# FAQ

Inconsistent gaming mouse tracking behavior
If the cursor for your gaming mouse stutters, or skips during general usage, try these troubleshooting steps:

1. If you have Logitech Gaming Software (LGS) installed:
   o Lower your DPI sensitivity in the **Customize Pointer Settings** tab.
   o If your gaming mouse supports surface tuning, tune your mouse to the surface in use. See Surface Tuning your gaming mouse for more information.
2. If you don't have LGS installed, lower your Pointer Speed in **Control Panel** > **Mouse** > **Pointer Options**:
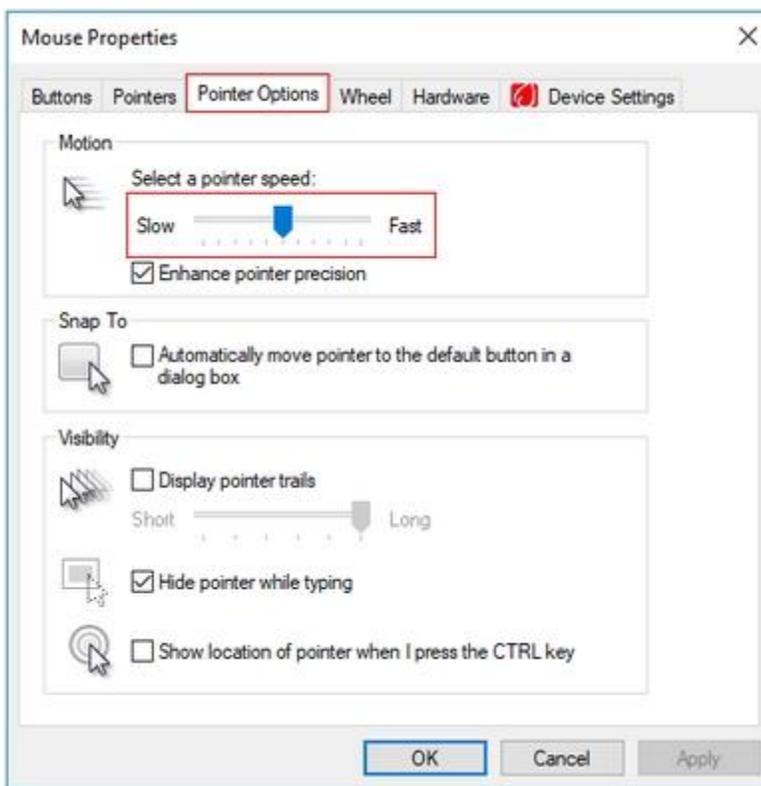
3. If your mouse is wireless:
   o Recharge the mouse using the included cable or replace the batteries.
   o Make sure the mouse and USB receiver are at least 2 meters away from wireless routers and other 2.4 GHz wireless devices.
   o Keep the USB receiver within 20 cm of the mouse.
   o Temporarily disconnect any other wireless devices and observe the effect on the tracking performance.
4. The sensor lens may be dirty. Turn your mouse over and thoroughly clean any dirt or lint covering the lens.

5. Try using the mouse on a piece of white paper to make sure it isn't a tracking issue on a particular surface you're using.

If none of these suggestions work, please contact [Logitech Support](#) and let us know what troubleshooting steps you've tried.

Close

Solved - Issue with USB devices after Windows 10 update KB4074588
Logitech is aware of a Microsoft update (OS Build 16299.248) which is reported to affect USB support on Windows 10 computers.

Support statement from Microsoft
"After installing the February 13, 2018 security update, KB4074588 (OS Build 16299.248), some USB devices and onboard devices, such as a built-in laptop camera, keyboard or mouse, may stop working for some users."

If you are using Microsoft Windows 10, (OS Build 16299.248) and are having USB-related issues. Microsoft has released a new update KB4090913 (OS Build 16299.251) to resolve this issue.

We recommend you follow Microsoft Support recommendations and install the latest Microsoft Windows 10 update: https://support.microsoft.com/en-gb/help/4090913/march5-2018kb4090913osbuild16299-251.

This update was released by Microsoft on March 5th in order to address the USB connection issues and should be downloaded and installed automatically using Windows Update.

For instructions on installing the latest Microsoft update, please see below:

- [If you have a working keyboard/mouse](#)
- [If you have a non-working keyboard/mouse](#)

If you have a working keyboard/mouse:

1. [Download](#) the latest Windows update from Microsoft.
2. If your operating system is 86x-based, click on the second option. If your operating system is 64x-based, click on the third option.
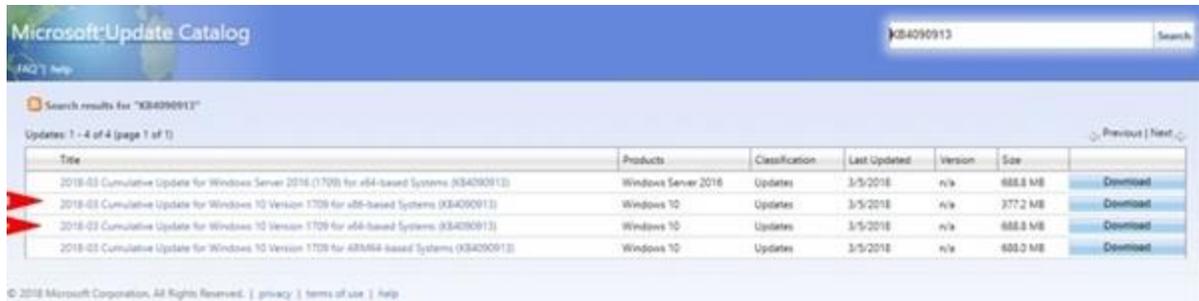
3. Once you have downloaded the update, double-click on the downloaded file and follow the on-screen instructions to complete the update installation.

NOTE: If you wish to install the update manually, you can download the 86x and 64x versions of the update from http://www.catalog.update.microsoft.com/Search.aspx?q=KB4090913


If you currently have no working keyboard/mouse:

For more information, see the Microsoft article on how to start and use the Windows 10 Recovery Environment (WinRE):
https://support.microsoft.com/en-us/help/4091240/usb-devices-may-stop-working-after-installing-the-february-13-2018-upd

Do the following:

1. Restart the system before Windows finishes loading the desktop three times in a row. Windows should automatically start the Windows 10 Recovery Environment (WinRE).
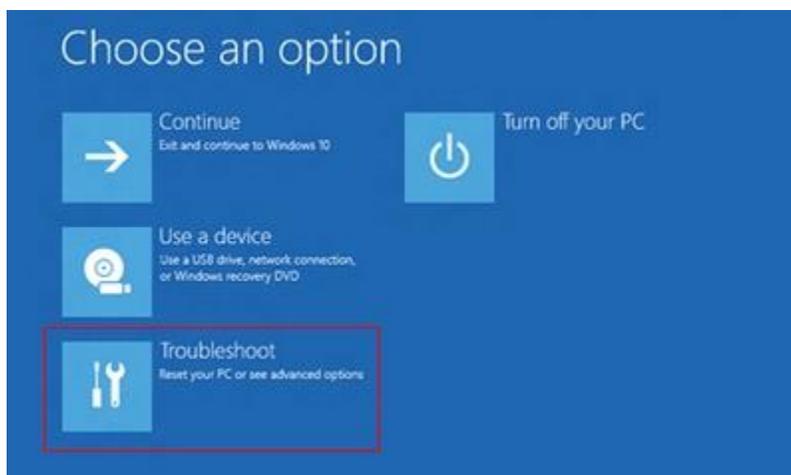
2. Once in WinRE select **Troubleshoot** > **Advanced Options** > **Startup Settings**.
3. In the bottom right corner of the window, click **Restart**.

4. Press **5** on your keyboard to select **Enable Safe Mode with Networking**.
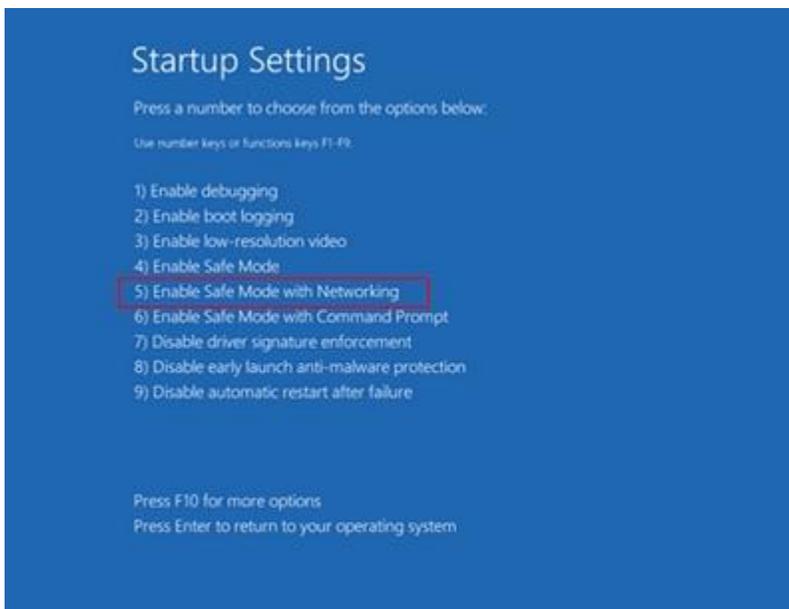
5. In Windows Safe Mode, navigate to Windows Settings (**Win+I**) > **Update and Security** > **Windows Update** and install the latest updates.

Close

G502 firmware update not working on Windows Vista

When you run the G502 firmware update on Windows Vista, you'll be prompted to unplug your gaming mouse and then plug it back in. If the firmware update doesn't start the first time, try unplugging and re-plugging the G502 again. The update should now start.

Close

Troubleshooting gaming mouse profile detection using Logitech Gaming Software

You can configure your gaming mouse separately for each game or application on your computer (see 26855 for instructions). When a game is launched, the profile associated with it should activate. Sometimes, the profile doesn't activate properly, which can prevent game-specific settings from being applied.

When a game profile isn't activating properly:

- Try using a Persistent Profile (see answer 26858 for instructions).

  NOTE: Using a persistent profile will help you determine if the Logitech Gaming Software is working properly.

- Make sure the correct .exe file is selected for the game (see answer 26833 for help).
- Check that both the single player and multiplayer .exe files have profiles (see answer 26859 for help).

Close

Logitech Gaming Software does not detect the G502 gaming mouse

If you're getting the message "No devices detected" when you launch the Logitech Gaming Software (LGS), please do the following:

1. With the gaming mouse still connected to your computer, uninstall LGS.
2. After you've uninstalled the software, restart your computer.

   IMPORTANT: Do not skip this step.

3. Re-install LGS. Make sure you're using LGS version 8.53 or later. You can get the latest version from the G502 Downloads page.
4. Reboot your computer when prompted.

Close

Cursor does not follow gaming mouse movements

If the cursor isn't following the movements of your mouse, try the following:

- Make sure your mouse is firmly connected to a USB port on your computer (not to a USB hub).
- Try a different mouse pad.
- Check the sensor port (on the bottom of the mouse) for dust or lint.
- Avoid using your mouse on:

-
  - Glass or other see-through surfaces
  - Reflective surfaces, such as mirrors and metal desks
  - Wood grains and grooved surfaces
  - Very high gloss finished surfaces
- Try the mouse on a piece of white paper to make sure it isn't a tracking issue on a particular surface you're using.

If the above steps don't resolve your problem, the erratic movement may be caused by software (for example, if the cursor speed is set too fast).

Close

Logitech device stops responding in Windows
If you notice that your Logitech device stops responding (ex: the mouse or headset disconnects) after fixed intervals of time, then the problem may be related to the power management settings. Perform all of the steps in the two sections below to resolve the issue:

- [Change Universal Serial Bus controllers settings](#)
- [Disable USB selective suspend](#)

**Change Universal Serial Bus controllers settings**

1. Click the Windows Start flag and type `device manager` in the search box. In the **Programs** list, click **Device Manager**. If you are prompted for an administrator password or confirmation, type your password or click **Continue**.
2. Click the arrow next to **Universal Serial Bus** controllers to expand the list, then right-click **USB Root Hub**, and click **Properties**.
3. In the **USB Root Hub Properties** window, click the **Power Management** tab. Uncheck **Allow the computer to turn off this device to save power** to disable the setting.

NOTE: Windows will reverse this setting when the device is unplugged from the USB port or the PC is restarted. To keep this from happening, follow the steps below so Windows will remember the power management setting.

Disable USB Selective Suspend

1. Click **Start** and in the search box, type `power options`. In the **Programs** list, click **Power Options**.
2. If you are prompted for an administrator password or confirmation, type your password or click **Continue**.
3. Click **Change plan settings** for the power plan you use.
4. Click **Change advanced power settings**. The **Power Options** window appears.

5. In the **Power Options** window, expand **USB settings**, and then expand **USB selective suspend setting**.
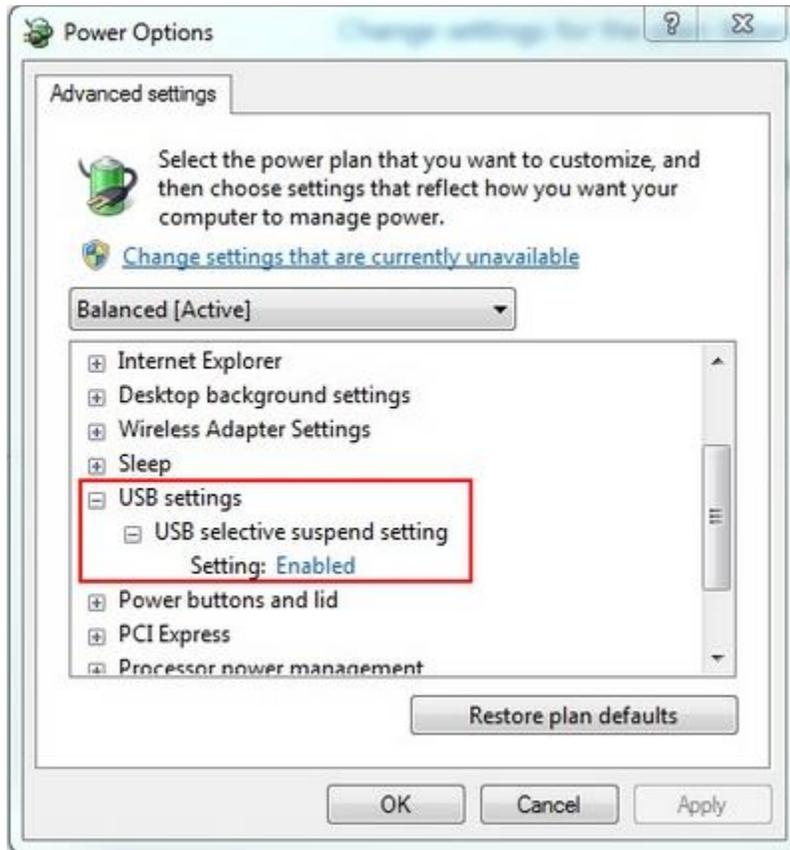
6. (For laptop users only) To prevent Windows from turning off the USB root hub when the computer is running 'On battery' power, select **Disabled** in the **On battery** list.
7. To prevent Windows from turning off the USB root hub when the computer is 'Plugged in' to a power outlet, select **Disabled** in the **Plugged in** list and then click **OK**.

