CORSAIR®

Raptor® M40 Gaming Software

User Guide

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Introducing the Corsair Gaming Software

Welcome

Thanks for choosing the Raptor M40 optical gaming mouse for your PC gaming. We hope you enjoy using it as much as we do. This Software Guide is designed to help you get the most from your mouse. You can find a community of other Raptor-equipped gamers at www.corsair.com/forums, on Facebook at www.facebook.com/RaptorGaming, and on Twitter @CorsairMemory.

Using This Guide

To help make it easy and quick to learn how to use the Corsair Gaming Software, we used the following formatting conventions in this User Guide:

Items that you click on will be in **boldface type**.

Items that are particularly important will be in *italics*.

Button numbers will be shown like this: 1

The terms Select and Click are used interchangeably and indicate that you should left-click on the item.

Right-click means to select the item and press the right mouse button.

Paragraphs that are called out like Raptor M40 gaming mouse better.

Compatible Products

The Corsair Gaming Software can be used with the Vengeance K90/95 MMO/RTS-optimized gaming keyboard, Vengeance M60/65, and the Vengeance M90/95 laser gaming mice. The Vengeance K60/K70 FPS-optimized gaming keyboard has no programmable functions and therefore does not use the Corsair Gaming Software.

This User Guide covers the Raptor M40 gaming mouse. Other User Guides cover the other Corsair gaming peripherals.

This guide is specifically tailored to the 1.0 release version of the Corsair Gaming Software. If you are using an earlier version, please update it.

User Interface Overview

The Corsair Gaming Software is designed to make tuning your gaming profiles, including recording, editing and storing macros, as easy as possible. All of the options can be found on just three tabs, and most configuration changes and edits are stored automatically.

Before following the rest of this guide, please take a moment to familiarize yourself with the basics of the user interface:
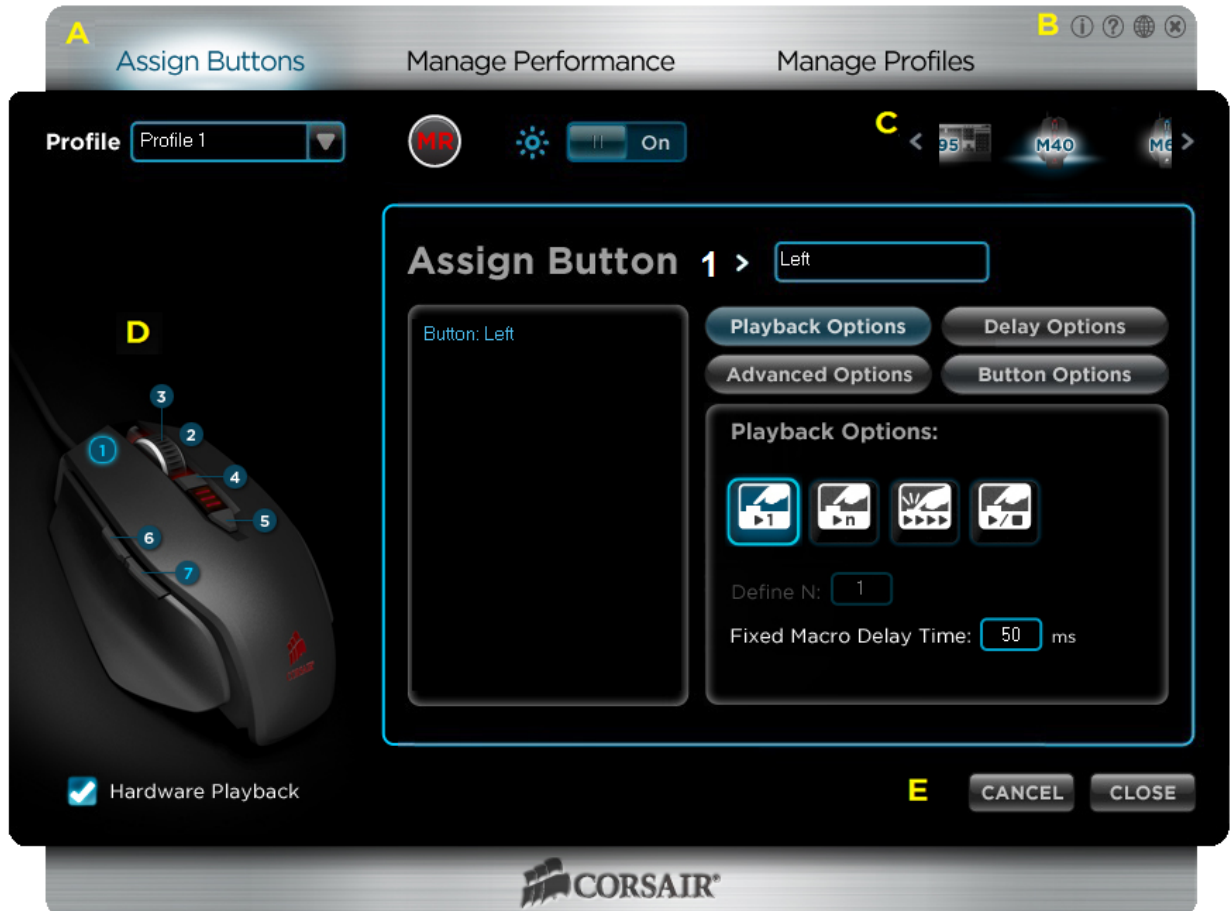
A. The Activities Bar

