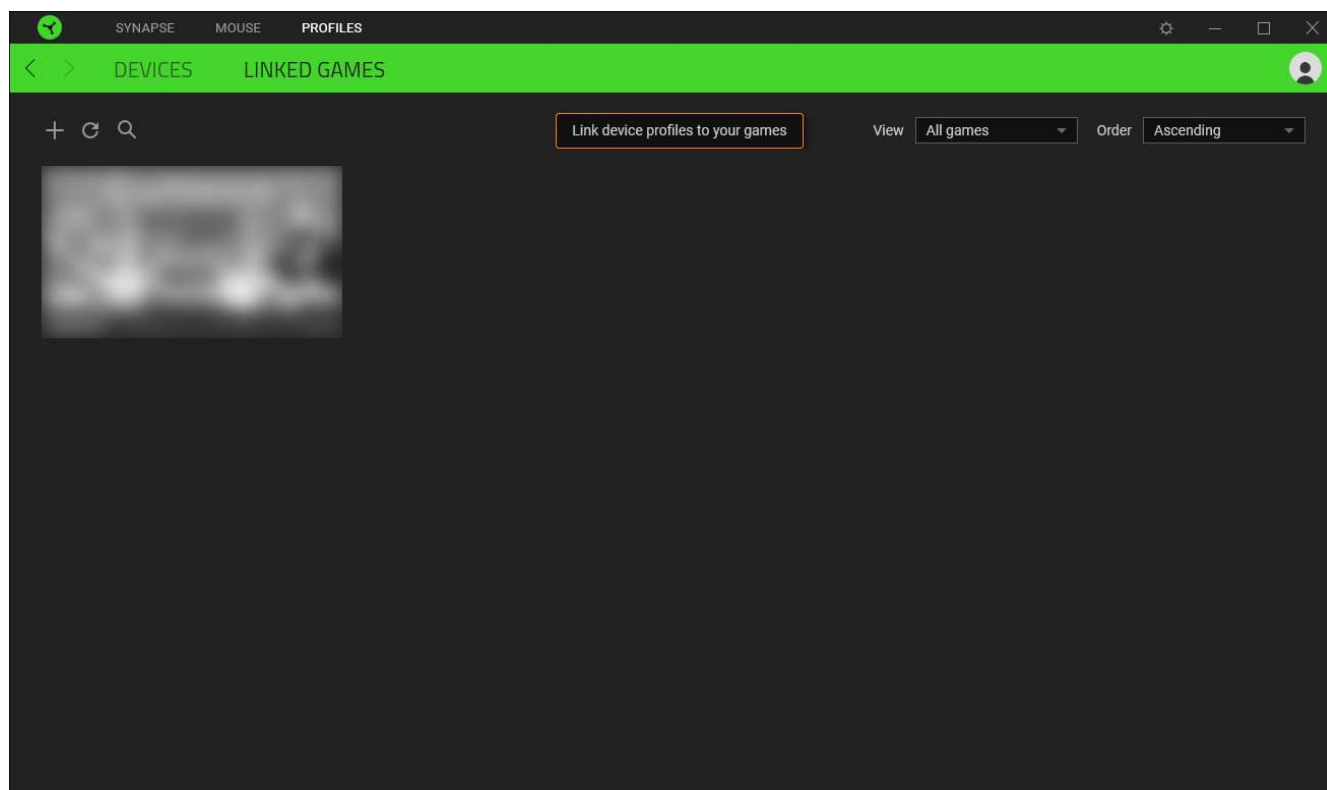
View which games are linked to each device's profiles or which Chroma Effect is linked to specific games using the Devices subtab.



You can import Profiles from your computer or from the cloud through the import button () or create new profiles within the selected device using the add button (). To rename, duplicate, export, or delete a profile, simply press the Miscellaneous button (). Each profile can be set to automatically activate when you run an application using the Linked Games option.