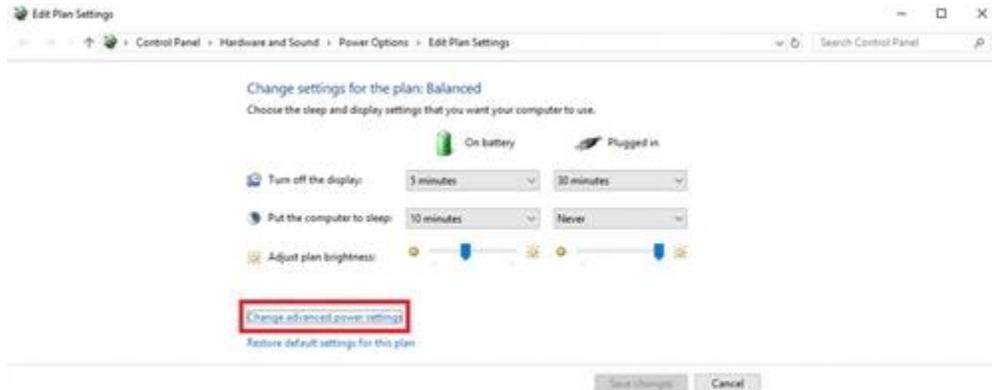For more information, please refer to the Microsoft knowledge base:
http://support.microsoft.com/kb/930312

Close
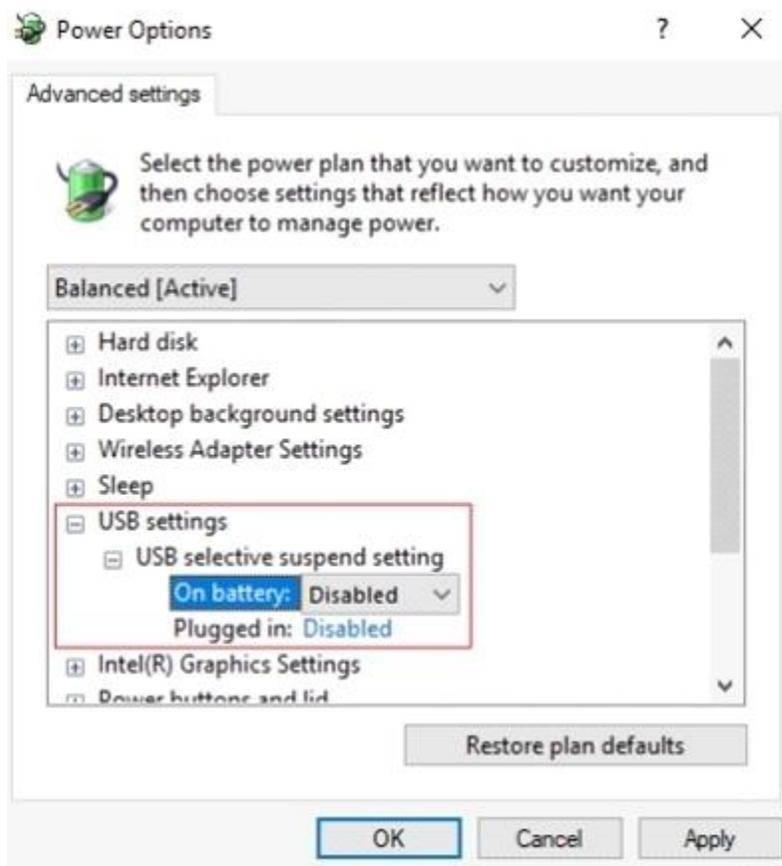
G502 - Troubleshooting - Connection Issue: Mouse auto disconnects from computer

- 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":
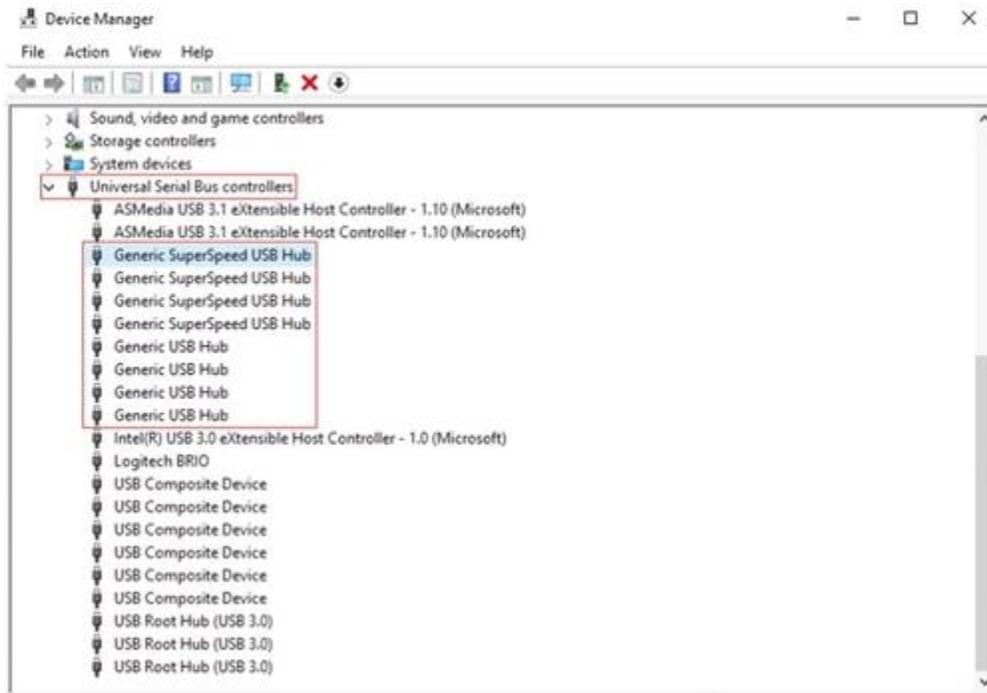   1. Press the Windows key, type "Edit power plan" and press **Enter**.

    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:
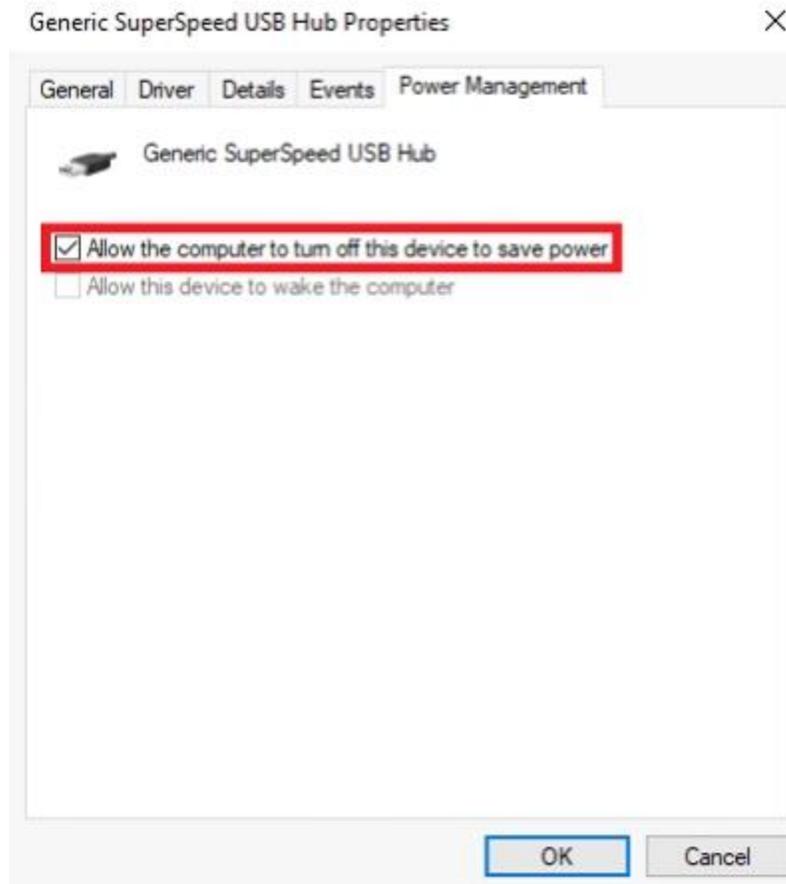

- Power Management for USB hubs:
    1. Press the Windows key, type "Device Manager" and press **Enter**.

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.

Close

Troubleshooting mouse button assignments and macros using Logitech Gaming Software

When your button assignments and macros aren't working the way you configured them, the problem usually has to do with the active profile.

Here are some ways to try and resolve this issue:

- Lock the profile while the game is running (see answer 26857 for instructions).
- Try using a Persistent Profile to determine if the software is working properly (see answer 26858 for instructions).
- Check that the correct .exe is selected for the game (see answer 26833 for help).

- Make sure both the single player and multiplayer .exes have profiles (see answer 26859 for help).

Close

Gaming mouse profile stops working in the middle of a game

When a profile stops working in the middle of a game, there are two possible causes. Either the profile is:

- **Not associated with the correct .exe file**
  The profile is detected in the game launcher or menu, but stops working while playing the game. This happens when the profile isn't associated to the correct .exe file. You can fix this by assigning the game's .exe file to the profile and not the launcher's .exe file. See 26833 for instructions.

  OR

- **Reverted to the Default Profile**
  Another application running on your computer may come to the foreground, causing the active profile to revert to the Default Profile. You can fix this by locking the profile assigned to the game. See 26857 for instructions.

Close

G502 - Troubleshooting - Scroll/Gesture Issue: Faulty scroll wheel

- 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.
- Confirm the scroll mode the G502 mouse is in:
    o Single-click precision scrolling
    o Hyper-fast continuous scrolling
    o Toggle button highlighted in red
- Try using compressed air to clean the area around the scroll wheel.
- Try on a different computer (if available).
- Uninstall LGS or G HUB, uninstall G502 mouse driver, and reinstall:
    1. Uninstall LGS or Logitech G HUB.
    2. Press the Windows key and type "Device Manager", then select **Device Manager**.
    3. Expand the **Mice and other pointing devices** tree.
    4. If more than one mouse is plugged into the computer, unplug all mice except for the G502.
    5. Right-click the G502 mouse and select **Uninstall device**.
    6. Unplug the G502 mouse from the computer.
    7. Reboot the computer.

8. Reinstall the latest version of LGS or Logitech G HUB.
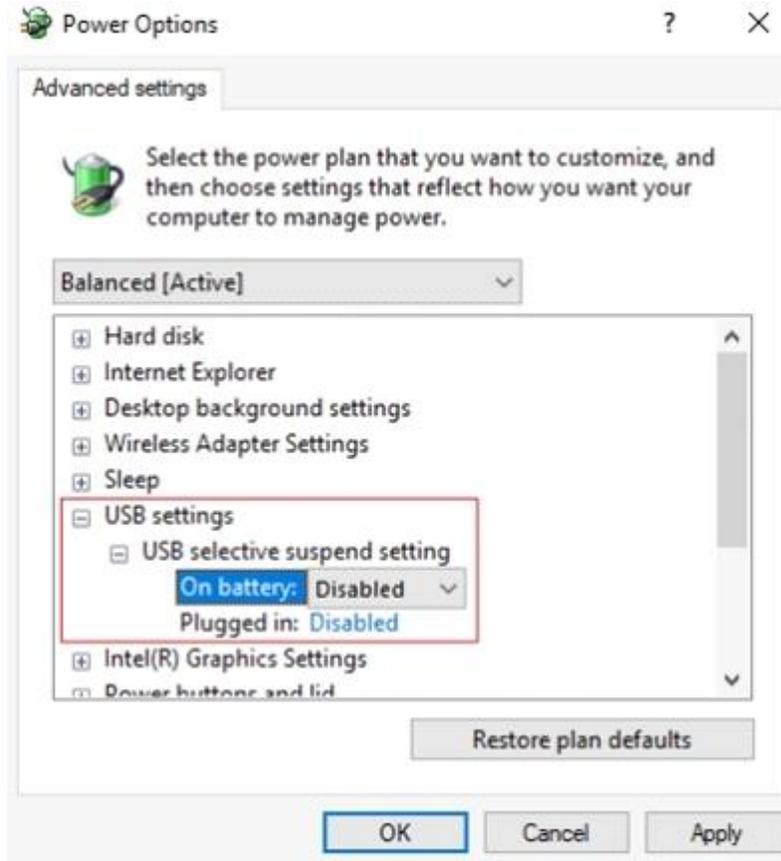9. Plug the G502 mouse back into the computer.