There are three activities you can perform with the Corsair Gaming Software: **Assign Buttons**, **Manage Performance**, and **Manage Profiles**.

Assign Buttons

This activity allows you to change the mouse functions or individual keyboard keystrokes assigned to a button. You can also record, edit, and delete macros, and bind them to the button of your choice on the Raptor M40 gaming mouse. You can also change how the macros will be played back.

Manage Performance

This activity gives you total control over how the mouse works, including adjusting the DPI settings, the rate at which the mouse reports data to the system, the height at which, when lifted, the mouse will stop tracking, and a test feature to judge how well the sensor in the mouse performs on the surface you are using.

The Raptor M40 gaming mouse can store one profile that can be selected on-the-fly. The profile independently stores all the important data for the mouse: DPI settings, lift height, reporting rate, and button assignments, as well as your macros and their button bindings. The **Manage Profiles** activity allows you to manage your profiles, including creating new profiles, importing and exporting profiles on the Raptor M40 mouse.

B. Help Buttons

The help buttons provide access to important information about the Corsair Gaming Software.

Selecting ⓘ opens the Information dialog box and displays the software version, USB ID information, etc. It is useful for checking the version you are running, and can assist our Technical Support group in the event you have a problem with your mouse.

Selecting ❓ opens your browser to the Corsair Gaming Peripherals Frequently Asked Questions page on corsair.com.

Selecting ⊕ opens your browser to corsair.com

C. Device Navigation

The **Device Navigation** section shows images of the Corsair gaming peripherals that are installed on your system, and allows you to choose which one the Corsair Gaming Software is modifying. You can scroll through devices by clicking on the **<** and **>** arrow symbols on the screen. Select the Corsair gaming peripheral you wish to configure by clicking on the appropriate image.

D. Button Selection

The Button Selection area displays an image of the Raptor M40 gaming mouse, with each button labeled. When using the **Assign Buttons** activity, this is where you select the button you would like to modify.

E. Cancel and Close

Generally speaking, most changes you make in the Corsair Gaming Software are saved automatically to the mouse. The **Cancel** button provides a single-level undo for any changes that haven't yet been saved to the mouse.

When the **Cancel** button is available, clicking it will cancel any changes you have made, including any macros you have recorded. When the **Cancel** button is grayed out, your edits have been saved to the mouse and you cannot cancel them.

Selecting **Close** will minimize the application to the task bar whenever **Notification** is enabled. The Corsair Gaming Software is still be active and can be accessed again by double-clicking the icon in the task bar. If you do not have **Notification** enabled, the Corsair Gaming Software will close and you will need to reopen it from the Windows Start menu if you wish to make any changes.

Other Important User Interface Elements

Profile selector
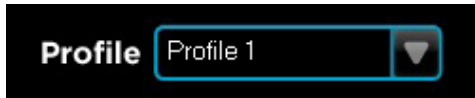
This pull-down allows you to select the profile that you will be modifying. You can only select existing profiles; if you need to create a new profile, use the **Manage Profiles** activity.

Macro Record button

The Macro Record (**MR**) button is a toggle that turns macro recording on and off. When Macro Record is active, all of your keystrokes will be recorded until it is turned off. Please see "How-to: Record a Macro" later in this User Guide for step-by-step instructions on using the macro record feature.

LED Toggle

The LED toggle controls the LED lighting on the mouse, allowing you to turn it on and off. The state of the LED toggle is not stored in a profile.

