



G502 X PLUS | G502 X LIGHTSPEED Gaming Mouse

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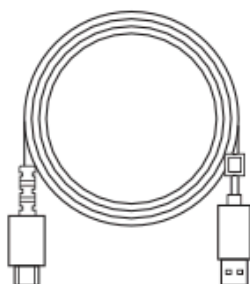
DOWNLOAD

- [G Hub](#)

GETTING STARTED

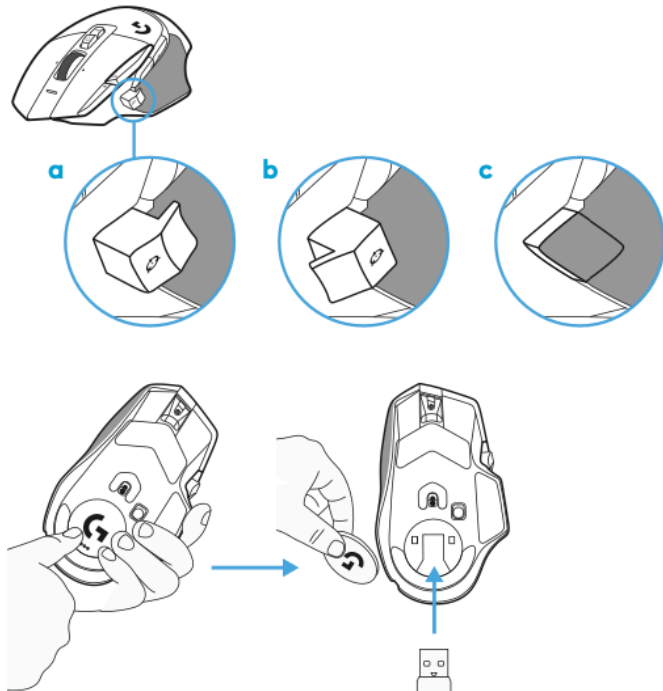
USER GUIDE

Package contents

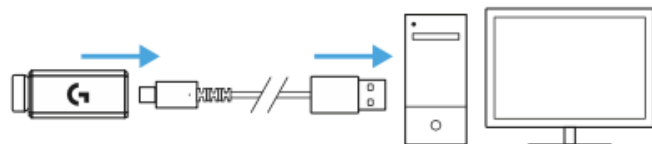


Setup instructions

1. Orientate the DPI Shift to fit your preference or replace it by the button cover to extend the grip surface.
2. The receiver can be stored in the mouse behind the door when on the go.

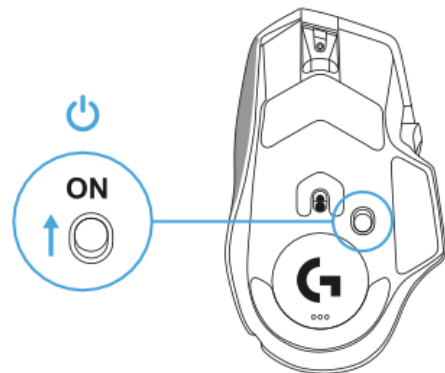


3. The LIGHTSPEED Wireless USB-A receiver is below the mouse in the product tray.
Plug the USB-A cable connector into your PC and the USB-C connector into the receiver extension adapter. Plug the USB-A receiver into the adapter.

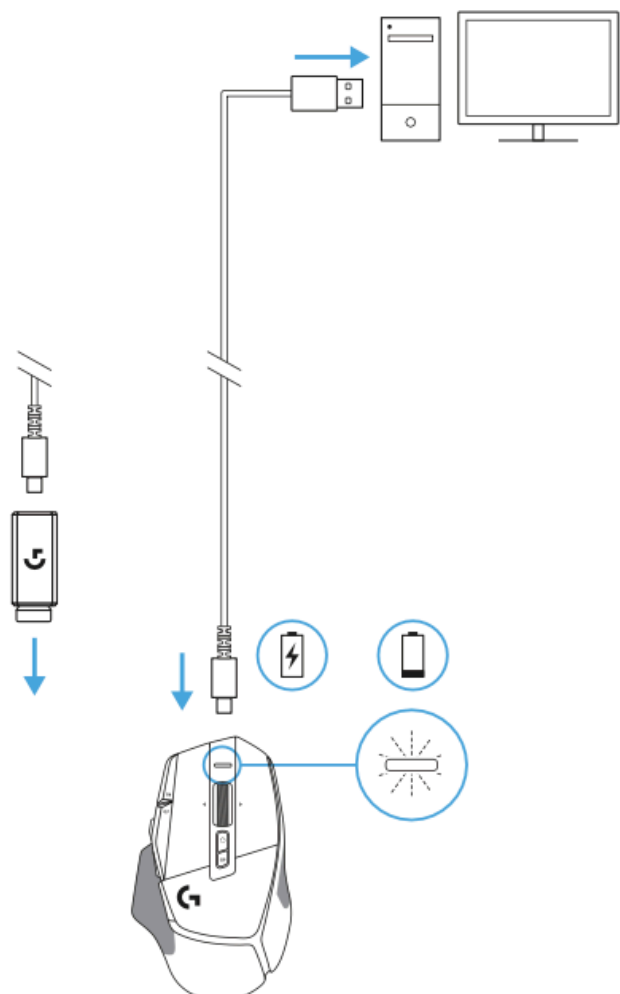


- The LIGHTSPEED Wireless receiver can also be plugged directly into your PC, but using the cable and extension adapter will ensure a better connection and easy access to the cable when you need to charge your mouse.

4. Slide the power button up to turn on your mouse.
5. Download Logitech G HUB gaming software to personalize your G502 X mouse. Fine tune to suit your playstyle, personality and each of your games, assign commands to any of the 13 controls, and more.

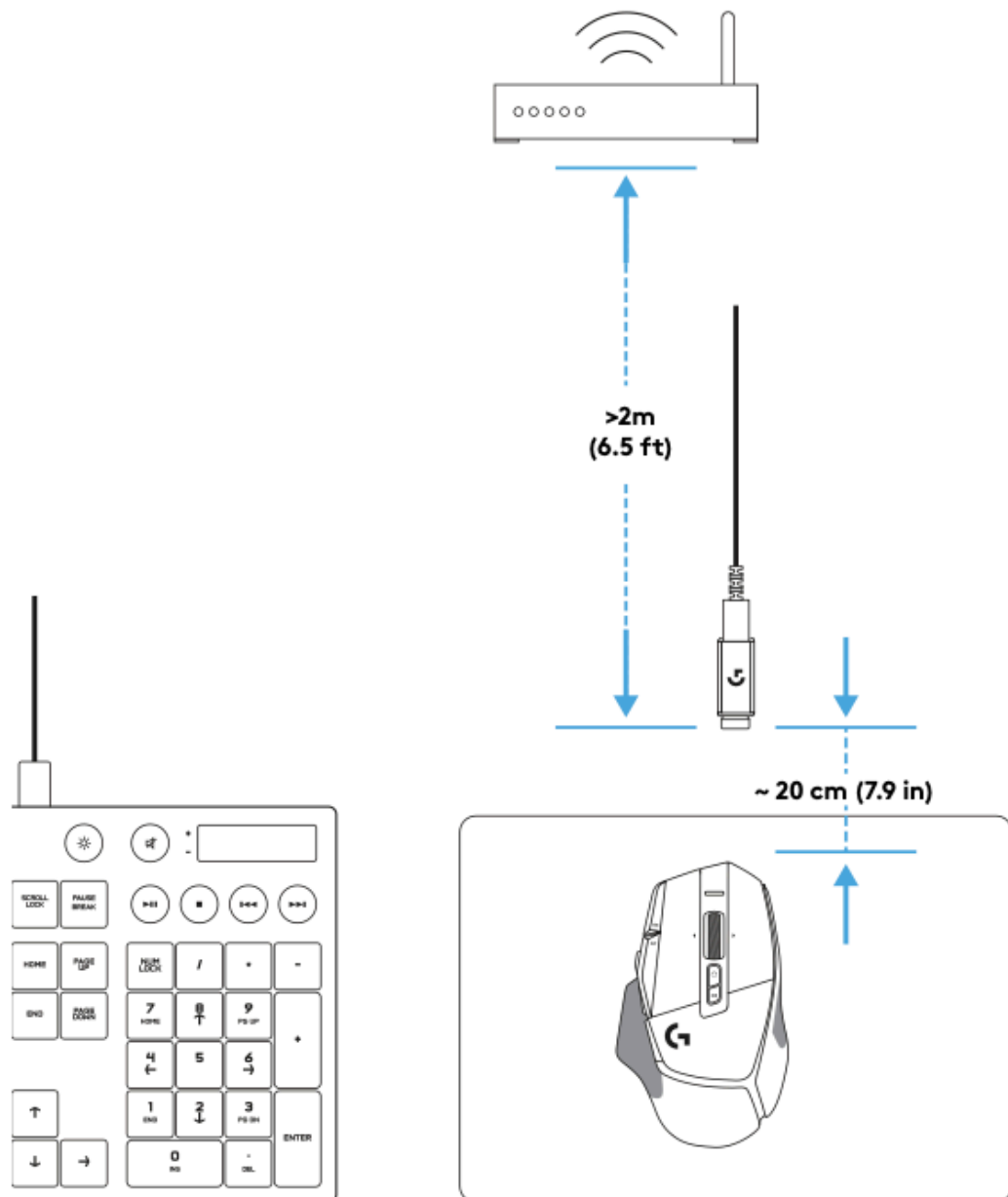


6. To charge your mouse, disconnect the cable from the adapter and plug it into the USB-C port located at the front of the mouse. Your mouse will operate in data-over-cable mode whenever it is plugged in directly to a PC. Charging from 0% to 100% takes around 2 hours when plugged into a USB port. Compatible with Powerplay wireless charging system.