Close

G502 - Troubleshooting - Connection Issue: Mouse not detected/recognized by computer
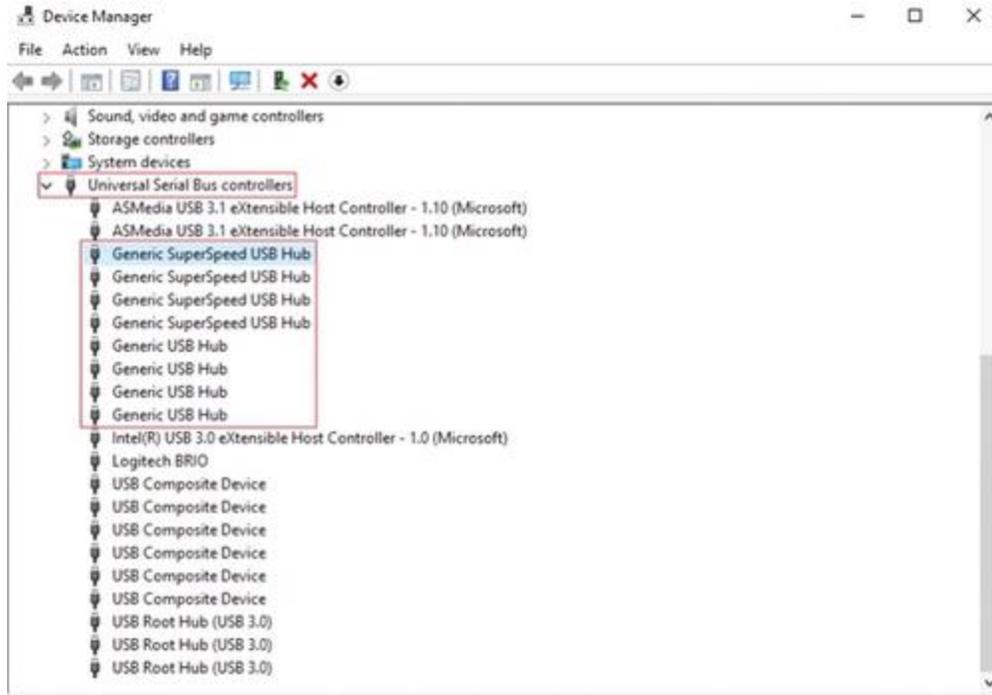
- We recommend that you plug the mouse directly into a USB port on the motherboard or a USB port on the computer case while troubleshooting. Please avoid using hubs of any kind, powered or not. This includes hubs that can be found on monitors.
- Try a different USB port on the motherboard or computer 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**.
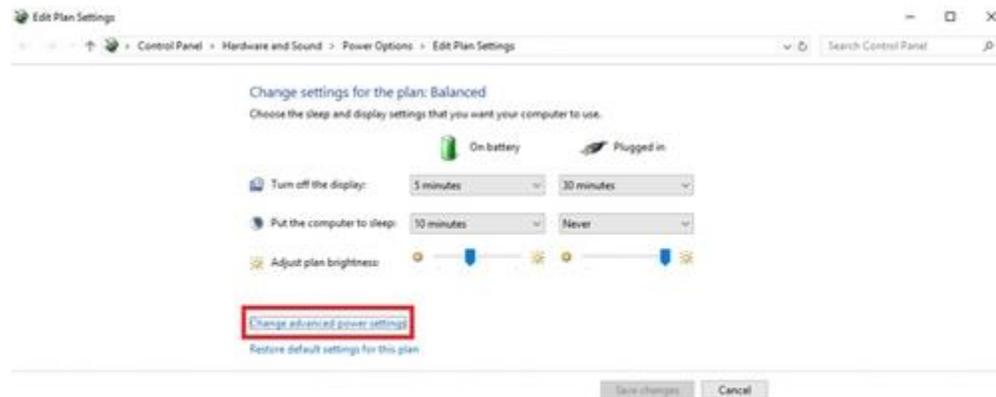
    2. Select "Change advanced power settings".
    3. Expand the tree for "USB settings", then expand the tree for "USB selective suspend setting". Disable the option for **On battery** and **Plugged in** as shown:

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

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".
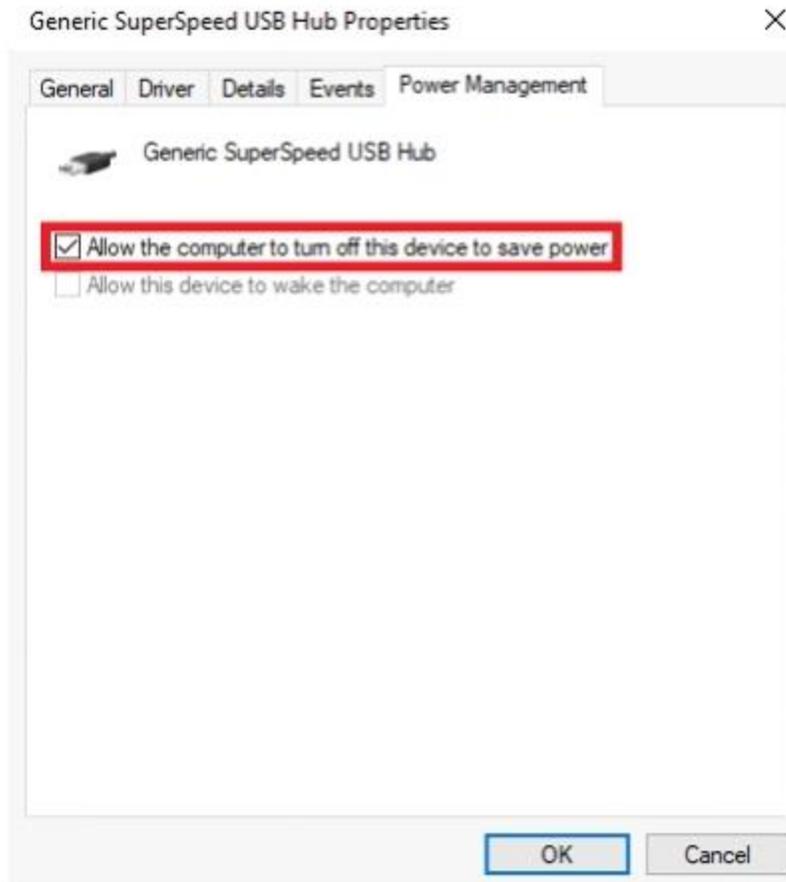
5. Repeat steps for all items listed as hubs.

- Try updating the motherboard chipset drivers. See [Update your motherboard USB and chipset drivers](#) for more information.

Close

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".
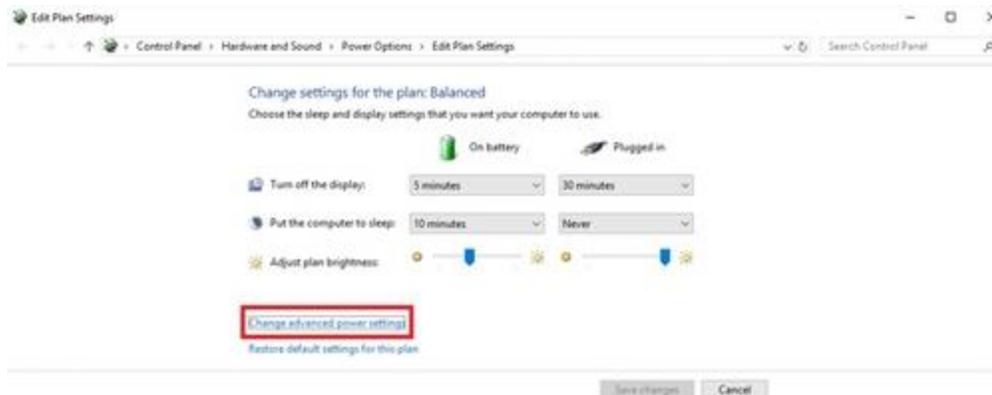
5. Repeat the above steps for all items listed as hubs.
6. Try updating the motherboard chipset drivers. See [Update your motherboard USB and chipset drivers](#) for more information
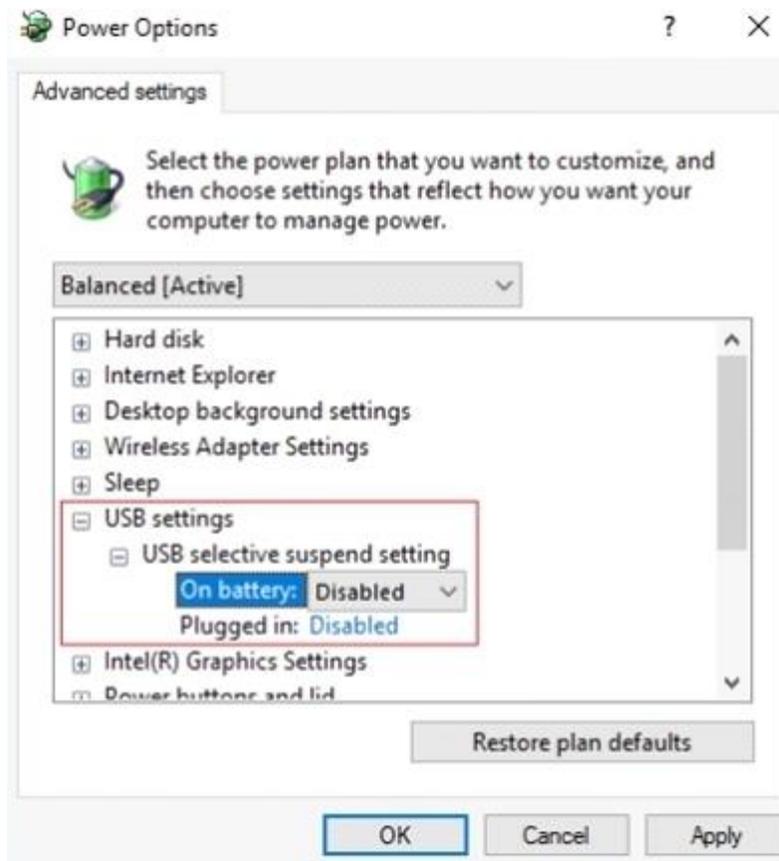
Close

Digital signature error when Logitech Gaming Software is installed on Windows 7 computers
You may see a digital signature error when you install Logitech Gaming Software (LGS) on some Windows 7 computers. All recent versions of LGS require the following Microsoft Windows security update to be installed prior to installing LGS:

- Security Update for Windows 7 Systems (KB3033929)

The security update adds support for SHA-2 driver signing and verification functionality. There are two versions — one for Windows 7 32-bit (x86) and one for Windows 7 64-bit (x64). Make sure you've downloaded and installed the correct version for your computer before you install LGS.
Close

Gaming mouse double-clicks when clicked once

If your gaming mouse clicks two or more times when clicked once, try the troubleshooting steps below:

1. Disable the single-click to open option in Windows:
   o Windows 8 or Windows 10
      ▪ Click on the magnifying glass to bring up the Search menu, type 'single-click', and then select Specify single- or double-click to open.
      ▪ Select the General tab, and under **Click items as follows**, make sure **Double-click to open an item (single-click to select)** is selected.
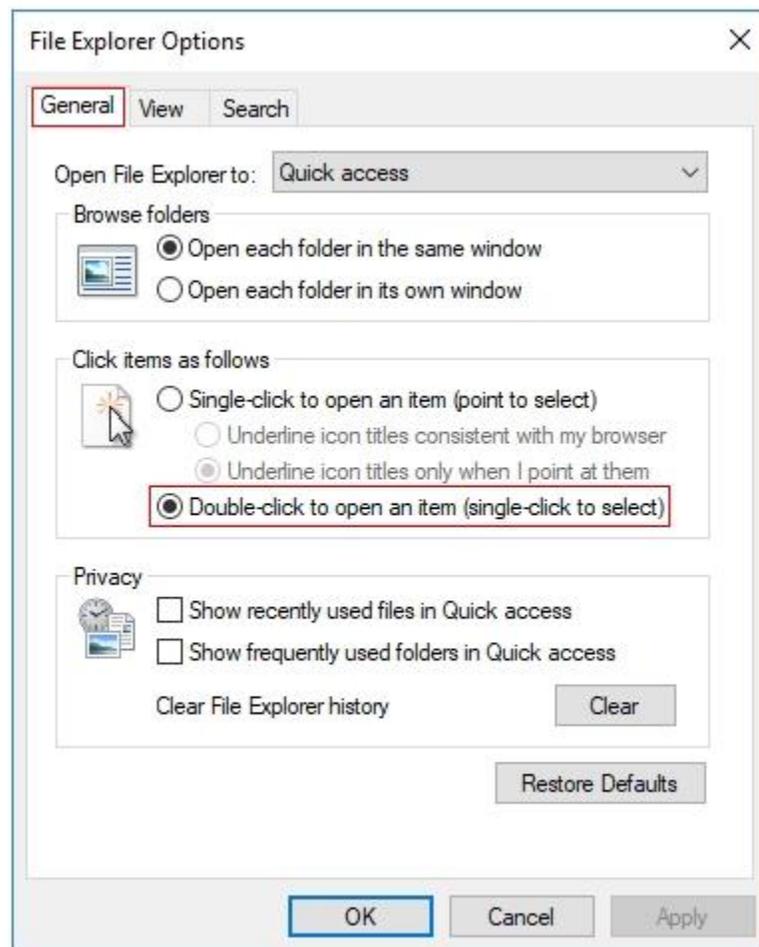
2. Windows 7 or Windows Vista:
   o Click on **Computer**.

   o On the menu bar, click **Organize** then **Folder and Search Options**.
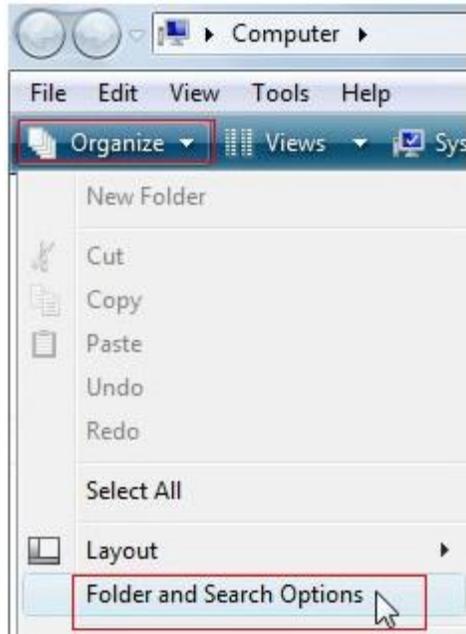
- o Under the **General** tab, make sure that the option **Double-click to open an item (single-click to select)** is selected.