Using the Corsair Gaming Software

Software versus Hardware Playback

The Corsair Gaming Software provides two different modes of operation: software playback and hardware playback. They each have advantages and disadvantages. Please read this section to determine which mode is best for you.

Software Playback

This is the default for the Corsair Gaming Software. In this mode, macros are read from the active profile by a background application played back via the Windows keyboard buffer.

Advantages of software playback

The main advantages of software playback are: 1) auto-switching of profiles based on the application assigned to the profile; 2) more than six profiles can be used; and 3) changes made to a profile, setting, or macro are immediately available.

The automatic profile switching allows you to assign an application to a profile, and when the Corsair Gaming Software detects that application as running and having focus, it will switch profiles for you. You can assign applications to a profile through the **Manage Profiles** activity.

The Raptor M40 gaming mouse is limited to one onboard profile. If you want to be able to choose between more than one active profile, you'll need to use the software mode.

Disadvantages of software playback

The main disadvantages of software playback are some applications block macro playback by reading directly from the hardware rather than the Windows keyboard buffer.

If you choose to use software playback, enabling **On-Screen Display** (OSD) will let you see the name of the profile you are switching to, the DPI setting you've selected, and other data. However, because the OSD uses Windows to display the message, you may be switched out of a full-screen game to the Windows desktop when you change a profile or setting. If you choose to use software playback with OSD enabled, be sure to test this before you're in the middle of the action in your favorite game!

Hardware playback

Because the Raptor M40 gaming mouse has on-board memory, you can playback your macros directly from the hardware. This mode is enabled by selecting **Hardware playback** from any of the activity screens.

Advantages of hardware playback

The main advantages of hardware playback is better game compatibility.

Disadvantages of hardware playback

The main disadvantages of hardware playback are: 1) you are limited to just one profile that can be active at any time, where software playback offers up to 50 profiles; 2) changes you make to your profile must be saved to the Raptor M40 before they can be used; 3) some advanced commands which make use of Windows API calls that cannot be emulated by keyboard (such as launching a program without clicking on its icon) will not be available; and 4) auto-switching of profiles does not work.

Hardware playback is the mode used by most of the gamers here at Corsair. Unless you're using more than one profile at a time, this is probably your best choice for gaming.

Manage Profiles Activity

Profiles store information on how your mouse behaves, how the buttons are mapped, and any macros that you may have recorded. This allows on-the-fly customization of your mouse for a different game, or for a different character within a game, or even for different activities within a game. For example, in Battlefield 3, you may have a profile for Assault, another for Engineer, and another for Recon or Support. Or you may create a profile for each of your favorite games. With control over virtually all the buttons, as well as DPI, report rate, and other settings, you can match the Raptor M40 to whatever game or gaming style you prefer.

When you are using the Corsair Gaming Software to edit macros or tune performance, be sure to select the correct profile. Many of the changes you make with the Corsair Gaming Software are saved immediately. If you want to create a new profile, please select **Manage Profiles** from the Activities Bar, click the **New** button, and give your profile a name.

Once you've completed setting up a profile and recording your macros, it's a good idea to use the **Export** feature to keep a backup of your profiles so that you can revert any accidental changes.