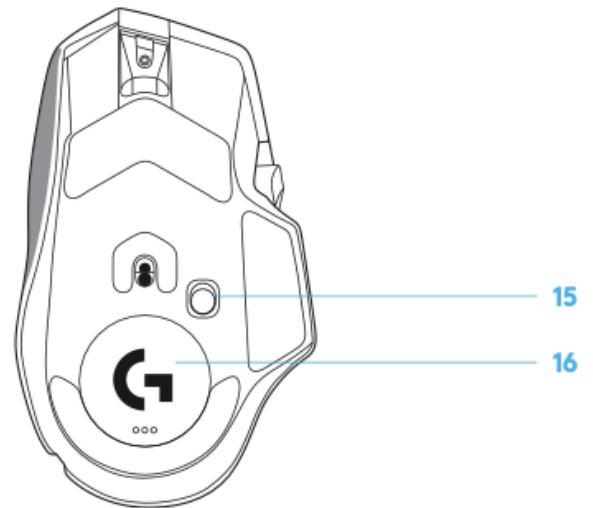
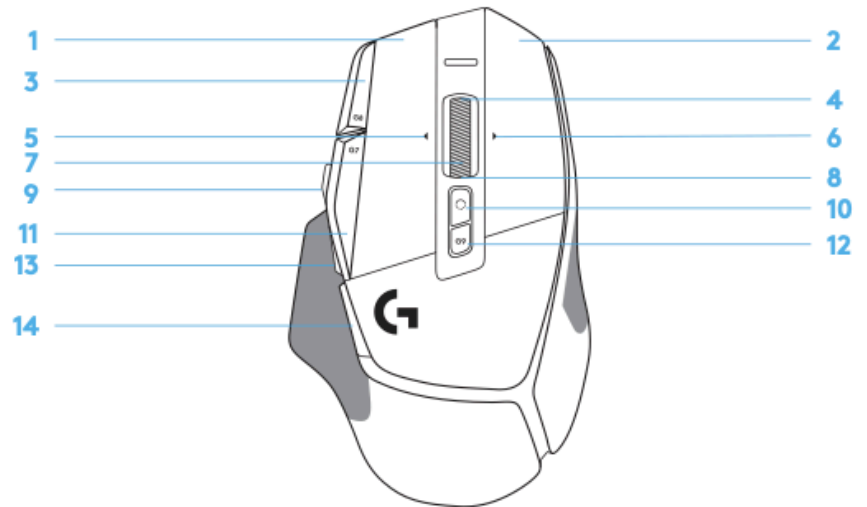
Tips:

- Keep the mouse and receiver at least 2 meters away from wireless routers or other 2.4 GHz wireless devices to minimize environmental noise.
- G502 X PLUS and G502 X LIGHTSPEED have a wireless range of up to 10 meters. To ensure optimal performance in noisy wireless environments, and to keep the charging cable easily accessible, it is recommended to keep the receiver within 20 cm of the mouse.



Mouse features

1. Left click (Button G1)
2. Right click (Button G2)
3. DPI up (Button G8)
4. Scroll up
5. Scroll left (Wheel tilt left)
6. Scroll right (Wheel tilt right)
7. Middle click (Button G3)
8. Scroll down
9. DPI Shift (Button G6)
10. Wheel mode toggle button
(not programmable)
11. DPI down (Button G7)
12. Profile cycling (Button G9)
13. Forward (Button G5)
14. Back (Button G4)
15. On / Off switch
(bottom of mouse, not programmable)
16. POWERPLAY™ Aperture door
wireless receiver storage



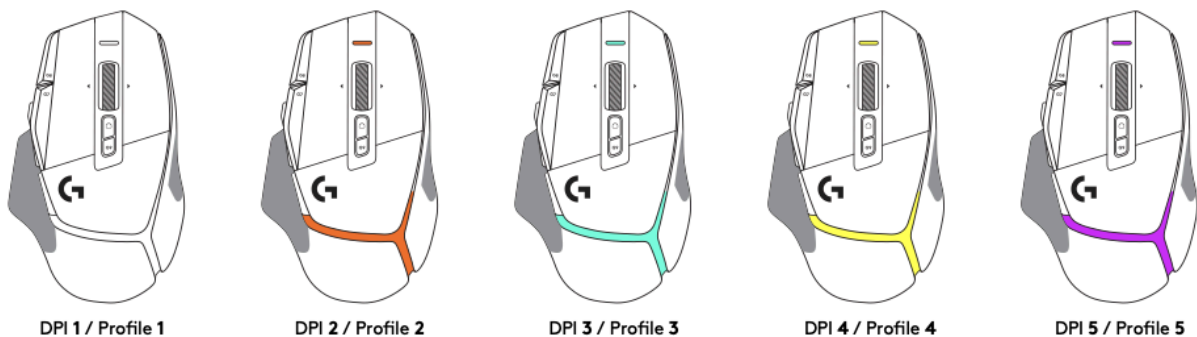
Onboard profiles by default

Up to 5 Onboard memory profiles can be unlocked and customized in G HUB.

SETTINGS	MAIN PROFILE GAMING	SECONDARY PROFILE PRODUCTIVITY	SECONDARY PROFILE G-SHIFTED (G-SHIFT on DPI Shift button)
Report Rate	1 ms	2 ms	No changes
DPI	800, 1200, 1600, 2400, 3200	800, 1200, 1600, 2400, 3200	No changes
DPI steps colors	1: White 2: Orange 3: Teal 4: Yellow 5: Magenta	1: White 2: Orange 3: Teal 4: Yellow 5: Magenta	
Default DPI	1600	1600	No changes
G6 button	DPI Shift to 800	G-Shift (see right column)	No changes
PROGRAMMABLE CONTROLS			
Left Main Button	Left click - system/application	Left click - system/application	No changes
Right Main Button	Right click - system/application	Right click - system/application	No changes
Middle Wheel Button	Wheel click/press - system/application	Wheel click/press - system/application	Ctrl-T - opening a new tab in browser
G4 Button	Side button - system/application (commonly used backwards)	Side button - system/application (commonly used backwards)	No changes
G5 Button	Side button - system/application (commonly used backwards)	Side button - system/application (commonly used backwards)	No changes

PROGRAMMABLE BUTTONS			
G7 Button	DPI Down	DPI Down	Ctrl-X
G8 Button	DPI Up	DPI Up	Ctrl-Z
G9 Button	Profile cycle	Profile cycle	Ctrl-0
Scroll right (wheel tilt right)	Tilt Right - system/application	Tilt Right - system/application	Ctrl-Tab
Scroll left (wheel tilt left)	Tilt Left - system/application	Tilt Left - system/application	Ctrl-Shift-Tab
Wheel Scroll Up	Scroll Up - system/application	Scroll Up - system/application	Volume Up
Wheel Scroll Down	Scroll Down - system/application	Scroll Down - system/application	Volume Down

Profile, DPI selection and DPI shift



When the DPI Shift button is pressed: the mouse displays the color associated with the DPI shift speed, when released the mouse displays the DPI setting color that was used prior to this action.

DPI and profile selection are communicated using lighting on the top and the rear of the mouse. DPI change is expressed by different steady colors, while profile change is displayed by different blinking colors.