- o Click **OK** to save and exit.
3. Test the mouse in multiple programs and components such as Control Panel or Windows Explorer on Windows, and Disk Utility or Finder on Mac OS. If the double-click is specific to one program, check the application settings or command assignments for the specific profile in Logitech Gaming Software.
4. Bypass any power hubs or extenders and connect your mouse cable or receiver to a different USB port on the computer's motherboard, if possible.
5. Test the mouse on a different computer that is functional.
6. Contact Logitech Support if the double-click issue appears on a different computer. Let us know what troubleshooting steps have been attempted.

Close

My gaming-mouse profile stopped working after a game update

Each profile is associated with a specific .exe file. Sometimes, when you install a game update or expansion pack, the location of the correct.exe may change.

If you recently installed a game update and then your game profile stopped working, see answer 26833 for help with finding the current game .exe.

Close

G502 - Troubleshooting - Cursor Tracking: Lag during cursor movement

- 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.
- Turn your mouse over and thoroughly clean any dirt or lint around the sensor lens.
- Try a different USB port on the motherboard or computer case.
- Uninstall LGS or Logitech G HUB. Reinstall the latest version of the software available.
- Try using the mouse on a plain white piece of paper.
- Try surface tuning in LGS or in G HUB (G502 HERO does not have this option). See Surface tuning the G502 gaming mouse for more information.
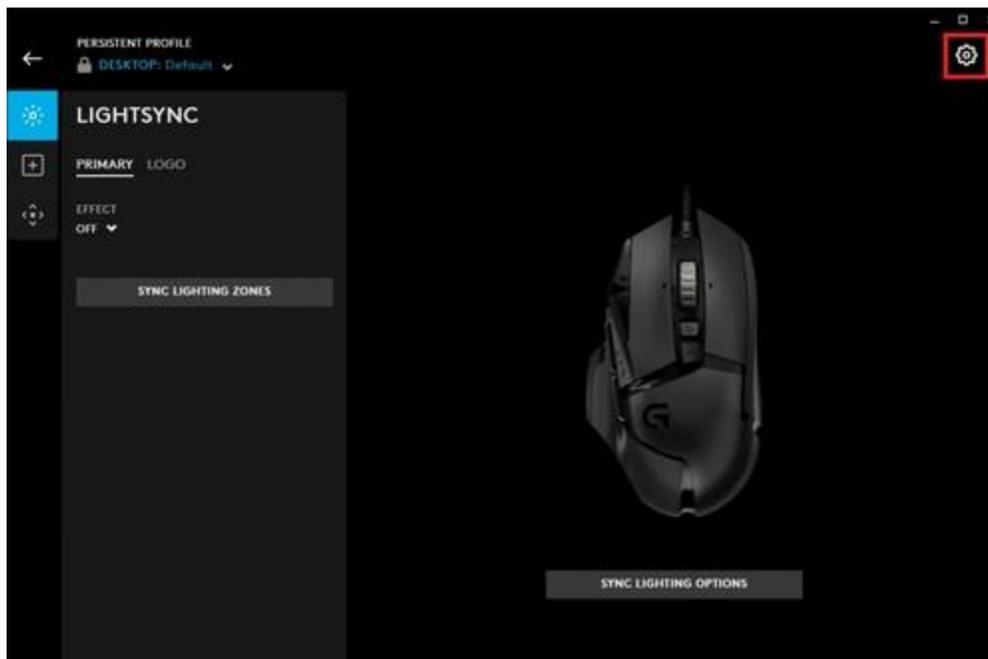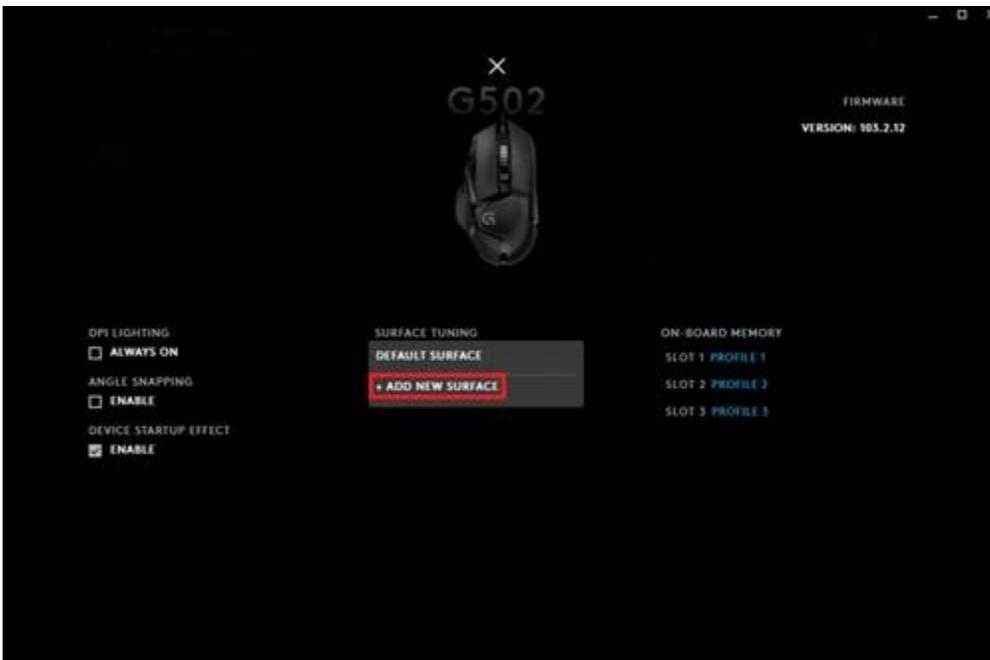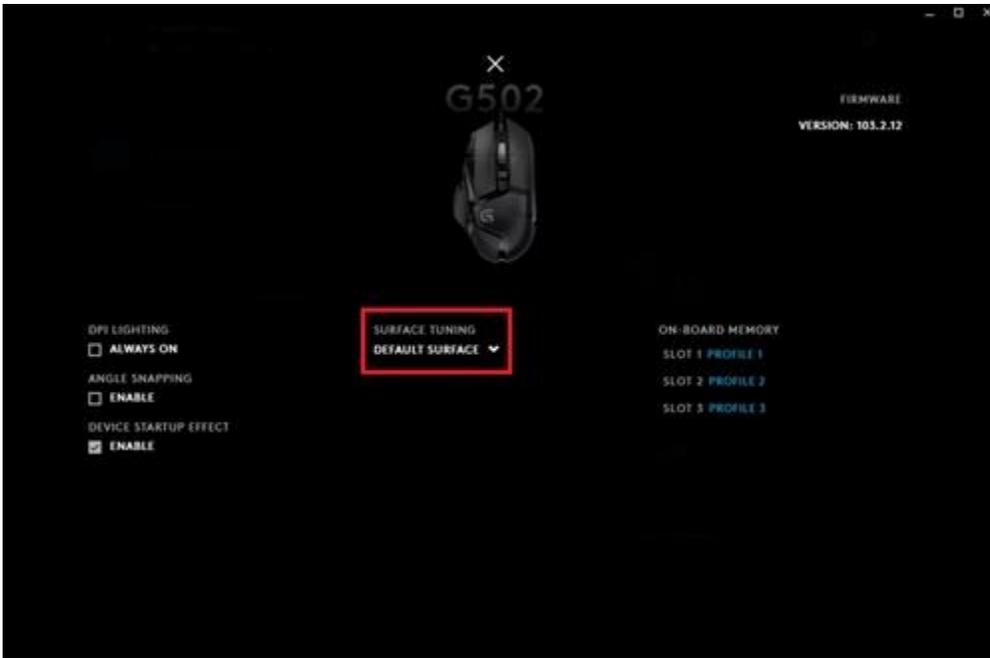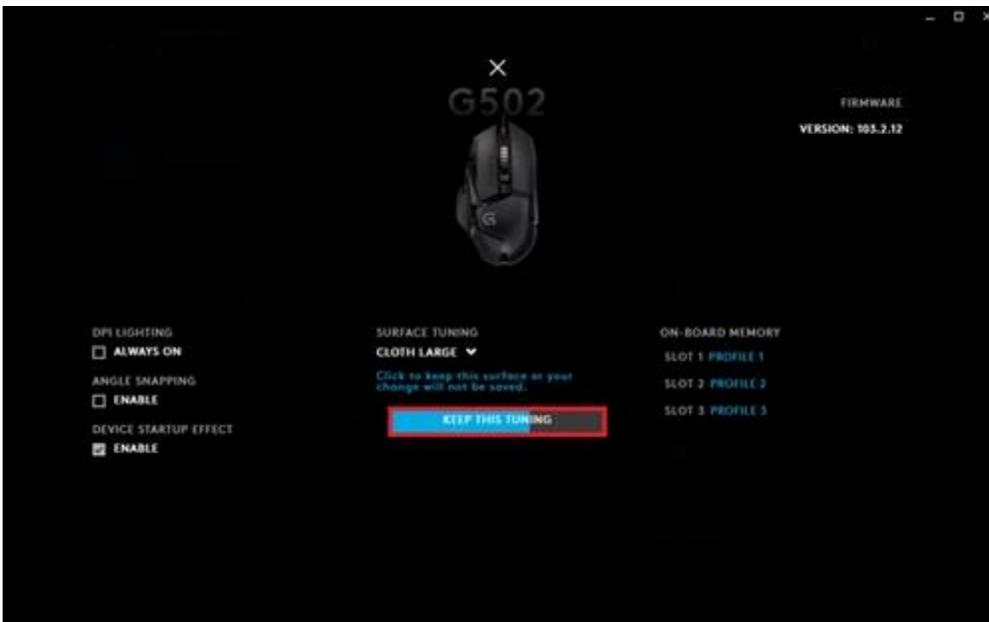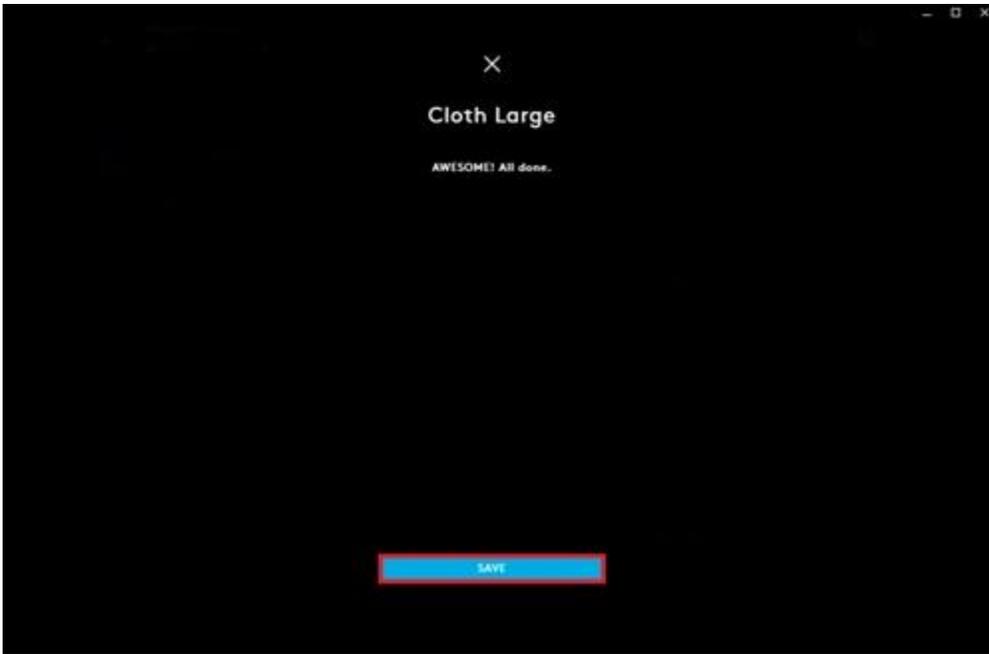
Close

Supported software for the G502 gaming mouse

The G502 gaming mouse uses Logitech Gaming Software version 8.53 and later. See the G502 Downloads page for the latest software support.

Surface Tuning on the G502 gaming mouse

Surface Tuning is a new feature available on the G502 Proteus Core gaming mouse. The mouse has a sensor you can calibrate to help you get the best accuracy, precision and responsiveness possible.

For more information on calibrating your gaming mouse, see answer 50046.

Close

Gaming mouse and keyboard compatibility with USB hubs and KVM switches

We don't support the use of third-party devices with our mice and keyboards. They can interfere with communication between a mouse or keyboard and the computer.

Unsupported third-party devices include:

- KVM switch boxes
- Port replicators
- Docking stations
- USB hubs

NOTE: The manufacturers of these third-party devices implement keyboard and mouse support in different ways. There is currently no industry standard.

Close

Supported operating systems for the G502 Proteus Core Gaming Mouse

At the time of release, this product is supported on:

- Windows Vista
- Windows 7
- Windows 8

See this product's Downloads page for the latest software support.

Close

Choose between G502 gaming mouse on-board memory and automatic detection

The G502 gaming mouse offers two different ways to manage button assignments:

On-Board Memory — The button assignments and DPI levels are written to the memory of the mouse. This allows you to configure the mouse on one computer, and then use your mouse on a different computer with no additional software or configuration. This setting is also useful if you

want to only use one set of button configurations for all applications/games on your computer. Please see answer 50041 for more tips.

Automatic Game Detection — The button assignments and DPI levels are individually configured for every application and game on your computer. This setting is recommended for advanced users and for when you want to assign specific keystrokes for each application on the computer. Please see answer 50039 for more tips.

Close

Enable and disable illumination on the G502 gaming mouse

To disable the illumination on your mouse:

1. Open the Logitech Gaming Software:

   Start > All Programs > Logitech > Logitech Gaming Software 8.x

2. Click the Light Settings icon.

3. In the Lighting Settings window, under Logo Lighting, move the **Brightness** slide bar all the way to the left to turn off illumination. Move the bar to the right to turn it back on and to adjust the brightness.

Close

Create macros for gaming mice and keyboards with Logitech Gaming Software
You can use Logitech Gaming Software (LGS) to create macros that automate a series of mouse button events and/or keystrokes with a single mouse button click or keypress of a G or function key.