Linked Games

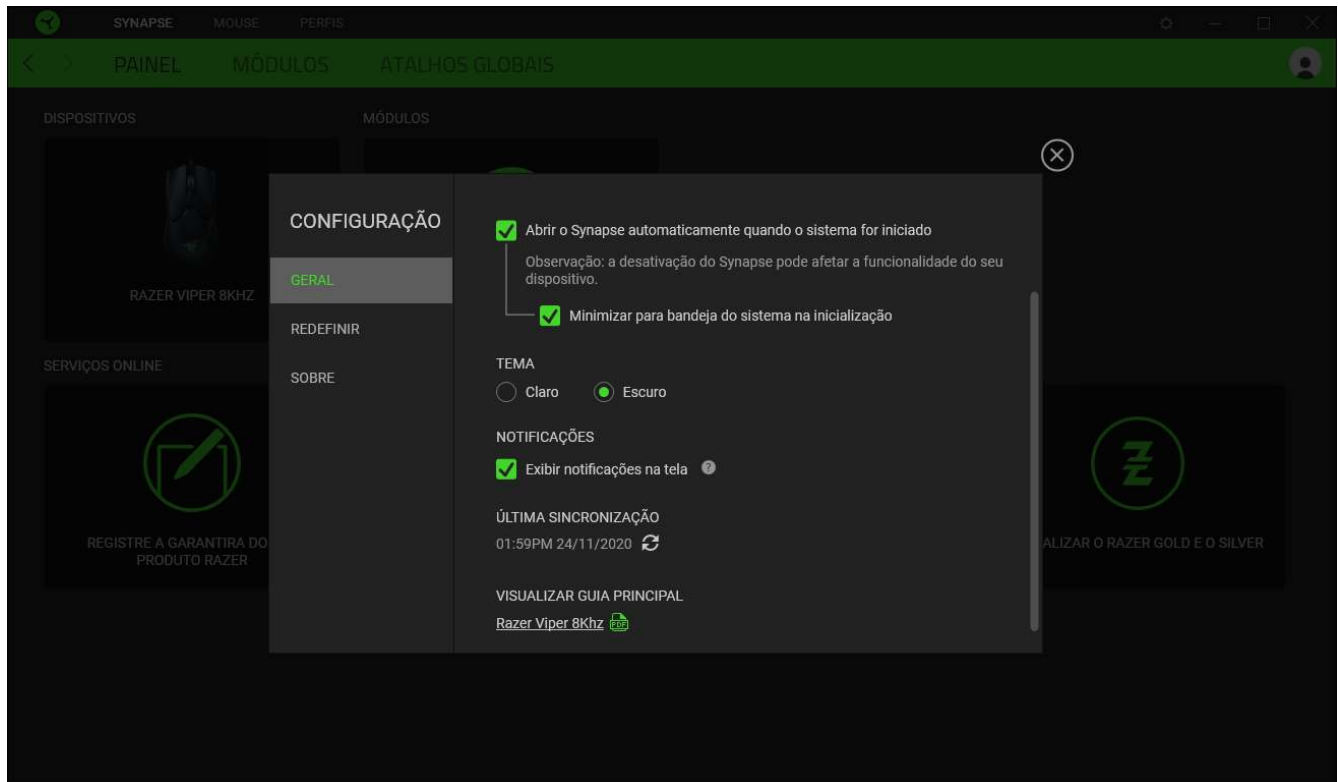
The Linked Games subtab gives you the flexibility to add games, view devices that are linked to games, or search for added games. You can also sort games based on alphabetical order, last played, or most played. Added games will still be listed here even if it is not linked to a Razer device.



To link games to connected Razer devices or Chroma Effects, simply click on any game from the list, and then click **Select a device and its profile to launch automatically during gameplay** to select the Razer device or Chroma Effect it will link with. Once linked, you may click on the Miscellaneous button (●●●) of the corresponding Chroma Effect or device to select a specific Chroma Effect or profile.

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 factory reset on any connected Razer device.



General tab

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

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.



By resetting a Razer device, all profiles stored on the selected device's on-board memory will be erased.

About tab

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

6. SAFETY AND MAINTENANCE

SAFETY 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.

Do not take apart the device and do not attempt to operate it under abnormal current loads. Doing so will void your warranty.

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 in order to let the temperature stabilize to an optimal level.

COMFORT

Research has shown that long periods of repetitive motion, improper positioning of your computer peripherals, incorrect body position, and poor habits may be associated with physical discomfort and injury to nerves, tendons, and muscles. Below are some guidelines to avoid injury and ensure optimum comfort while using your Razer Viper 8K^{HZ}.

- Position your keyboard and monitor directly in front of you with your mouse next to it. Place your elbows next to your side, not too far away and your keyboard within easy reach.
- Adjust the height of your chair and table so that the keyboard and mouse are at or below elbow-height.
- Keep your feet well supported, posture straight and your shoulders relaxed.
- During gameplay, relax your wrist and keep it straight. If you do the same tasks with your hands repeatedly, try not to bend, extend or twist your hands for long periods.
- Do not rest your wrists on hard surfaces for long periods. Use a wrist rest to support your wrist while gaming.
- Do not sit in the same position all day. Get up, step away from your desk and do exercises to stretch your arms, shoulders, neck and legs.

If you should experience any physical discomfort while using your mouse, such as pain, numbness, or tingling in your hands, wrists, elbows, shoulders, neck or back, please consult a qualified medical doctor immediately.

MAINTENANCE AND USE

The Razer Viper 8K^{HZ} 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 or harsh cleaning agents.

To get the ultimate experience in movement and control, we highly recommend a premium mouse mat from Razer. Some surfaces will cause undue wear on the feet requiring constant care and eventual replacement.

Do note that the sensor of the Razer Viper 8K^{HZ} is 'tuned' or optimized especially for the Razer mouse mats. This means that the sensor has been tested extensively to confirm that the Razer Viper 8K^{HZ} reads and tracks best on Razer mouse mats.

7. LEGALESE

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