Battery life

G502 X PLUS and G502 X LIGHTSPEED have a rechargeable 500 mAh LiPoL battery which provides up to 140 h of continuous motion for G502 X and up to 120 h for G502 X PLUS.¹

Charging Status:

When the charging cable is plugged in the device:

- Steady **green** = charge completed (100%) when device is ON or OFF
- Breathing **green** = charging (0 - 99%)

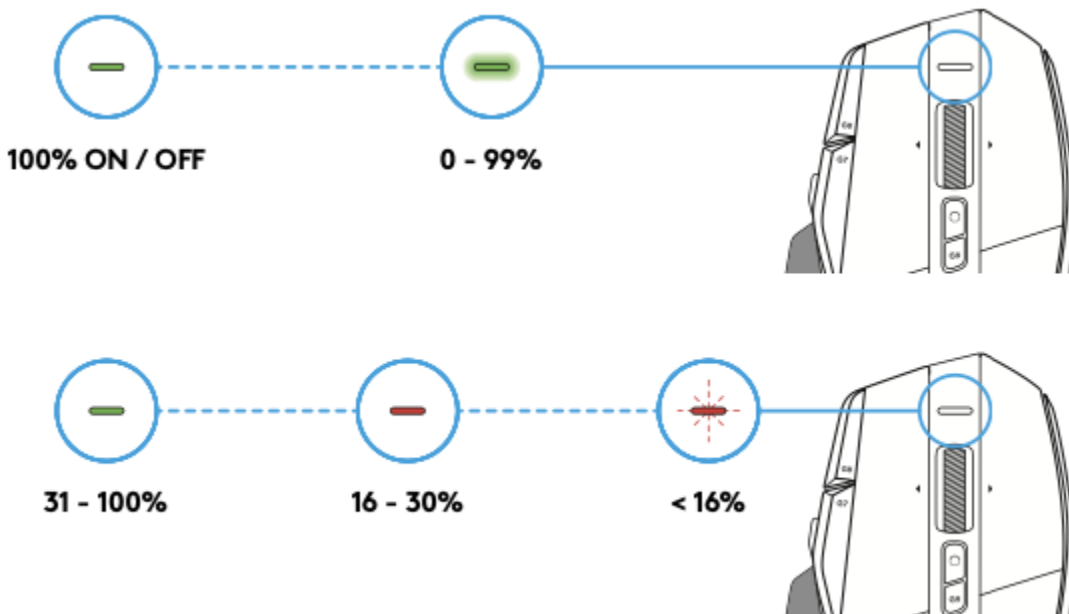
Battery level:

When turning the device ON:

- Steady **green** = good (31% - 100%)
- Steady **red** = low (16 - 30%)
- Slow blink **red** = critical (< 16%)

Tips:

- Charge level, power draw, and estimated remaining battery life can be checked in Logitech G HUB.



¹ Battery life and capacity may vary with age and use.
Rechargeable batteries have a limited number of charge cycles.

SPECIFICATIONS

Product Information		
Component	Model Number (M/N)	Location
Mouse	MR0089	Label inside the receiver compartment
Receiver	CU0021	On receiver

Product Dimensions				
Component	Height	Width	Depth	Weight
Mouse	131.4 mm	41.1 mm	79.2 mm	102 g

Mouse Specifications	
Connection Type	USB
USB VID_PID	VID_046D&PID_C095
USB Protocol	2.0
USB Speed	Full-speed
USB Report Rate	1,000 MHz (Min 1ms)
DPI (Min/Max)	Min: 100 - Max: 25,600
Sensor	HERO™
Sensor Type	Optical, Visible light: No
Max acceleration	> 40G 2

Mouse Specifications	
Max tracking speed	> 400 IPS
Onboard Memory	Yes (5)
Scroll Wheel	Vertical scroll type: Hyper-fast Left/Right tilt: Yes
Indicator Lights (LED)	Functional LED at the front of the product
RGB	Evolved LIGHTSYNC, 8 Zone
Number of Buttons	11 buttons, 13 Programmable controls
Connect/Power	On/Off Switch (under mouse)
Battery Details	Type: Rechargeable Quantity: 1 Accessible: No Size: Proprietary Technology: Li-polymer
Battery Life	Up to 500 hours - HI mode (performance); Up to 18 months - LO mode (endurance)
Materials used	Rubber, ABS, PC, PCR
Other Features	Thumb button orientable 180° and removable (replacement by keycap - extending the grip area) Scroll Wheel Vertical scroll type: Hyper-fast / Left/Right tilt: Yes Powerplay compatible gaming mouse

Receiver Specifications	
Connection Type	USB 2.0
USB VID_PID	VID_046D&PID_C547 (Wireless)
USB Protocol	HID
USB Speed	Full-speed
Wireless Protocols	Lightspeed 2 (including 2:1 pairing with a compatible Keyboard receiver)

FAQs

- Scrolling on my G502 X is erratic

If you are experiencing issues with the scroll function on your G502 (X, LIGHTSPEED, or PLUS), do the following:

- Clean off dust or dirt on your mouse using a Q-tip or a compressed can of air.
- Test your mouse on a different surface or mouse pad.
- Update the device's firmware:
 1. Download and install Logitech G HUB: logitechg.com/innovation/g-hub.html
 2. Open G HUB, select the mouse from the home screen, and then go **Settings**.
 3. If a firmware update is available, a **blue Update button** appears under the firmware version on the top right corner of the window. Click **Update** and follow the onscreen instructions.
- In G HUB, try adjusting the DPI settings.
- Make sure the wheel itself moves and isn't physically stuck.
- Unpair and repair the mouse, or disconnect and reconnect hardware.
- **Windows only** — try a different USB port or on a different computer. If it works on a different computer, then the issue might be related to a USB chipset driver. Updating the motherboard USB chipset driver may make a difference.

- My mouse does not hold a charge

If you're experiencing a charging issue on your G502 (X, LIGHTSPEED, or PLUS) try the following:

1. Verify that your device is connected directly to the computer and not to a hub, extender, switch, or something similar.
2. Recharge using a different USB cable.
3. Use an alternative power source to charge.
4. Check the G Hub application for any firmware updates for your G502 (X, LIGHTSPEED, or PLUS).

- My G502 X Plus and LIGHTSPEED mouse shows incorrect LED status while the system is in sleep mode

This is expected behavior as the device will try to send a remote wake up signal to the computer. However, it can't wake up the system since it's in hibernation. Because of this, it's possible that the LED notification lags or shows an inconsistent status.

- I have paired my G502 X Plus/LIGHTSPEED mouse to my keyboard but it reconnects to the original receiver while charging

This happens because the primary function of the mouse is to establish a connection with the original receiver. We recommend unplugging the mouse receiver when you initiate the 2:1 pairing and keep it unplugged while keyboard and mouse are paired with a single receiver.

An unpaired receiver has been detected.

PAIR

DISMISS

- My G502 X does not show up on G HUB automatically when connected via USB

This is expected if the mouse is in sleep mode. To make it recognised in the G HUB product list you may need to move or click the mouse.

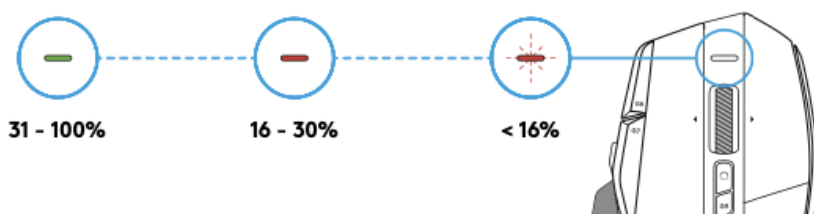
- G HUB indicates my G502 X Plus or LIGHTSPEED is fully charged, but the LED is breathing green

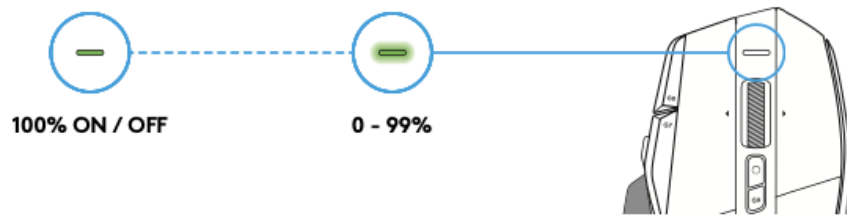
In some cases, the LED indicator on the G502 X Plus or G 502 X LIGHTSPEED may start breathing green even though G HUB indicates your mouse is fully charged.

If this happens, unplug the mouse from the USB-C charging cable. The LED indicator will stop breathing.

- How do I know when to charge my G502 X Plus and LIGHTSPEED?

Your G502 X Plus and LIGHTSPEED comes with a built-in rechargeable battery which can be charged with the provided USB cable. The mouse has a multi-color LED indicator, which displays the battery level and charging behavior.





A steady green light while the device is plugged in means it's fully charged. A breathing green light indicates that it's charging.