- Getting started with a keyboard or gaming mouse in Automatic Game Detection mode
- Getting started with a gaming mouse in On-Board Memory mode
- Add mouse events to a macro
- Add keystrokes to a macro
- Add delays to a macro
- Select a Repeat Option for the macro
- Mouse events example
- Mouse events and keystrokes with delay example

Getting started with a keyboard or gaming mouse in Automatic Game Detection mode

1. Make sure your gaming mouse or keyboard is connected using the supplied USB cable. If you have a wireless gaming mouse, make sure your device is charged and the USB receiver is securely connected to a USB port.
2. Launch Logitech Gaming Software (LGS).
3. Select your gaming device and navigate to the **Home** tab.
4. If applicable, make sure the mouse or keyboard is set to **Automatic Game Detection**.

5. Click on the **Customize buttons**, **Customize G-keys** or **Customize Function Keys** icon at the bottom of the screen.

6. In the **Profiles** box, select a profile that you want to create macros for.
7. Double-click or right-click on a button and select **Assign New Command** or **Edit Command** to open the Command Editor. You can also open the Command Editor by clicking on the "+" sign in the Commands panel.

NOTE: Left and right mouse buttons can only be customized after their respective functions are assigned to other keys on the mouse.

8. In the left pane of the Command Editor window, select the **Multi Key** tab.
9. In the **Name** box, give your macro a unique name that will help you to identify it.

Getting started with a gaming mouse in On-Board Memory mode

1. Make sure your gaming mouse is connected using the supplied USB cable. If you have a wireless gaming mouse, make sure your device is charged and the USB receiver is securely connected to a USB port.
2. Launch Logitech Gaming Software (LGS).
3. Select your gaming mouse and navigate to the **Home** tab.
4. Make sure the mouse is set to **On-Board Memory**.
5. Click on the **Customize on-board profile** icon at the bottom of the screen.

6. Double-click or right-click on a button and select **Assign New Command** or **Edit Command** to open the Command Editor.
NOTE: Left and right mouse buttons can only be customized after their respective functions are assigned to other keys on the mouse.
7. Select the **Multikey Macro** tab from the left-hand pane of the Command Editor window.

Add mouse events to a macro

1. Right-click anywhere in the **Keystrokes** section of the Command Editor and hover over **Insert mouse Event**. The following options are displayed:
   o Left Button
   o Middle Button
   o Right Button
   o Wheel
   o Extra Button
2. For each mouse button, you can insert Down, Up, or Click events. If you choose the **Click** event, LGS automatically adds sequential Down and Up events.
NOTE: Although you can add separate button up and down events, it is recommended to add them both one after the other. Otherwise, the macro will execute as if the button is held down.
3. To delete events, right-click on the respective event in the **Keystrokes** section and select **Delete**. You can select multiple events by dragging the mouse while holding the left click button.

4. Once your macro is complete, click **OK**. Keyboard macros must contain at least one key press. The OK button remains grayed out until your macro meets this requirement.
NOTE: If you opened the Command Editor from the Commands pane on a keyboard or mouse in **Automatic Game Detection** mode, you'll need to drag the macro from the **Commands** list onto a mouse button or keyboard key in the **Customize buttons** window. The macro's name will be visible above the mouse button or keyboard key.

See also Mouse events example.

Add keystrokes to a macro:

1. In the **Multi Key** or **Multikey Macro** tabs in the Command Editor, click **Start Recording** to begin entering keystrokes.
NOTE: Select **Record delays** between events to automatically add delays between the keystrokes you input. For example, if you press the **A** key and wait 4 seconds before pressing the **B** key, LGS automatically includes those delays in the macro. This feature is not available on a mouse in **On-Board Memory** mode.

2. Press the keys or type on the keyboard as you would in-game.
NOTE: LGS only registers the keys that are pressed, not the symbols that result from the keystrokes. If you want to insert the "**!**" symbol in your macro, LGS displays shift down, up and button 1 up and down events.
TIP: Read the other sections of this article to understand how to manually add delays and mouse events to the macros you create with LGS.
3. Once you are finished adding the desired keystrokes, click **Stop Recording**.
4. You can add keystrokes to a macro even after you stop recording. Right-click any event in the **Keystrokes** section and select **Record Before Here** or **Record After Here**. Depending on which option you choose, the new keystrokes will be added either before or after the event you selected. Once you are finished adding the additional keystrokes, click **Stop Recording**.
5. Click **OK** to save the macro. Keyboard macros must contain at least one key press. The OK button remains grayed out until your macro meets this requirement.
NOTE: If you opened the Command Editor from the **Commands** pane on a keyboard or mouse in **Automatic Game Detection** mode, you'll need to drag the macro from the

Commands list onto a mouse button or keyboard key in the **Customize buttons** window. The macro's name will be visible above the mouse button or keyboard key.

Add delays to a macro

Inserting delays within macro events allows you to accommodate for latency and the time required to complete in-game actions. For example, if a certain in-game action requires 2 seconds to complete, you have to add a delay so the macro waits 2 seconds before executing the rest of the sequence. You can automatically add delays between your keystrokes by selecting the **Record delays between events** checkbox below the **Keystrokes** section. However, you have to manually add delays between mouse events. The same steps apply to manually adding delays between keystrokes:

1. Right-click the event in the **Keystrokes** section of the **Command Editor** before which you want to add a delay.
2. Select **Insert Delay** from the pop-up menu.
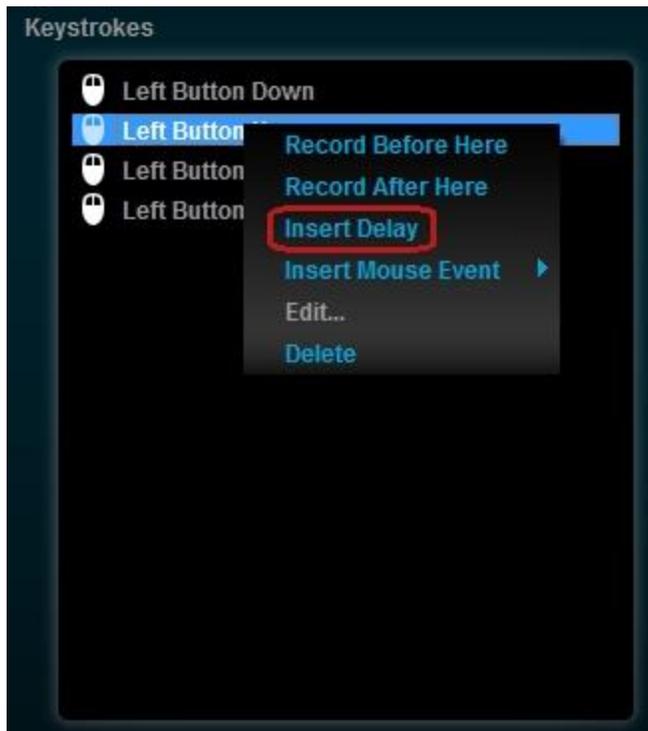
3. LGS inserts a 0.5-second delay by default. To customize the length of the delay, double-click on the entry in the **Keystrokes** section or right-click the delay event and select **Edit**.
4. Type a value in milliseconds and then press **Enter** to save.

See also Mouse events and keystrokes with delay example.

Select a Repeat Option for the macro
You can use the Command Editor to select a repeat option for your macro. By default, LGS sets the Repeat Options to **None**. You can choose from three repeat options: **None**, **While Pressed**, and **Toggle**.
NOTE: Repeat option functionality is unavailable while the mouse is in **On-Board Memory** mode.

1. Open the **Command Editor** window for the macro you want to repeat.
2. In the **Repeat Options** box, click the down arrow on the right.

3. Select one of the following options from the drop-down menu:
   o **None:** The macro only executes the keystrokes once.
   o **While Pressed:** Select this option to repeat the macro while the assigned button is pressed down.
   o **Toggle:** Clicking the button activates the macro and it repeats until the button is clicked again.

NOTE: The delay between the macro repetitions is set to 25 milliseconds by default. You can customize the length of the delay by setting a value in the **Delay (milliseconds)** box.

4. Click **OK** to save your changes.

Mouse events example
In this example, we will create a double-click macro to better understand how mouse events work.

1. Follow the Getting Started steps above.
2. Right-click in the **Keystrokes** section, hover over the **Insert Mouse Event** text, then hover over the Left Button option in the pop-up menu and select **Click** from the second pop-up menu.
3. Repeat Step 2 to insert a second Left Button click event.
4. Click **OK** to save the macro.

Mouse events and keystrokes with delay example
In this example, we will set up a macro to open the Device Manager to get acquainted with keystrokes and delays.

1. Follow the steps in the <u>Getting Started</u> section above.
2. Click **Start Recording**, press and hold the **Windows** key, press the **E** key, and release the **Windows** key. You should see the following commands in the Keystrokes section:

       NOTE: You might see Right Windows instead of Left Windows depending on the Windows key you used.

3. Right-click the **Keystrokes** section, hover over **Insert Mouse Event**, and then over **Right Button**. Select **Click** from the pop-up menu.
4. We need to add a delay between the keystrokes and the right button click events so there is enough time to position the pointer on the Computer button in the Navigation pane. Right-click the **Right Button Down** event and select **Insert Delay**. Next, double-click the delay event, type 4000 (4s) and press Enter.

5. Repeat Step 3 but insert a **Left Button** click event instead.
6. Add a delay between the **Right Button Up** and **Left Button Down** events so there is enough time to position the cursor over the **Manage** option in the pop-up menu. Right-click the **Left Button Down** event and select **Insert Delay**. Next, double-click the delay event, type 4000 (4s) and press Enter.

7. Click **OK** to save your macro.

Close

Create and scan for profiles with Logitech Gaming Software
Logitech Gaming Software (LGS) includes support for approximately six hundred games as of release 8.91. When you run the software for the first time, it should scan and automatically set up game profiles for you. If you install more games later, you can rescan for supported games and have profiles imported for them. You use profiles to customize pointer, lighting or G-key/function key command assignments for every individual game and application. If you prefer, you can also just use one profile for all your games and applications.

There are two ways to set up profiles for your games or applications:

- [Scan for new games](#)
- [Create new profiles](#)

Scan For New Games

Logitech Gaming Software's game profiles are created using registry entries from either Steam, uPlay, Battle.net, or Origin. Certain game profiles are associated with multiple publisher's registry entries, but the majority are linked to the Steam registry entry, excluding the games that are available exclusively on Battle.net or Origin. See a complete list of games [here](#).

1. Open Logitech Gaming Software (LGS).
2. Navigate to the Home window for your mouse, keyboard or headset.
3. Select **Customize buttons**, **Customize Function keys** or **Customize G-keys** depending on the device.
4. In the Profiles pane, click **Scan For New Games**.

5. Once the profiler has completed its scan, click **OK** to add the profiles to your list.
NOTE: A profile for the selected game should appear in the Profiles pane.

If you own a game that is not automatically detected by the Scan for New Games feature, you can make a few minor adjustments to set up the profile. For more information, please see [Scan For New Games does not detect game in Logitech Gaming Software](#).

Create new profiles

If the Scan For New Games list does not contain the game you want, LGS offers the ability to create your own profile. Here's how:

LGS can store profiles for any program executable (.exe) file. Use this to customize commands assignments for productivity programs.

1. Open Logitech Gaming Software (LGS).
2. Navigate to the Home window for your mouse, keyboard or headset.
3. Select **Customize buttons**, **Customize Function keys** or **Customize G-keys** depending on the device.
4. In the Profiles pane, click **Create new profile** ("+").

The **New Profile** window appears:

5. Type distinct names for your profile in the **Name** and **Description** boxes.

6. Click "+" and use the Windows Explorer window that appears to navigate to and open your executable (.exe) file.
   NOTE: You can assign multiple executable files to the same LGS profile.
7. Select the checkbox to **Lock profile while game is running** to prevent other profiles from becoming active while your game or application is running.
8. If you prefer to use another profile's lighting, command assignment or pointer settings as a starting point, select the checkbox to **Copy from an existing profile**. Use the drop-down menu to select a profile to copy settings from.
9. Click **OK** to save changes and add the new profile.
   NOTE: A new profile for the game or application should appear in the Profiles pane.

Close

Collect Windows log files
Windows log files can be used to troubleshoot and diagnose issues you may encounter while playing games and watching videos. You may be asked by technical support to provide various log files so they can further help you to solve the problem. Here's how to obtain some of the most commonly used files:

- DirectX Diagnostic files
- System Information files
- Windows System and Application Event log files
- Installation log files

DirectX Diagnostic files
DirectX is a programming interface that handles Windows tasks related to multimedia, especially game programming and video. The DirectX Diagnostic file contains information about this interface and its current status. Here's how to generate a DirectX Diagnostic file:

1. Hold down the Windows key and press R.
2. In the Run dialog box, type DXDIAG and then click **OK**. This opens the DirectX diagnostic tool.
3. On the bottom of the DirectX Diagnostic Tool window, click **Save All Information**.
4. When prompted, save the file to your Desktop with the file name DXDIAG.
5. Click **Save**.

6. Attach the file when you reply to Support.

System Information files

The Microsoft System Information tool collects system information, such as devices installed on your computer and any associated device drivers. To generate a System Information file:

1. Hold down the Windows key and press R.
2. In the Run dialog box, type MSINFO32 and then click **OK**. This opens the System Information diagnostic panel.
3. In the menu bar on the left, click **File**, and then click **Save**. This will prompt you to choose a location to save the file.
4. When prompted, choose your Desktop as the location to save the file with the file name MSINFO32.
5. Click **Save**.
6. Attach the file when you reply to Support.

Microsoft Windows System and Application Event log files

The Microsoft Windows Event log is a centralized log service, where the operating system and applications can report events that have taken place, such as when an action successfully completed or if there was a failure. The logs can indicate where and why an issue may be occurring.