Manage Profiles screen

Corsair Gaming Software User Guide
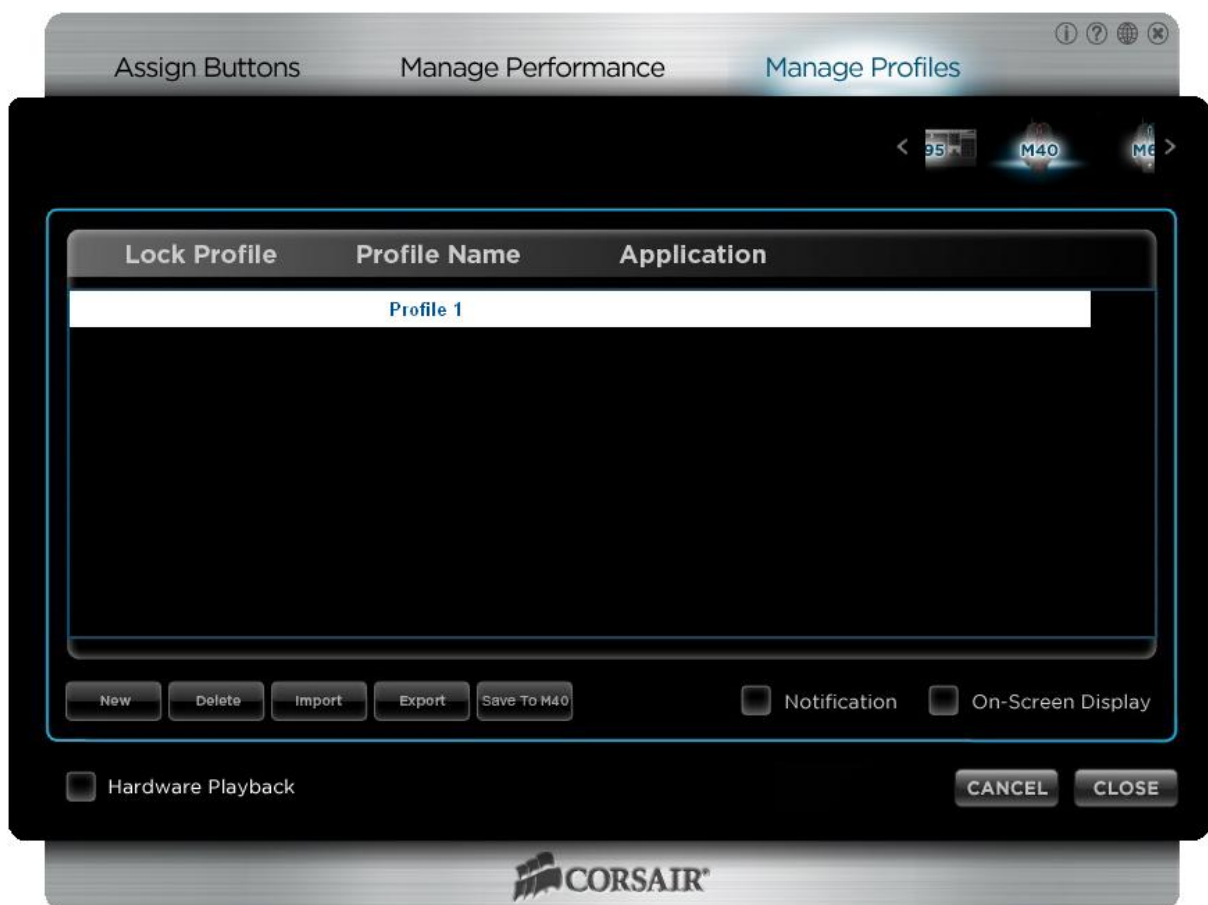
Lock Profile

Lock Profile is used in association with the application detection and automatic profile selection, and works only in software playback mode.

When you launch a new application or change focus to an application, and that application is assigned to a profile, the Corsair Gaming Software will automatically switch to that profile. If you have a locked profile, once that profile is active, the Corsair Gaming Software will not be able to switch to different profile automatically. You will still be able to switch profiles using the **Profile Up** and **Profile Down** keys or by opening the Corsair Gaming Software; only the automatic switching will not work.

When a profile is locked, a ✓ will appear next to the profile name. To unlock a profile, simply select **Lock Profile** again. You can only have one locked profile.

Profile Name and Application

The names of all the profiles stored on your system are shown under Profile Name, whether or not they are associated with a profile slot on the Raptor M40. If the profile is associated with an application, the name will appear under Application. Right-clicking either the profile name or the application brings up a context menu with the following actions:

Rename
Preview
Copy
Assign Application
Unassign Application
Lock Profile
Restore Default Values
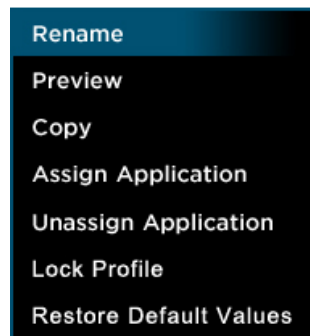
Rename allows you to rename the current profile.

Preview brings up a window (similar to the one shown below) that displays the button assignments for the profile, and allows you to print or save the information to a text file.

Copy creates a copy of the currently selected profile.

Assign Application opens a Windows dialog box that allows you to navigate to the application that you wish to associate with the profile. When the Corsair Gaming Software detects the application is running and has focus, the Raptor M40 will be switched to the profile assigned to that application.

Unassign Application will delete the association between the profile and the application so that the Raptor M40 will no longer switch to that profile when the application is active.