When you first turn on your mouse, the approximate battery level is indicated by the LED:

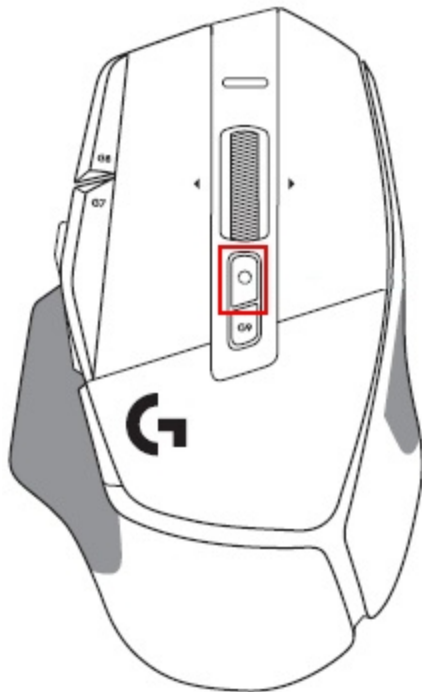
Steady **green** = good (31% - 100%)

Steady **red** = low (16 - 30%)

Slow blinking **red** = critical (< 16%)

- What does the G502 X wheel mode toggle button do?

The G502 X has a wheel mode toggle button below the newly designed scroll wheel. This button toggles the scroll wheel between Free Spin and Ratchet modes.



- In Free Spin mode, the wheel will spin effortlessly, but not endlessly.
- In Ratchet mode, the wheel will click as it spins to help stop its movement.

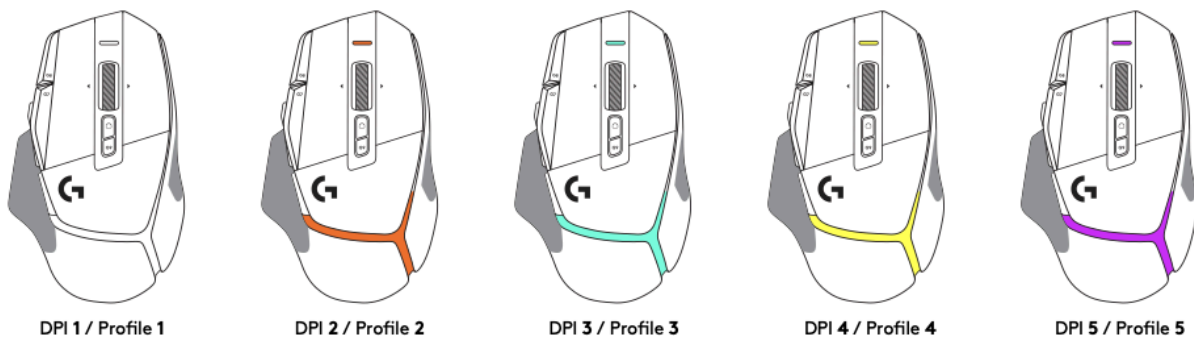
- [Why are the button clicks loud on my G502 X?](#)

The feel and sound of the LIGHTFORCE Hybrid Switch is by design.

The G502 X's LIGHTFORCE Hybrid Switch combines both the speed and durability of an optical switch with the tactile feel of a mechanical switch.

- [Onboard Memory Mode DPI profiles on G502 X](#)

Onboard memory mode keeps your settings on the device and accessible without G HUB. Your G502 X comes with two profiles: Primary (Gaming) and secondary (Productivity). When you install G HUB, you can have up to five profiles. Each profile can have different DPI settings and you can associate each setting with a different color, which makes it easy to know which profile is active. You can find more information in the Setup Guide PDF, available on the Getting Started page.

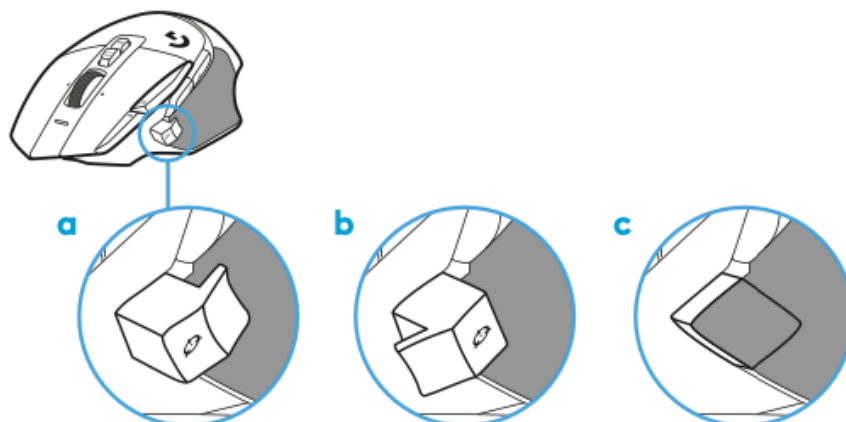


NOTE: Installing G HUB will override the two default profiles.

- [Change the DPI button position on G502 X](#)

The DPI Shift button on your gaming mouse is useful for FPS games. You can also change the position in three ways:

- Backward
- Forward
- Extended grip



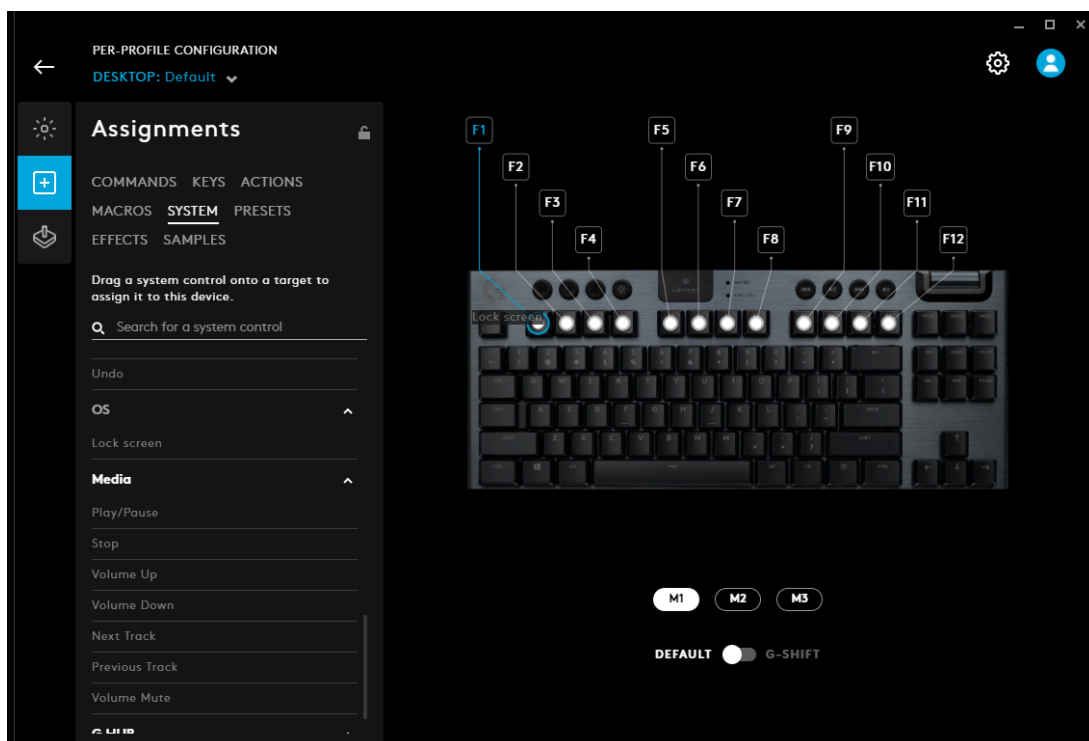
- [G-Keys in Logitech G HUB](#)
 - [What are G-Keys?](#)
 - [Assigning commands to my G-Keys](#)
 - [Removing commands from my G-Keys](#)

What are G-Keys?

G-Keys are keys or buttons on Logitech devices that allow you to perform specific commands or functions when you press them. These commands can be a single keystroke all the way to complex commands that perform multiple in-game actions.

Assigning commands to my G-Keys

1. Launch Logitech G HUB.
2. Click on your Logitech device.
3. Click on the **Assignments** icon.
NOTE: If your product doesn't have the Assignments tab then it doesn't have a G-Key.
4. Find and select a command from within the Assignments tab. Commands are located in the following sections:

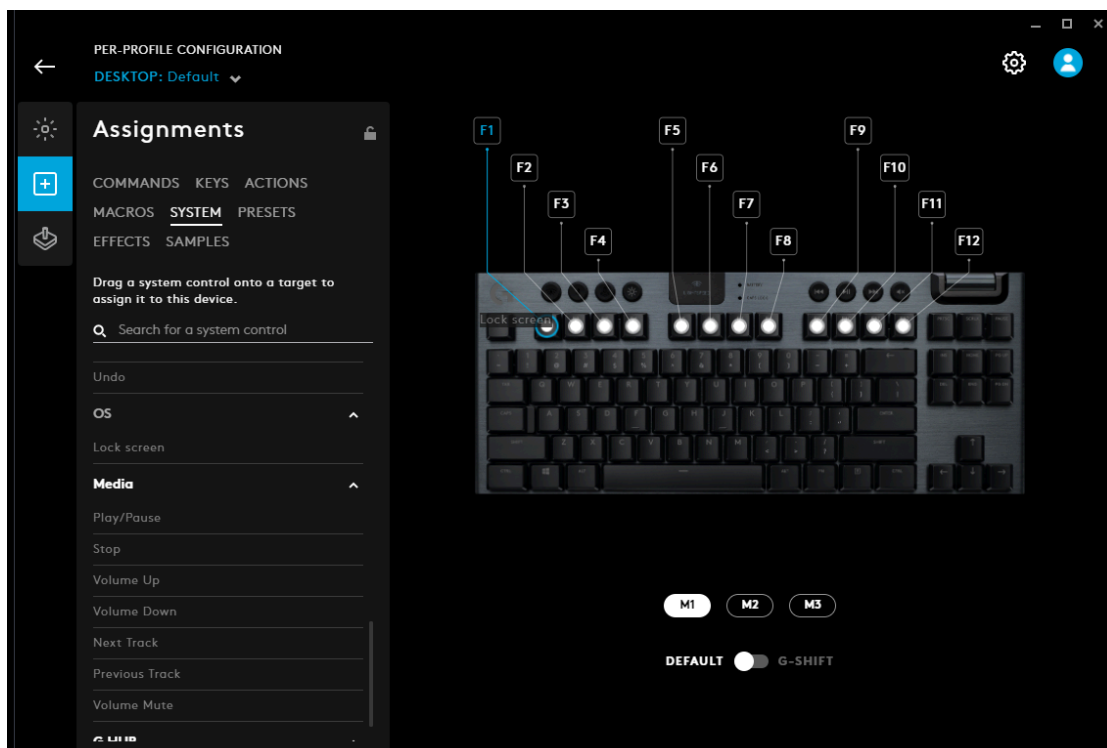


- **Commands:** Preconfigured system or Game profile commands based on your selected G HUB Profile.
- **Keys:** Individual keyboard commands.
- **Actions:** Actions for application-specific integrations that work with Logitech G HUB.
- **Macros:** Custom programmable commands that perform a specific task or action.
- **System:** System and device control commands.
- **Presets:** Blue VO!CE Preset for your Blue VO!CE compatible products.
- **Effects:** Blue VO!CE Effects for your Blue VO!CE compatible products.
- **Samples:** Audio Samples for your Blue VO!CE compatible products.
- **Audio:** Audio commands for your Logitech speakers.

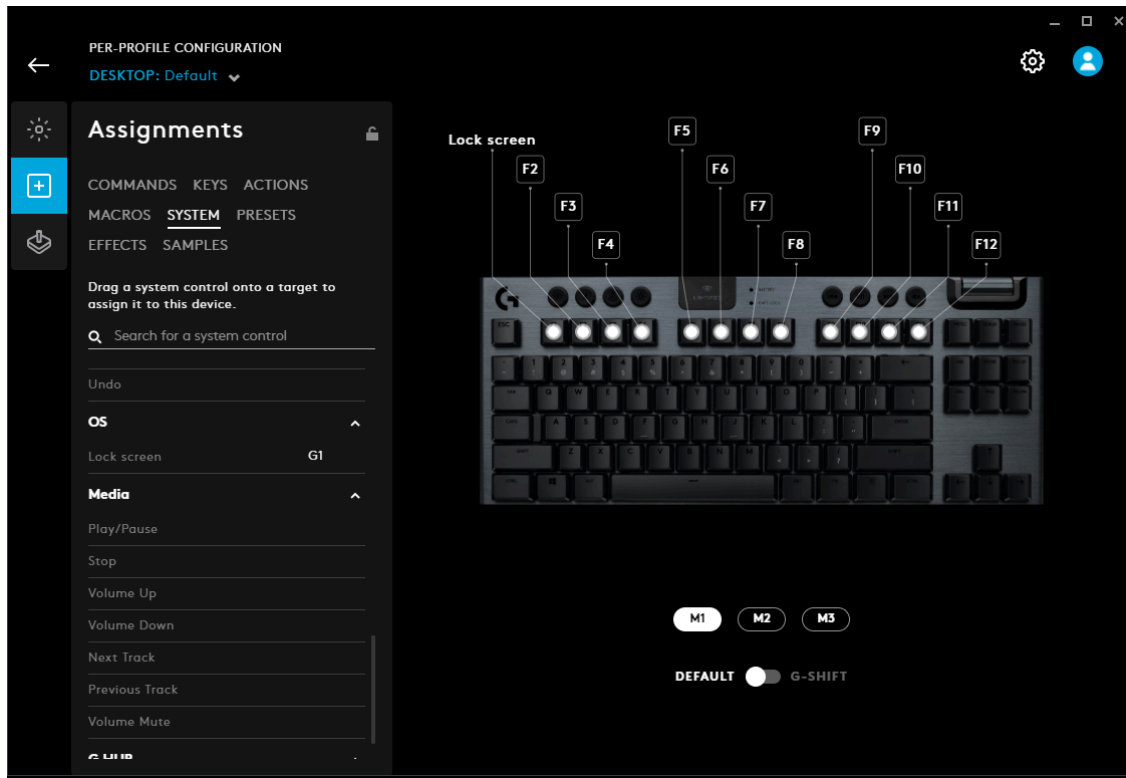
NOTE: If you are missing some of these sections it means that you don't have a G HUB compatible device connected with those features.

5. To assign a command to a G-key, do one of the following:

- Click on the G-key you want to give a new assignment to so it's highlighted in Blue then double-click on the command you want to assign to it.
- Drag and drop an existing command from the list on the left of the G HUB window onto a G-key. When you drag a command over a G-key, the G-key area will become highlighted.

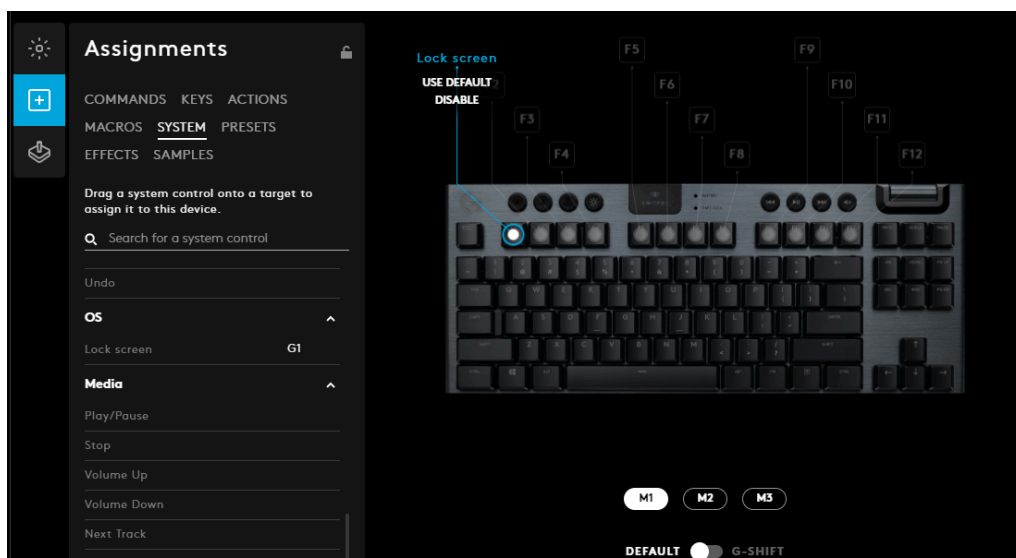


- G-Keys that have assignments will show what their current command is.



Removing commands from my G-Keys

- Launch Logitech G HUB.
- Click on your Logitech device that has the G-Key you want to edit.
- Click on the **Assignments** icon.
- Click on the G-Key so it's highlighted.
- Click on **USE DEFAULT** to remove the assigned command.



- Using the Device Pairing Tool in G HUB

The Device Pairing Tool in Logitech G HUB allows you to pair replacement USB receivers with your mouse or keyboard. The Device Pairing Tool also allows you to connect two LIGHTSPEED devices to one LIGHTSPEED keyboard receiver using the Device Pairing Tool. You may also use this tool to pair your mouse with Logitech POWERPLAY.

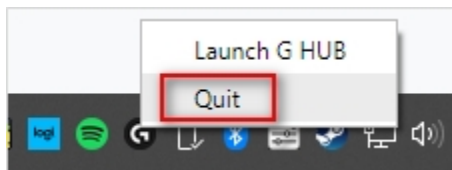
The Device Pairing Tool will allow you to select the receiver and the device you want to pair it with. The receiver selected will determine what devices can be paired with it. The compatible devices that can be paired with the selected receiver will be shown afterward.

You may need to update the firmware on your device before using the Device Pairing Tool. Please follow any on-screen instructions you receive if G HUB informs you that your device firmware is out-of-date.