Use the steps below to generate System and Application Event log files for your specific version of Windows:

- [Windows XP](#)
- [Windows Vista](#)
- [Windows 7, Windows 8, and Windows 10](#)

Windows XP

1. Hold down the Windows key and press R.
2. In the Run dialog box, type EVENTVWR.MSC and click **OK**. This will open the Event Viewer.
3. In the left pane, under Event Viewer (Local), right-click on **Application** and select **Save Log File As...** from the menu.
4. When prompted, type Application Event Log for the file name and save the file to your Desktop.
5. Next, right-click on **System** and select Save **Log File As...** from the menu.
6. When prompted, type System Event Log for the file name and save the file to your Desktop.
7. Attach the file when you reply to Support.

Windows Vista

1. Hold down the Windows key and press R.
2. In the Run dialog box, type EVENTVWR.MSC and click **OK**. This will open the Event Viewer.
3. In the left pane, under Event Viewer (Local), expand the Windows Logs folder by double-clicking on it or clicking the arrow next to the folder.
4. Under Windows Logs, right-click on **Application** and select **Save Events As...** from the menu.
5. When prompted, type Application Event Log for the file name and save the file to your Desktop.
6. Under Windows Logs, right-click on **System** and select **Save All Events As...** from the menu.
7. When prompted, type System Event Log for the file name and save the file to your Desktop.
8. Attach the file when you reply to Support.

Windows 7, Windows 8, and Windows 10

1. Hold down the Windows key and press R.
2. In the Run dialog box, type EVENTVWR.MSC and click **OK**. This will open the Event Viewer.
3. In the left pane, under Event Viewer (Local), expand the Windows Logs folder by double-clicking on it or clicking on the arrow next to the folder.
4. Under Windows Logs, right-click on **Application** and select **Save All Events As...** from the menu.
5. When prompted, type Application Event Log for the file name and then save the file to your Desktop.
6. Under Windows Logs, right-click on **System** and select **Save All Events As...** from the menu.
7. When prompted, type System Event Log for the file name and then save the file to your Desktop.
8. Attach the file when you reply to Support.

Installation log files
When Logitech software is installed, it uses several key log files in Windows to store installation information. These log files can indicate where a potential issue may lie. Support can use that information to help provide a resolution. To locate the installation log files:

1. Hold down the Windows key and press R.
2. In the Run dialog box, type %WINDIR%\INF and click **OK**. This will open Windows Explorer in the Windows\INF folder.
3. In the Windows\INF folder, scroll down until you find the following files:

- setupapi.dev.log
- setupapi.app.log

Copy the files to your Desktop.

4. Attach the files when you reply to Support.

Close

Configure G502 pointer settings with Logitech Gaming Software

The G502 gaming mouse lets you customize pointer settings in two different modes:

- Automatic Game Detection mode
- On-Board Memory mode

NOTE: For help with choosing between these two modes, see answer 44494.

Automatic Game Detection mode

The G502 gaming mouse supports these pointer customizations in Automatic Game Detection mode:

- **DPI levels** - Configure up to five levels, from 200-12000 in 50 DPI increments.
- **Report rate** - Update from 125/sec (8ms response time) to 1000/sec (1ms response time).
- **Per profile pointer settings** - Enable different pointer behavior for each profile.
- **Acceleration** - Enhance pointer precision.

To configure your pointer settings:

1. Open the Logitech Gaming Software:

   Start > All Programs > Logitech > Logitech Gaming Software 8.x

2. Click the glowing pointer - gear icon. Make sure the blue marker next to the icon is to the right.

The Pointer Settings window will appear.

3. Under **DPI Sensitivity Levels**, drag the tick mark along the graph. For each DPI level you set, you'll see a tick mark. You can set up to five.

NOTE: If you prefer, you can edit the list of DPI values to the left of the graph from 200-12000. For each DPI level you set, you'll see a tick mark rounded to the nearest 50. For example, if you type in "632", the software will round to 650 DPI.

- o **Assign Default** - (Required) One DPI level must always be the default. To change the default, click a DPI level that doesn't have a blue diamond above it, and then click **Assign Default**. This is the DPI level the mouse will return to when you:
  - Press the default DPI button
  - Switch between profiles
  - Power up the computer
  - Wake the computer from sleep mode
- o **Assign Shift** - (Optional) A Shift DPI is a DPI level you can temporarily activate by pressing the DPI Shift button. To set the Shift DPI, select a DPI level that isn't highlighted in orange, and then click **Assign Shift**. This enables extreme precision or mouse speed when needed. The mouse will revert back to the current DPI level when the button is released.

TIP: Buttons you assign as DPI Up, DPI Down and DPI Cycle will enable you to change between DPI levels rapidly.

NOTE: LEDs on the G502 mouse will change while cycling through DPI levels using assigned mouse buttons..

4. Change the **Report Rate**, if you prefer something other than the default of 1000 reports/second (1ms response time). The Report Rate controls how often your mouse updates its position to the computer.

NOTE: The possible range is from 125/sec (8ms response time) to 1000/sec (1ms response time).

You can:

- o Decrease processor use by reducing the report rate.
- o Increase the mouse response by raising the report rate.

TIP: For most PCs, a report rate of 500 is recommended.

5. Make your preferred selections under **Advanced**. The options are:
   - o **Enable per profile pointer settings** - Select this option to enable each profile to have different pointer behavior (see answer 26861 for help).

     TIP: We recommend leaving this unchecked for the initial setup.

   - o **Acceleration (Enhance Pointer Precision)** - Select this option to use Window's "Enhance Pointer Precision" acceleration.

On-Board Memory mode

The G502 gaming mouse supports these pointer customizations in On-Board Memory mode:

- **DPI levels** - Configure up to four levels, from 200-12000 in 50 DPI increments.

  NOTE: DPI Shift setting isn't available in On-Board Memory mode.

- **Report rate** - Update from 125/sec (8ms response time) to 500/sec (2ms response time).

For details on configuring your gaming mouse in On-Board Memory mode, see answer 50041.

Close

Manage profiles for the G502 gaming mouse using Logitech Gaming Software

You can manage your gaming mouse profiles using either Automatic Game Detection or On-Board Memory. For help with choosing between them, see answer 50040.

To learn about Automatic Game Detection:

- Configuring pointer settings using Automatic Game Detection (see answer 50039)
- Importing pre-made profiles (see answer 26852)
- Creating new profiles (see answer 26855)
- Viewing current profiles (see answer 26826)
- Modifying button assignments for existing profiles (see answer 26862)
- Setting different DPI settings for profiles (see answer 26861)
- Setting Default and Persistent profiles (see answer 26858)
- Linking profiles between your G-series keyboard and mouse (see answer 26836)

To learn about On-Board Memory:

- Configuring On-Board Memory (see answer 50041)

For help with:

- Application-specific profiles not working with the G502 Proteus Core gaming mouse (see answer [50042](#))
- Troubleshooting profile detection (see answer [26856](#))
- Troubleshooting button assignments and macros (see answer [26838](#))
- Enabling the "Lock profile while game is running" option (see answer [26857](#))
- Making sure both single and multiplayer games have profiles (see answer [26859](#))
- Profiles not working after a game update (see answer [26830](#))
- Profiles stop working in the middle of the game (see answer [26790](#))

Close

Application-specific profiles do not work with the G502 gaming mouse

- [Enabling On-Board Memory](#)
- [Configuring On-Board Memory](#)

NOTE: To learn more about On-Board Memory, see answer [50040](#).

Enabling On-Board Memory

To enable On-Board Memory:

1. Open the Logitech Gaming Software:

   Start > All Programs > Logitech > Logitech Gaming Software 8.x

2. Make sure the blue marker next to the icon is to the left.

The mouse will now be in On-Board Memory mode and all of the customizations you make will be written directly to the mouse.

Configuring On-Board Memory

To configure On-Board Memory:

1. Open the Logitech Gaming Software:

    Start > All Programs > Logitech > Logitech Gaming Software 8.x

2. Click the glowing pointer-gear icon.

The screen will now change to show the configuration view.

3. Under **DPI Sensitivity Levels**, drag the tick mark along the graph. For each DPI level you set, you'll see a tick mark. You can set up to five.

If you prefer, you can edit the list of DPI values to the left of the graph from 200-12000. For each DPI level you set, you'll see a tick mark rounded to the nearest 50. For example, if you type in "632", the software will round to 650 DPI.
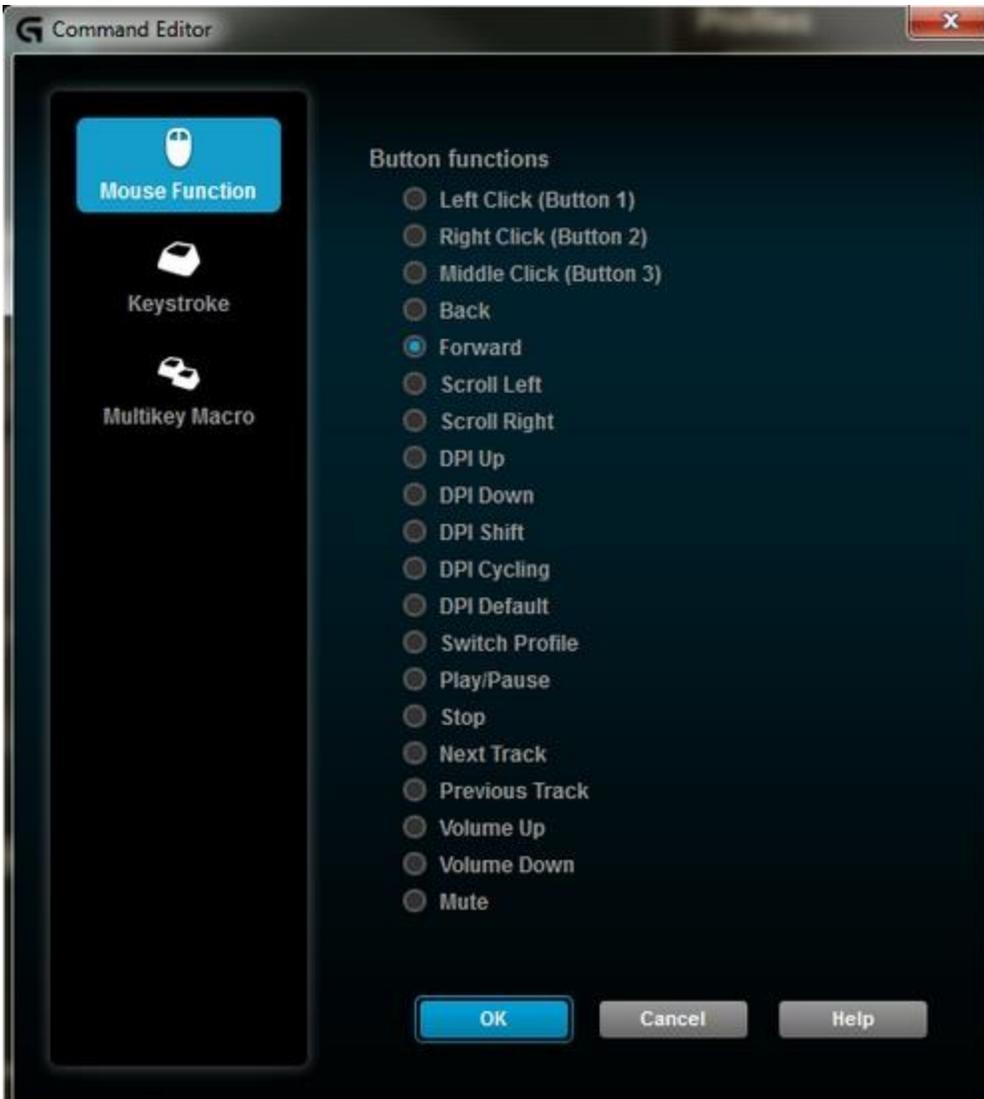
- o **Assign Default** - (Required) One DPI level must always be the default. To change the default, click a DPI level that doesn't have a blue diamond above it, and then click **Assign Default**. This is the DPI level the mouse will return to when you:
  - Press the default DPI button
  - Switch between profiles
  - Power up the computer
  - Wake the computer from sleep mode
4. Change the **Report Rate**, if you prefer something other than the default of 1000 reports/second (1ms response time). The Report Rate controls how often your mouse updates its position to the computer. The possible range is from 125/sec (8ms response time) to 1000/sec (1ms response time).
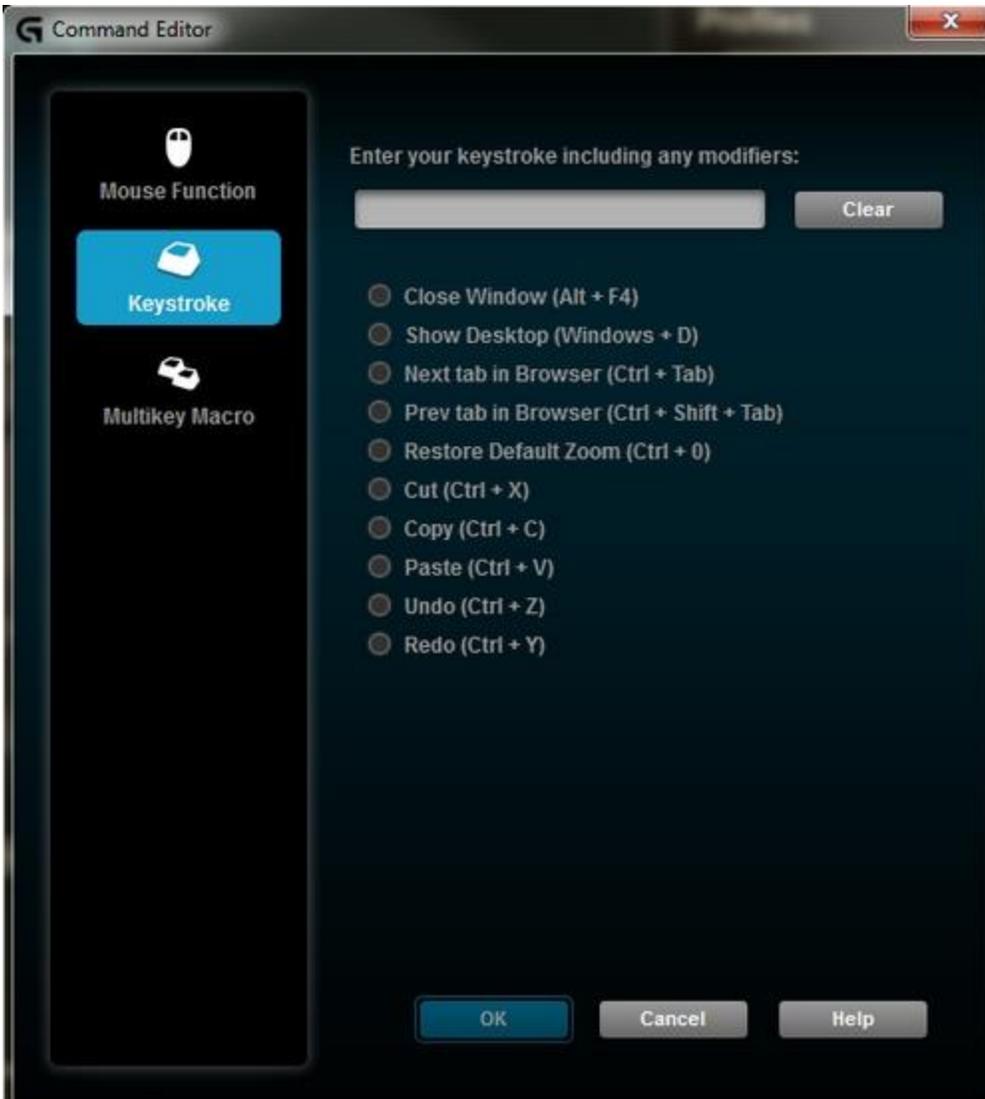
    You can:

  - o Decrease processor use by reducing the report rate.
  - o Increase the mouse response by raising the report rate.