Lock Profile will toggle the locked/unlocked state of the profile. It works the same as clicking in the **Lock Profile** area.

Restore Default Values resets performance settings and button assignments to the factory default.

Application
The name of the application, if any, associated with the profile is listed here.

If you enable the **Hardware playback** feature, you *must* save your profile to the Raptor M40 as the Corsair Gaming Software will not be used to manage your button assignments or playback your macros. Changes to your button assignments, macros or performance settings made in the application will not be available in **Hardware playback** mode unless they are saved to the Raptor M40.

New

Creates a new profile, using the default settings.

Delete

Deletes the currently selected profile. A confirmation dialog box will appear to prevent you from accidently deleting a profile. Selecting "Do not show this message again" will stop the dialog box from appearing, making it a single-click to delete a profile so be certain before removing this safety step.

Import

Opens a Windows dialog box that allows you to browse for and import a profile in the Corsair Gaming Software XML format. You can import profiles you've exported as a backup or profiles that you receive from other Corsair Gaming Software users.

Information stored in a profile includes button mappings, macros, and performance settings like DPI and lift height. If you import a profile from another Corsair Gaming Software user, be sure to use the **Preview** command (detailed earlier) to check the button mappings, and to review the performance settings using the **Manage Performance** activity.

Export

Opens a Windows dialog box that allows you browse and select a folder, as well as enter a name, to export the current profile to, in Corsair Gaming Software XML format.

Exporting is a great way to backup your profiles, once you've perfected them. If your profile were to be inadvertently changed or overwritten, you can **Import** your XML backup.

Exported profiles can also be shared with other Raptor M40 owners. Simply send them the exported XML profile and they can use their Corsair Gaming Software to import them and use them on their Raptor M40 gaming mouse.

Notification

When **Notification** is enabled, the Corsair Gaming Software will be minimized to the system tray when you close the application. If it is disabled, the application will close completely and you will need to relaunch the application from the Windows Start menu to use it.

If you are not using **Hardware playback**, you should enable **Notification**, otherwise your button assignments and macros may not be available to you. This is because the Corsair Gaming Software app must be open for macros to be played back in software.

On-Screen Display

When On-Screen Display is checked, changes to the mouse, such as the name of the profile or the DPI setting will appear briefly in the lower right corner of your screen whenever they are changed.

Assign Buttons Activity

You use the **Assign Buttons** activity to control what each button on the Raptor M40 gaming mouse does, as well as bind macros to buttons, and define how the macros are played back when the button is pressed.

> The button assignments, macros, and other settings for your Raptor M40 gaming mouse are stored in profiles. Because most changes are stored automatically to the profiles, you want to be sure to select the correct profile before making changes.

Button Selection

Before you can assign an option to a button, or record a macro, you must select the button in the button selection area, as shown here:

Left-clicking on the button number selects that button, and shows you the current assignments for that button. Right-clicking on the button brings up a context menu as shown here:


From here, you can: **Copy** the current button assignment (including any macros and playback options); **Paste** a macro that's been copied to a button (including the macro name and any playback options); **Delete** the contents of the selected button; **Import** a saved macro (including the macro name and any playback options), or **Export** the macro, macro name, and playback options to a XML file.

You can share your exported macros with other owners of Raptor M40 gaming mice. Your exported macros can be found in the Macro folder under the Corsair Raptor\M40 mouse\ folder on your system. To share a macro, simply send it to another Raptor M40 owner. They can then use **Import** to assign it to a button

Playback Options

Clicking the **Playback Options** button brings up four possible macro playback modes, as shown below:
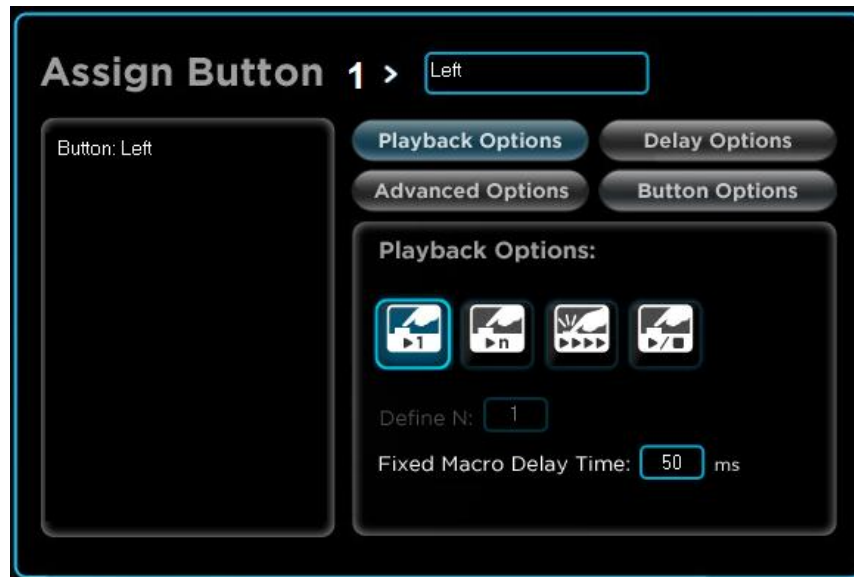
Playback once
Select this option to play the macro once for each time you press the button.