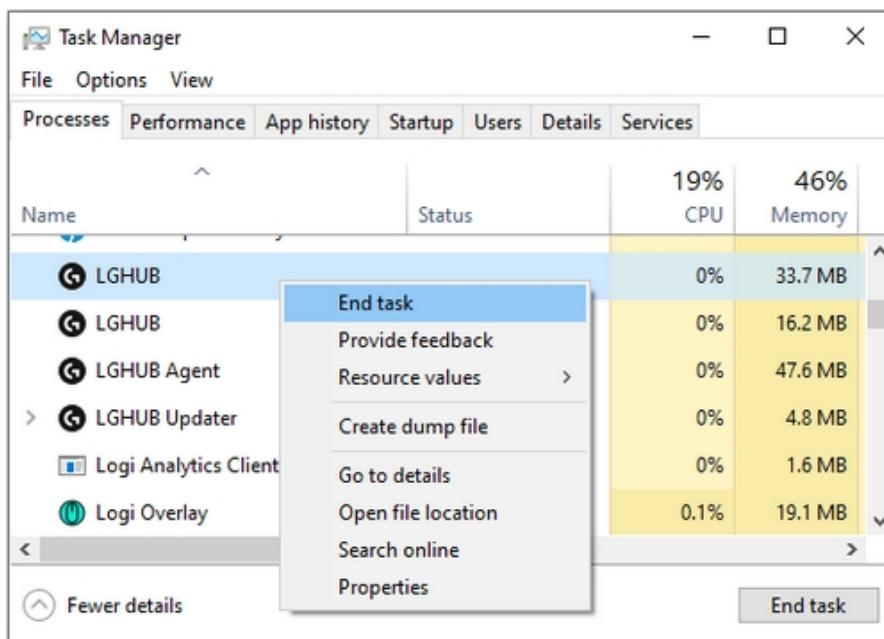
- G HUB freezes while loading and logo animation loops

If G HUB seems to be stuck while trying to load and the logo animation loops, try the following:

1. Exit G HUB by right-clicking the applet in the task tray and selecting **Quit**.



2. Navigate to **Task Manager** (**CTRL+ALT+DEL**).



NOTE: You may also need to click More Details at the bottom of the window. Look for **LGHUB**, **LGHUB Agent** and **LGHUB Updater**, right-click and choose **End task** on each.

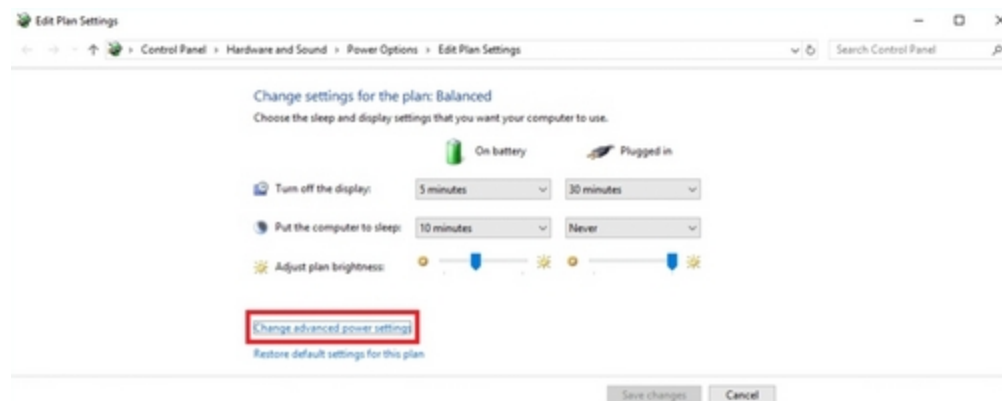
3. Once those processes are ended, navigate to **C:\Program Files\LGHUB** and run these in order:
 - Lghub_updater.exe
 - Lghub_agent.exe
 - Lghub.exe

This should resolve the logo spinning issue. If it doesn't, then make sure you're running with admin privileges. G HUB might need to update and needs admin privileges to do this.

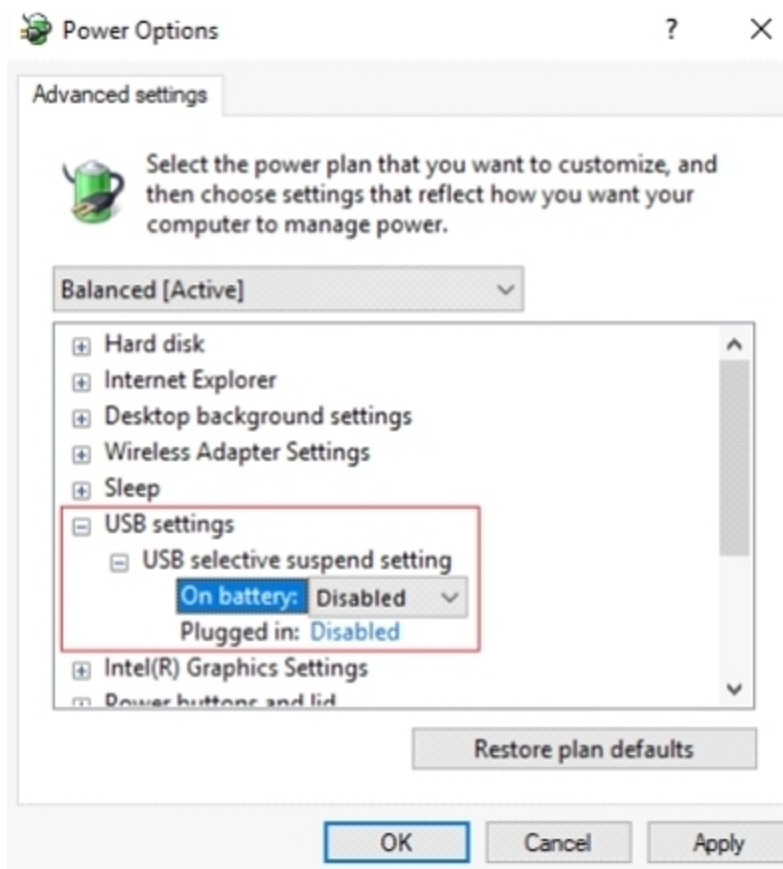
If you're using an administrator account and the issue persists, please follow the steps in G HUB Install/Uninstall/Update Troubleshooting:

<https://support.logi.com/hc/en-us/articles/360023192454-G-HUB-Install-Uninstall-Update-Troubleshooting>

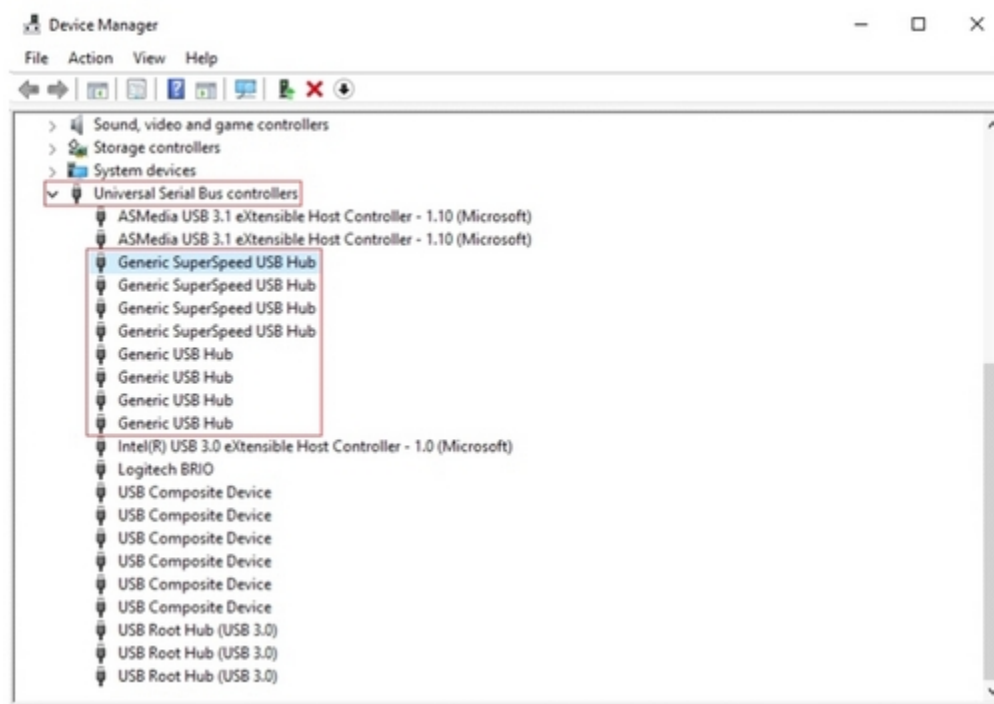
- G502 - Troubleshooting - Connection Issue: Intermittently working
- We recommend that you plug the mouse directly into a USB port on the motherboard or a USB port on the computer case while troubleshooting. Avoid using hubs of any kind, powered or not. This includes hubs that can be found on monitors.
- Try a different USB port on the motherboard or computer case.
- Try the mouse on another computer (if available).
- Disable **USB Selective Suspend**:
 1. Press the Windows key, type "**Edit power plan**" and press Enter.