    TIP: For most PCs, a report rate of 500 is recommended.

5. To change a button assignment, right click on a button and select **Edit**.
6. You can have the button perform either a Mouse Function, a Keystroke or a Multikey Macro.

Command Editor

Mouse Function

Keystroke

Multikey Macro

Enter your keystroke including any modifiers:

[   ]   Clear

○ Close Window (Alt + F4)
○ Show Desktop (Windows + D)
○ Next tab in Browser (Ctrl + Tab)
○ Prev tab in Browser (Ctrl + Shift + Tab)
○ Restore Default Zoom (Ctrl + 0)
○ Cut (Ctrl + X)
○ Copy (Ctrl + C)
○ Paste (Ctrl + V)
○ Undo (Ctrl + Z)
○ Redo (Ctrl + Y)

OK   Cancel   Help

When you assign a keystroke to the button, note that the software retains the modifier presses. For example, to assign Ctrl+Alt+3, press and release Ctrl, then Alt, then 3. To remove modifier keys, press the **Clear** button.

7. Click **OK** to save your function to the button.

Close

Finding the correct .exe file for a gaming-mouse profile

If you're having trouble with profile detection, you may not have the profile associated with the correct or active game .exe file.

To find the active .exe for a game, you can either:

- Associate automatically using a G-Series keyboard with an LCD screen (see [26853](#)).
  OR
- Find the .exe through Windows Task Manager (see [26854](#)).

NOTE: You only need to do one of the above if the profile is not associated correctly. If you can point to the correct .exe when creating a profile, you don't need to do either one.

Close

Programming gaming-mouse buttons using Logitech Gaming Software

Logitech Gaming Software enables you to program different button configurations for each profile on your computer. To learn how to create and assign application-specific profiles, see article [26855](#).

NOTE: If you're new to Logitech Gaming Software or you want to use only one profile with your mouse, first follow the steps in article [26858](#) to set up your Default Profile as a Persistent Profile.

To configure your mouse buttons:

1. Open the Logitech Gaming Software:

   Start > All Programs > Logitech > Logitech Gaming Software 8.x

2. Click the **Customize buttons** icon.

3. Select the profile you want to edit by clicking its icon. The profile will have a blue highlight bar above it when selected (ex. "Default Profile" below).

   NOTE: Logitech Gaming Software will detect some games you've installed and create profiles for them. You can create profiles for other games yourself (see article 26855 for help).
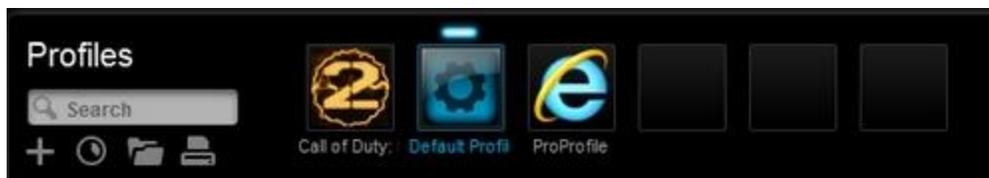
4. To edit a button, either:
   o Drag and drop an existing command onto it.

      NOTE: All commands you've created for that profile will be visible in the Commands list on the left. When you drag a command over the mouse, the configurable buttons will highlight. Choose the button you want to program and drop the command on top of it.

      OR

   o Right-click on a button and select **Edit Command**. The Command Editor window appears:
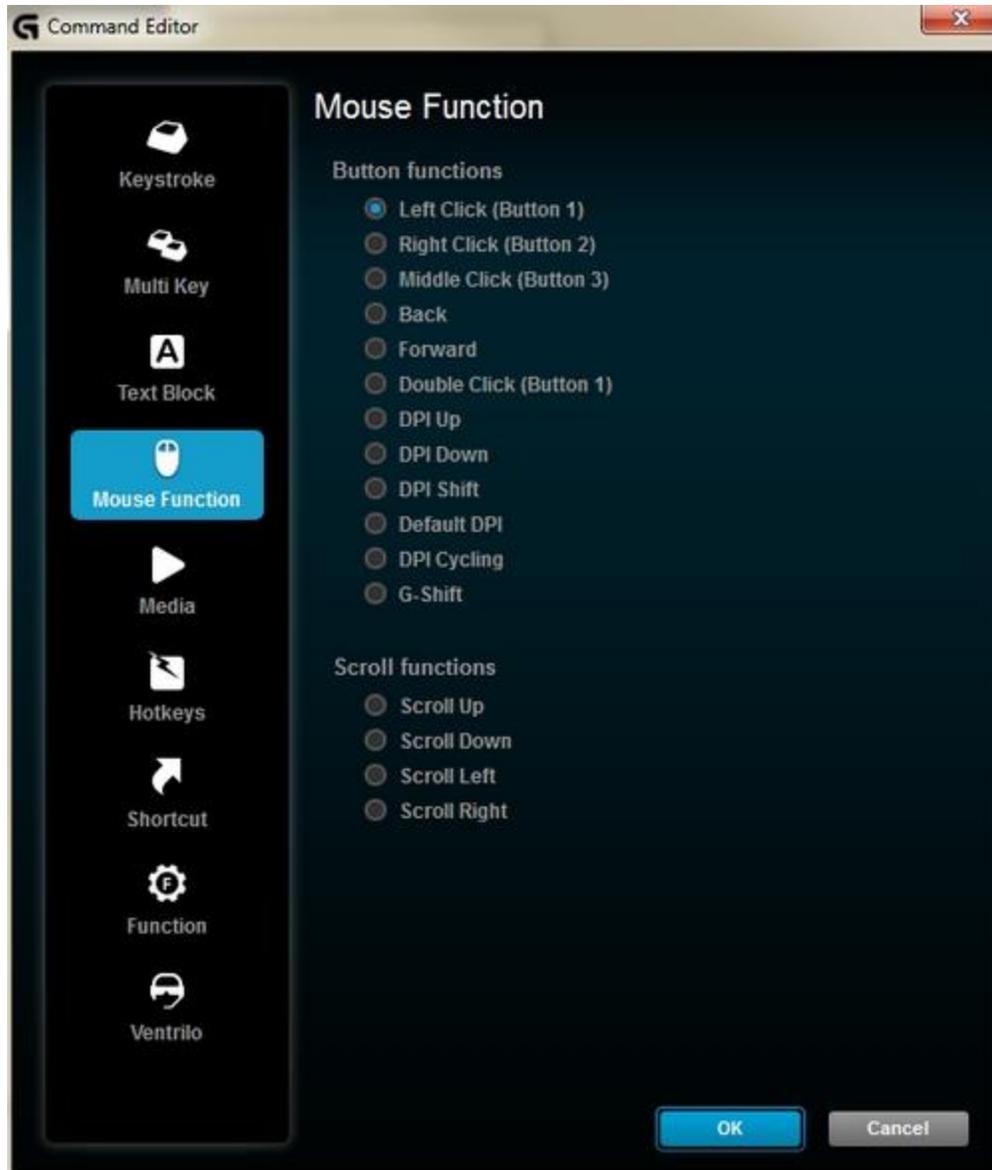
In this window, you can assign a:

- **Keystroke** — Assign a single key press, or a key press with modifiers.
- **Multi Key** — Assign a "macro'd" series of keystrokes. (NOTE: You can set up these macros to function both with and without recorded time delays.)
- **Text Block** — Create a block of text to be typed out when the key is pressed (either with or without Unicode support).
- **Mouse Functions** — Assign a button on your mouse to use any of the available mouse button functions.
- **Media** — Set a mouse button to function like a media key you'd typically find on a keyboard.
- **Hotkeys** — Use a pre-defined keystroke command.

- **Shortcut** — Assign a button to launch a file/folder/drive on your computer.
- **Function** — Assign a button to act like a Microsoft function button (ex. to open your web browser).

After you've selected the function to assign to the button, click **OK**. This will apply the new function and you'll the command's name next to the button (ex. mouse function "DPI Cycling" assigned to Button 5 below).
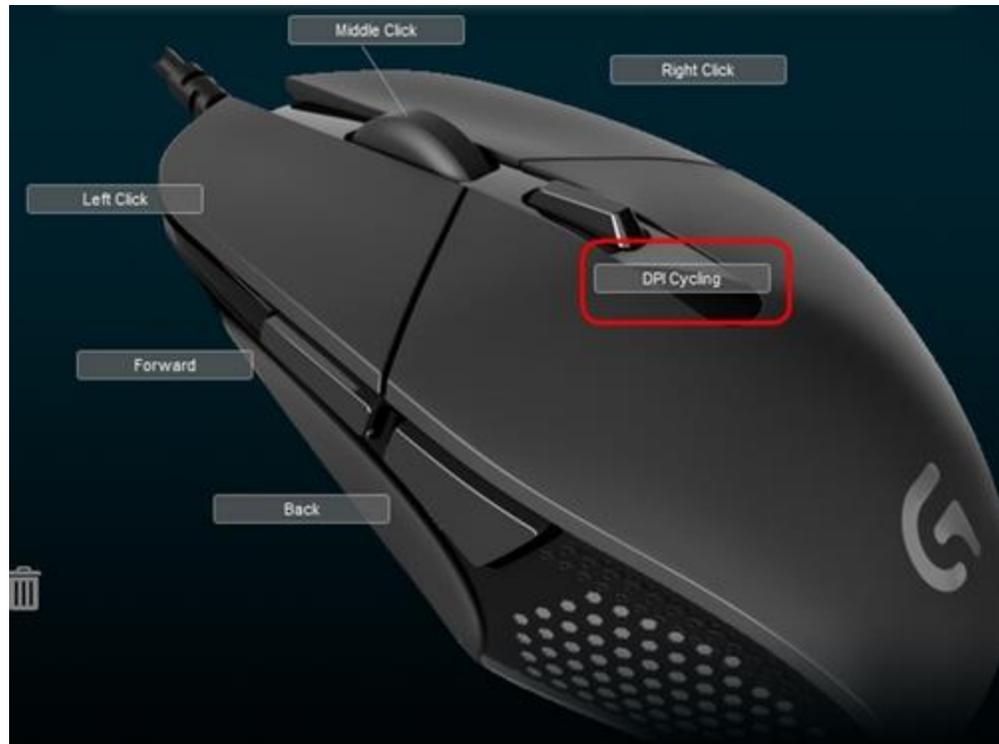
IMPORTANT: At least one button must be configured as "Left Click" and one as "Right Click" at all times. To reprogram either of these buttons, you'll first have to assign that function to another button.

To reassign a button back to the standard behavior of the mouse, right-click the button and select "Use Generic".

To un-assign a button, either right-click and select "Unassign" or drag the command from the button to the trash icon.

Close

View current profiles in Logitech Gaming Software
To see your current gaming profiles in Logitech Gaming Software (LGS) for your gaming mouse, keyboard or headset:

1. Open Logitech Gaming Software
2. Select your product by using the arrows at the bottom left of the LGS window.

3. Do one of the following, depending upon your device type:
   - Mouse — click **Customize Buttons** if your mouse is in Automatic Game Detection mode. Click **Customize on-board profile** if your mouse is in On-Board Memory mode.

   - Keyboard — click **Customize Function Keys** or **Customize G-Keys**.

   - Headset — click **Customize G-Keys**.

4. The profiles you've created will show in alphabetical order in the **Profiles** area at the top of the window.

Close

Surface tuning the G502 gaming mouse

Custom surface tuning lets you tune your gaming mouse for maximum tracking accuracy. Here's how:

1. Open the Logitech Gaming Software:

   Start > All Programs > Logitech > Logitech Gaming Software 8.x

2. Click the Surface Tuning icon.

3. In the Surface Tuning window, click **Add new surface**.

4. Enter a name for the new custom surface tuning.

5. Click on the **Tune** icon to start custom surface tuning.

6. Follow the on-screen instructions closely.

7. The gauge lets you know if you're moving your mouse fast enough. Be sure to keep it moving or the surface tuning will fail and you'll have to start over.

The blue progress bar moves to **Complete** when surface tuning is done.

8. Click **OK** to exit. If you have multiple surfaces, you can tune for those as well. Repeat steps 3 - 8.

NOTE: To restore the original settings, click **Factory Default**.
Close

Setting different DPIs for gaming-mouse profiles using Logitech Gaming Software

VIDEO - G502 Surface Tuning

Linking profiles between a G-Series keyboard and gaming mouse using Logitech Gaming Software

Configure G502 gaming mouse on-board memory

- Enabling On-Board Memory
- Configuring On-Board Memory

NOTE: To learn more about On-Board Memory, see answer 50040.