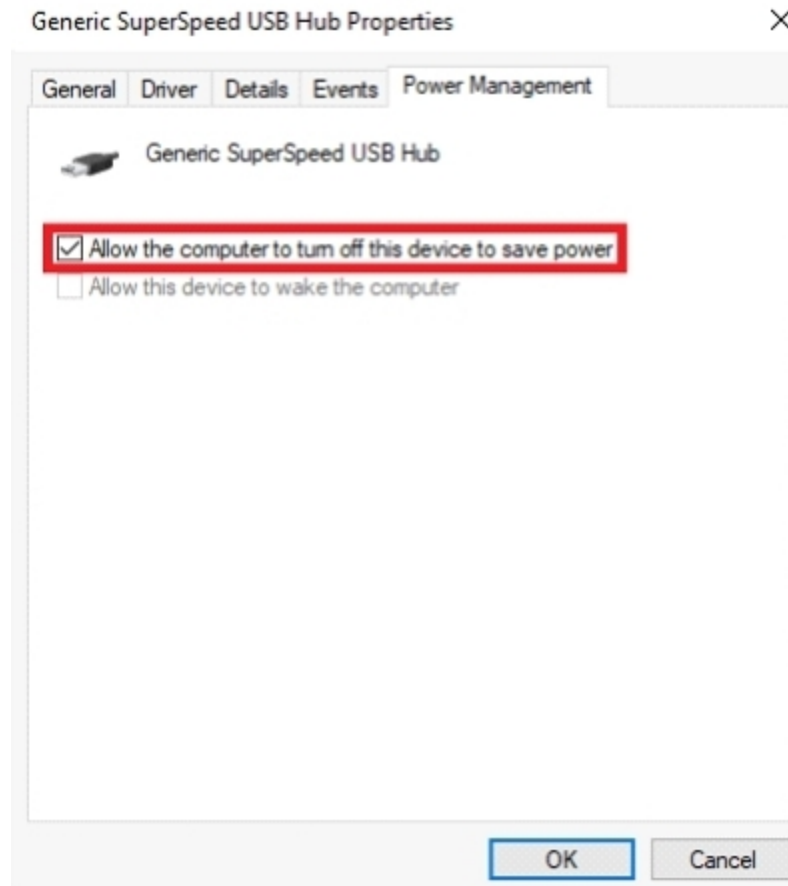
2. Select **Change advanced power settings**.
3. Expand the tree for "**USB settings**", then expand the tree for "**USB selective suspend setting**". Disable the option for On battery and Plugged in as shown:



- Power Management for USB hubs:
 1. Press the **Windows key**, type "**Device Manager**" and press **Enter**.
 2. Expand the tree for "**Universal Serial Bus controllers**".

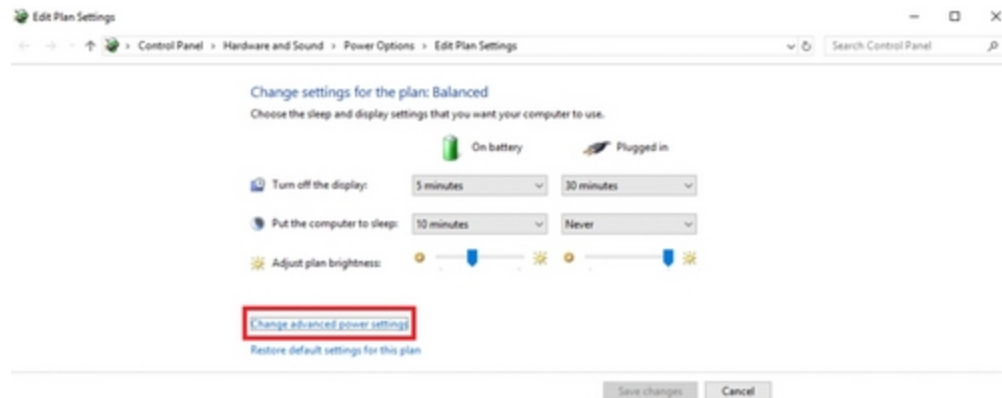


3. Right-click on a hub and select **Properties**.
4. Under the **Power Management** tab, uncheck the setting **Allow the computer to turn off this device to save power**.

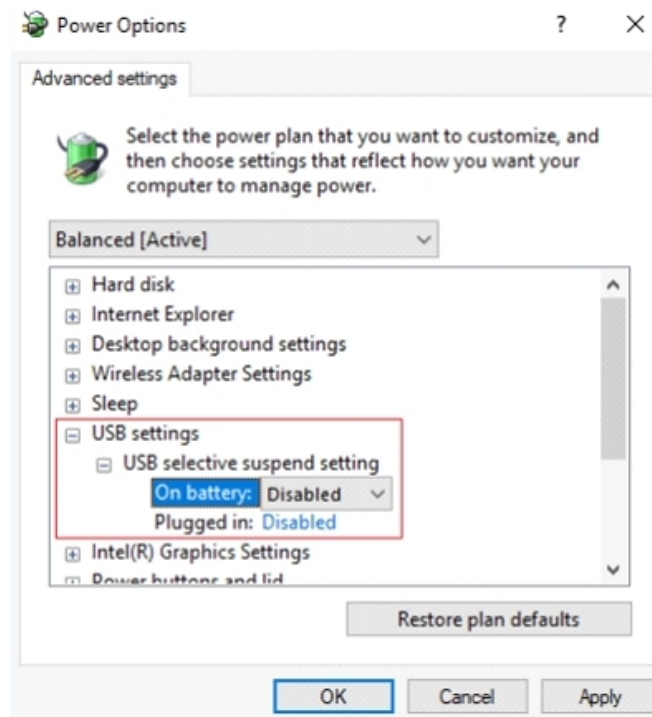


5. Repeat the above steps for all items listed as hubs.
- Try updating the motherboard chipset drivers. See **Update your motherboard USB and chipset drivers** for more information:
<https://support.logi.com/hc/en-us/articles/360023370233-Update-your-motherboard-s-USB-and-chipset-drivers>
 - G502 - Troubleshooting - Connection Issue: Mouse not detected/recognized by computer
 - We recommend that you plug the mouse directly into a USB port on the motherboard or a USB port on the computer case while troubleshooting. Please avoid using hubs of any kind, powered or not. This includes hubs that can be found on monitors.
 - Try a different USB port on the motherboard or computer case.

- Try the mouse on another computer (if available) to ensure that the computer is recognizing mice in general.
- Disable **USB Selective Suspend**:
 1. Press the **Windows key**, type "**Edit power plan**" and press **Enter**.

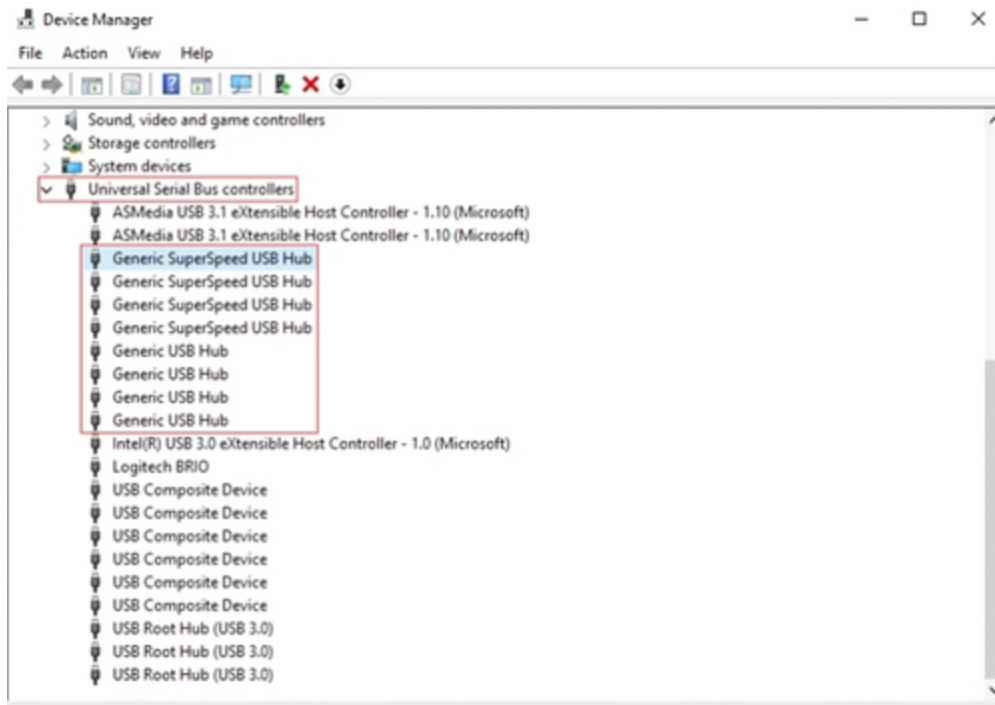


2. Select **Change advanced power settings**.
3. Expand the tree for "**USB settings**", then expand the tree for "**USB selective suspend setting**". Disable the option for **On battery and Plugged in** as shown:

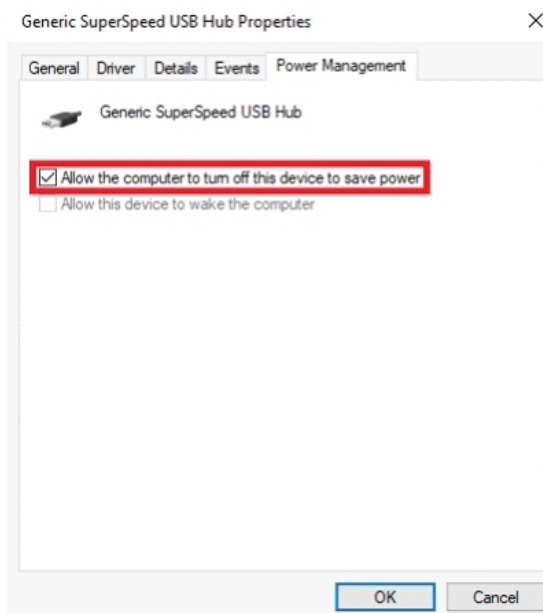


Power Management for USB hubs:

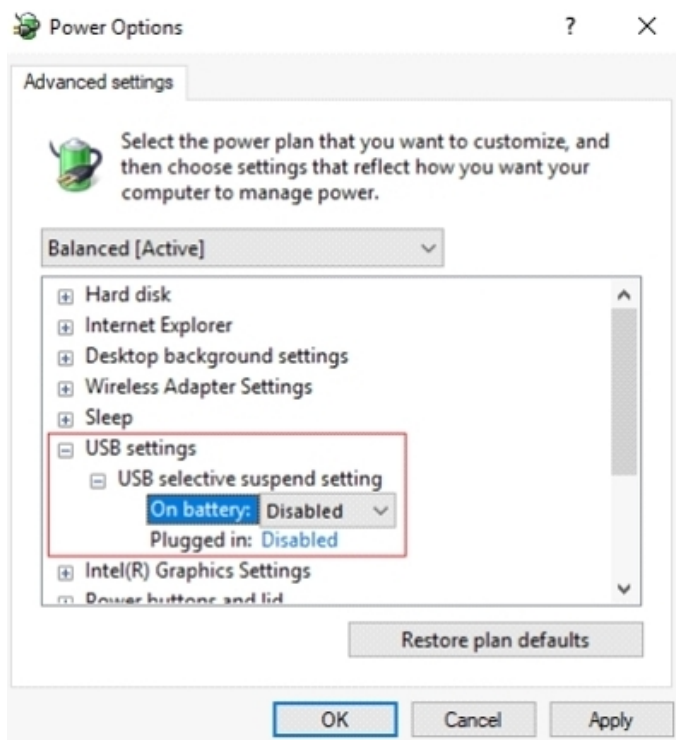
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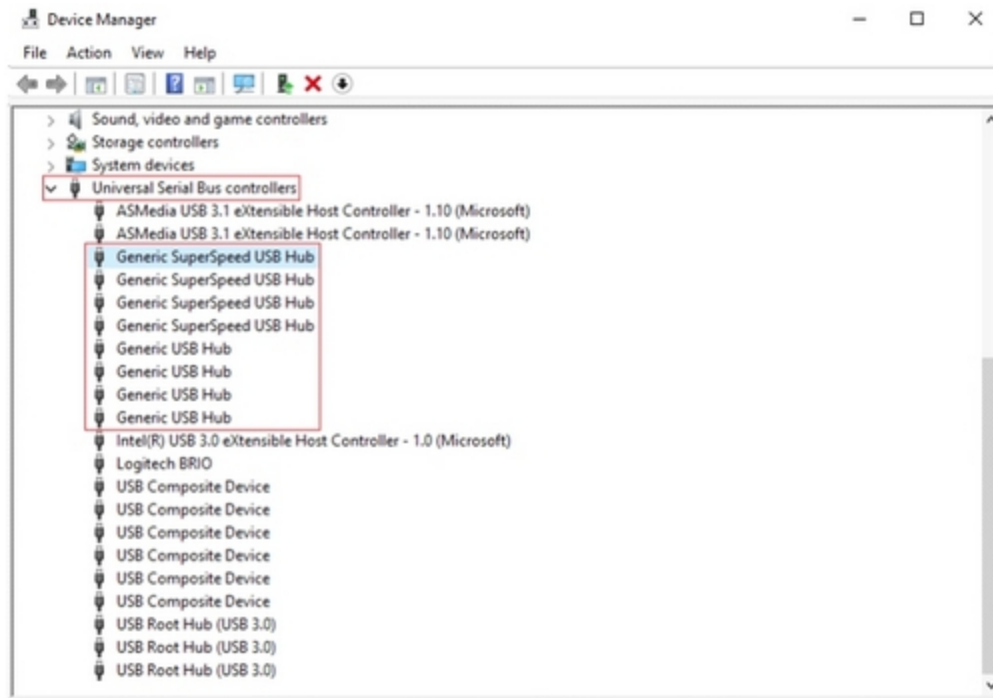
3. Right-click a hub and select **Properties**.
4. Under the **Power Management** tab, uncheck the setting "**Allow the computer to turn off this device to save power**".



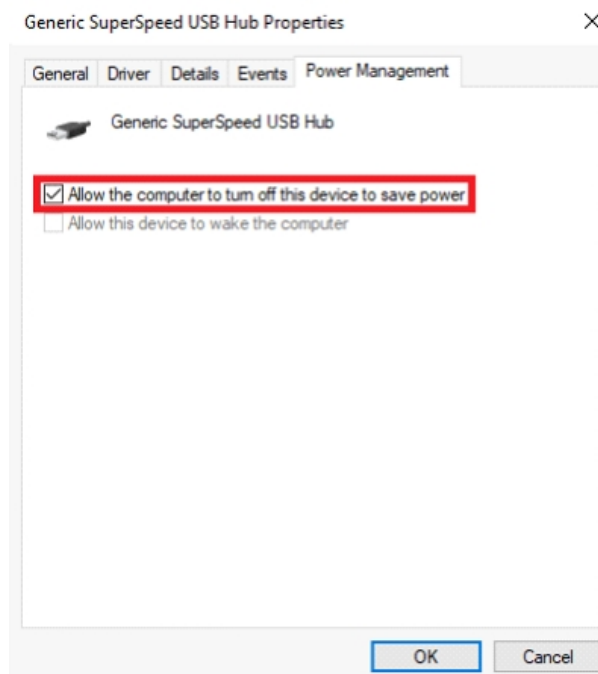
5. Repeat steps for all items listed as hubs.
- Try updating the motherboard chipset drivers. See **Update your motherboard USB and chipset drivers** for more information:
<https://support.logi.com/hc/en-us/articles/360023370233-Update-your-motherboard-s-USB-and-chipset-drivers>
 - G502 - Troubleshooting - Connection Issue: Mouse auto disconnects from computer
 - We recommend that you plug the mouse directly into a USB port on the motherboard or a USB port on the computer case while troubleshooting. Please avoid using hubs of any kind, powered or not. This includes hubs that can be found on monitors.
 - Try a different USB port on the motherboard or computer case.
 - Try the mouse on another computer (if available).
 - Disable "USB Selective Suspend":
 1. Press the Windows key, type "**Edit power plan**" and press **Enter**.
 2. Select **Change advanced power settings**.
 3. Expand the tree for "**USB settings**", then expand the tree for "**USB selective suspend setting**". Disable the option for **On battery and Plugged in** as shown:



- Power Management for USB hubs:
 1. Press the **Windows key**, type "**Device Manager**" and press **Enter**.
 2. Expand the tree for "**Universal Serial Bus controllers**".



3. Right-click on a hub and select **Properties**.
4. Under the **Power Management** tab, uncheck the setting **Allow the computer to turn off this device to save power**.



5. Repeat steps for all items listed as hubs.
- Try updating the motherboard chipset drivers. See Update your motherboard USB and chipset drivers for more information:
<https://support.logi.com/hc/en-us/articles/360023370233-Update-your-motherboard-s-USB-and-chipset-drivers>
 - [Logitech G HUB - FAQs](#)

VIDEO: <youtu.be/a5a4iAhTaho>

About G HUB

See the following link for more information:

<https://support.logi.com/hc/en-us/articles/4461144061975-Logitech-G-HUB-FAQs>

WARRANTY – G502 X PLUS | G502 X LIGHTSPEED Gaming Mouse

[2 year limited hardware warranty](#)

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