Enabling On-Board Memory

To enable On-Board Memory:

1. Open the Logitech Gaming Software:

    Start > All Programs > Logitech > Logitech Gaming Software 8.x

2. Make sure the blue marker next to the icon is to the left.

The mouse will now be in On-Board Memory mode and all of the customizations you make will be written directly to the mouse.

Configuring On-Board Memory

To configure On-Board Memory:

1. Open the Logitech Gaming Software:

    Start > All Programs > Logitech > Logitech Gaming Software 8.x

2. Click the glowing pointer-gear icon.

The screen will now change to show the configuration view.

3. Under **DPI Sensitivity Levels**, drag the tick mark along the graph. For each DPI level you set, you'll see a tick mark. You can set up to five.

NOTE: If you prefer, you can edit the list of DPI values to the left of the graph from 200-12000. For each DPI level you set, you'll see a tick mark rounded to the nearest 50. For example, if you type in "632", the software will round to 650 DPI.
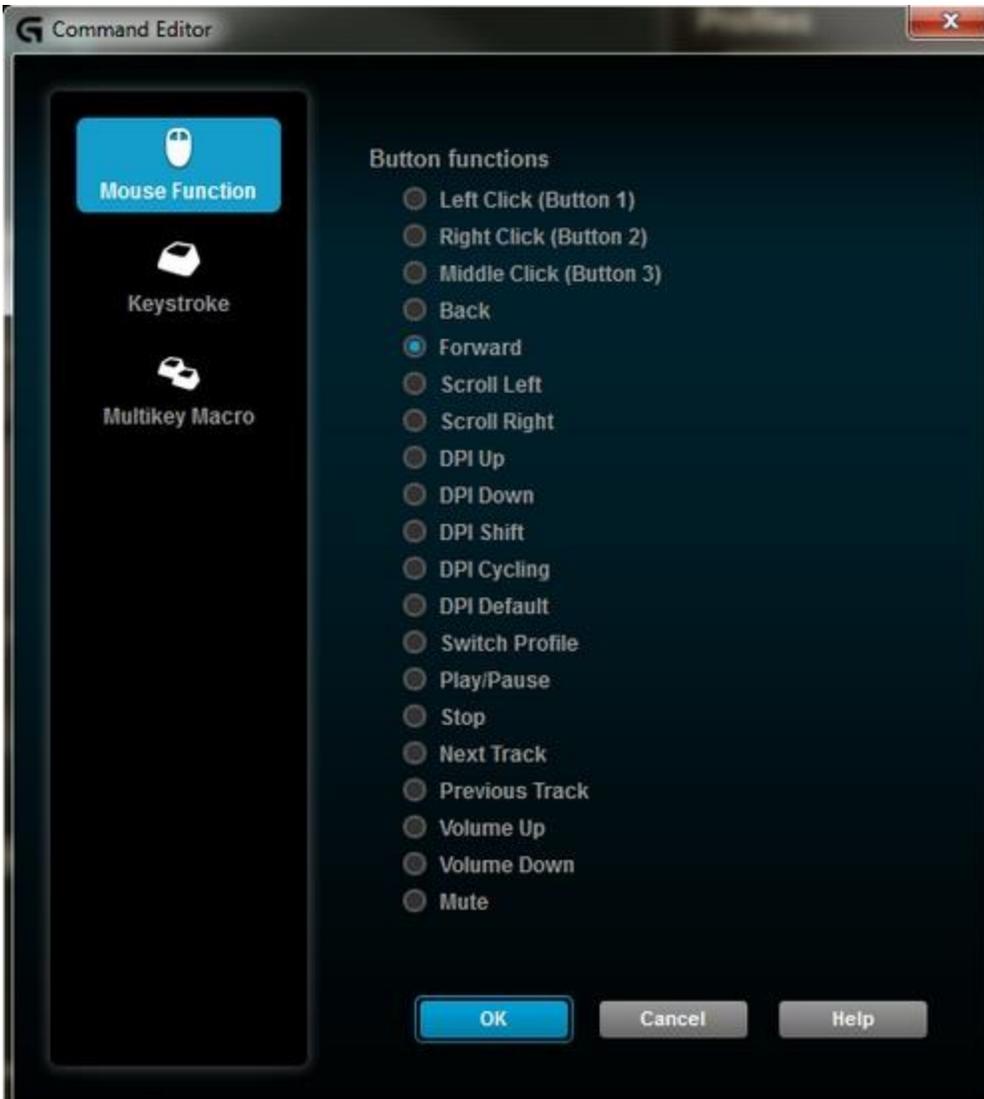
- **Assign Default** - (Required) One DPI level must always be the default. To change the default, click a DPI level that doesn't have a blue diamond above it, and then click **Assign Default**. This is the DPI level the mouse will return to when you:
  - Press the default DPI button
  - Switch between profiles
  - Power up the computer
  - Wake the computer from sleep mode

4. Change the **Report Rate**, if you prefer something other than the default of 1000 reports/second (1ms response time). The Report Rate controls how often your mouse updates its position to the computer. The possible range is from 125/sec (8ms response time) to 1000/sec (1ms response time).
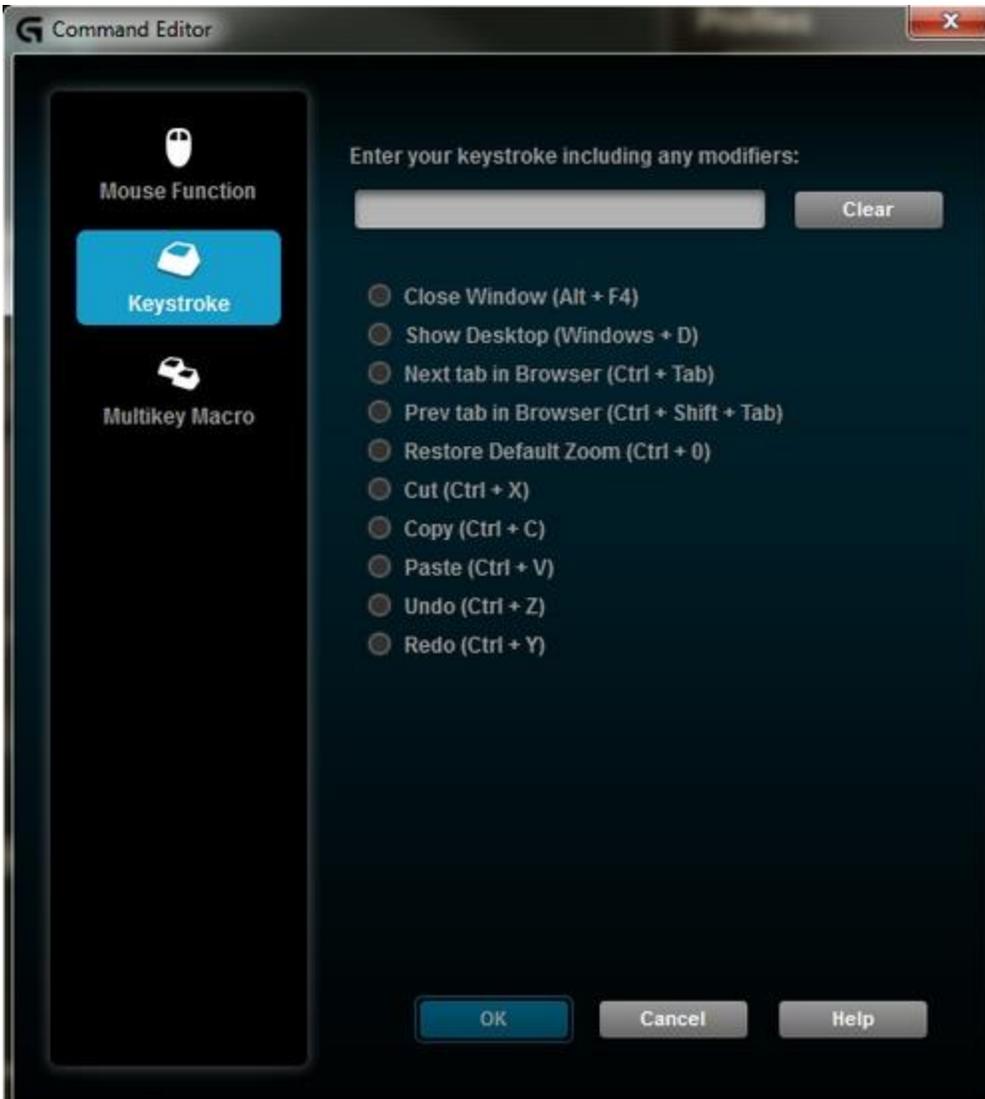
   You can:

   - Decrease processor use by reducing the report rate.
   - Increase the mouse response by raising the report rate.

     TIP: For most PCs, a report rate of 500 is recommended.

5. To change a button assignment, right click on a button and select **Edit**.
6. You can have the button perform either a Mouse Function, a Keystroke or a Multikey Macro.

G Command Editor

Mouse Function

Keystroke

Multikey Macro

Button functions

- ○ Left Click (Button 1)
- ○ Right Click (Button 2)
- ○ Middle Click (Button 3)
- ○ Back
- ● Forward
- ○ Scroll Left
- ○ Scroll Right
- ○ DPI Up
- ○ DPI Down
- ○ DPI Shift
- ○ DPI Cycling
- ○ DPI Default
- ○ Switch Profile
- ○ Play/Pause
- ○ Stop
- ○ Next Track
- ○ Previous Track
- ○ Volume Up
- ○ Volume Down
- ○ Mute

OK   Cancel   Help

Command Editor

Mouse Function

Keystroke

Multikey Macro

Enter your keystroke including any modifiers:

[   ]   Clear

○ Close Window (Alt + F4)
○ Show Desktop (Windows + D)
○ Next tab in Browser (Ctrl + Tab)
○ Prev tab in Browser (Ctrl + Shift + Tab)
○ Restore Default Zoom (Ctrl + 0)
○ Cut (Ctrl + X)
○ Copy (Ctrl + C)
○ Paste (Ctrl + V)
○ Undo (Ctrl + Z)
○ Redo (Ctrl + Y)

OK   Cancel   Help
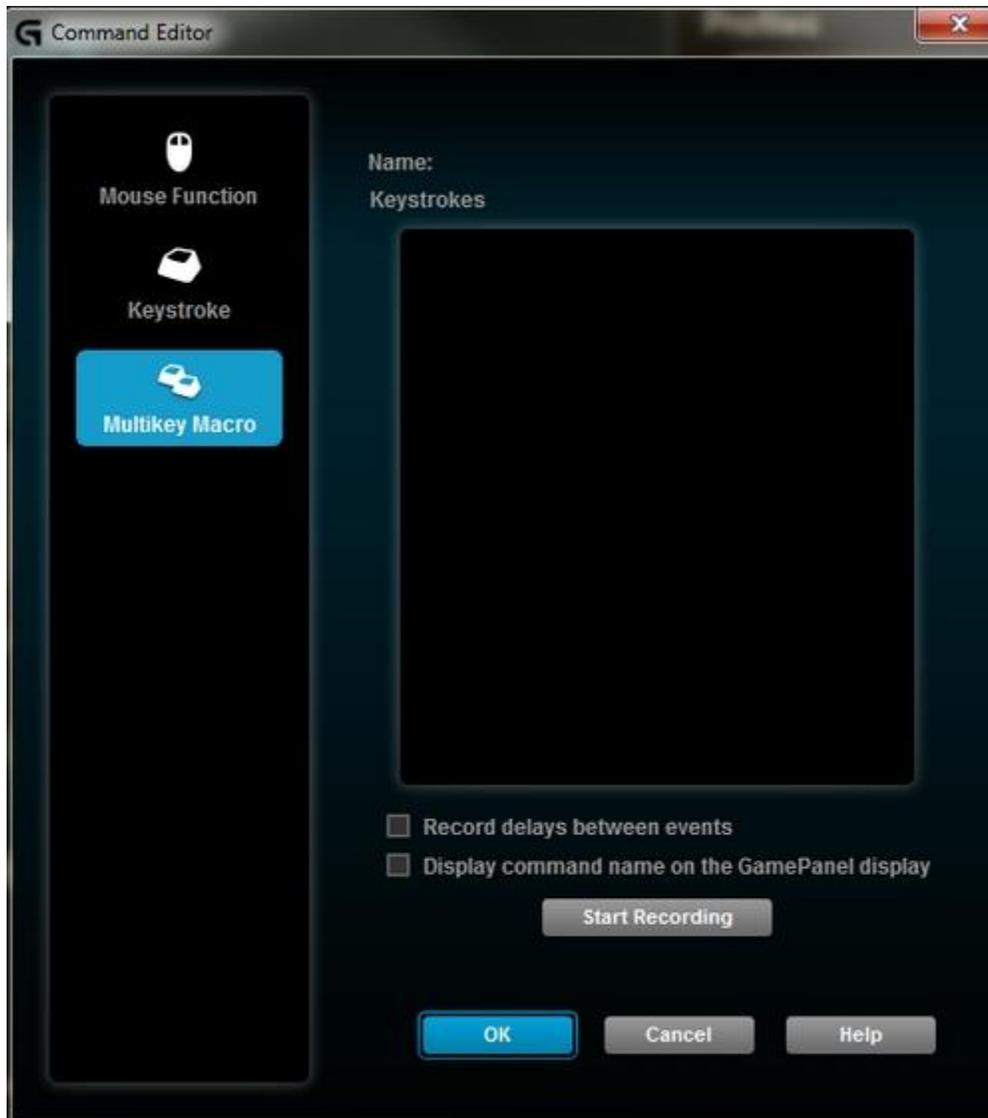
When you assign a keystroke to the button, note that the software retains the modifier presses. For example, to assign Ctrl+Alt+3, press and release Ctrl, then Alt, then 3. To remove modifier keys, press the **Clear** button.

7. Click **OK** to save your function to the button.

Close

Insert weights in the G502 gaming mouse

Your G502 gaming mouse comes with five tuning weights that you can use to personalize the mass and balance of the mouse.

To insert the weights:

1. Turn your mouse over and pull up on the blue tab to expose the weight compartment.

2. Remove the weights from the storage case.

3. Place the weights into the mouse in the configuration that works best for you. The mouse shown below is using four weights, but you can use one or all five.

4. Replace the cover.