Playback *n* times
Select this option to play the macro a specific number of times ("n") for each time you press the button. For example, if you enter "6" in the Define N: text box, pressing the button will cause the macro to run 6 times.

Repeat while pressed
This option will cause the macro to repeat as long as the button is held down.

Play until stopped
When this option is used, pressing the button will start the macro and it will repeat until the button is pressed again.

Fixed Macro Delay Time sets a fixed time delay between repeats of the macro being played back. The default is 50ms.

Delay Options

Delay Options are used *while you are recording a macro* to control how the keystrokes are recorded. The delay options have no impact on previously recorded macros. To change the delays between keypresses in existing macros, you need to edit them individually; please see the "How-to: Edit a macro" later in this guide for instructions.

Selecting the Delay Options button brings up the following choices:

The **Delay Options** text box and the **+** button next to it allow you to manually insert a delay while recording a macro. The default is 50ms. If you wish to use a different delay, be sure to enter it *before* you start recording. While Macro Recording (**MR**) is active, the **+** button will be available. Click it to insert a delay in the macro you are recording.

Below the Delay Options text box, there are three options:

Ignore delays

When the **Ignore delays** option is selected, the macro will be recorded with no delays between the keypresses. This makes the macro execute as fast as possible, but may not work with all applications.

Default delay

This is the default mode for recording macros. It inserts a fixed delay between keypresses as they are recorded. You can specify the delay in the text box; the default is 50ms.

Random delay time

When **Random delay time** is selected, a random delay is inserted between keypresses, up to the maximum delay specified in the text box. The default value for the maximum delay is 1000ms.

No delay options selected

If none of these options is selected, the *actual* delay between keypresses is recorded. This creates a very natural macro, in terms of playback, but you may find it surprisingly slow!

Comparing the delay options

The following table illustrates the result of each option using a simple macro (press the A key then the B key):
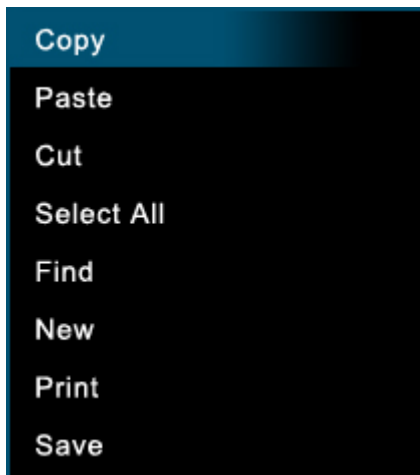
Ignore delays	Default delay	Random delay	No delay selected

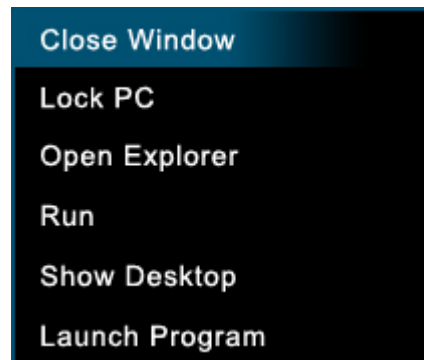|			
⬇ A ⬆A ⬇B ⬆B	⬇ A 🕐0.050 seconds delay ⬆A 🕐 0.050 seconds delay ⬇B 🕐 0.050 seconds delay ⬆ B	⬇ A 🕐0.339 seconds delay ⬆A 🕐 0.524 seconds delay ⬇B 🕐 0.992 seconds delay ⬆ B	⬇ A 🕐0.078 seconds delay ⬆A 🕐 0.530 seconds delay ⬇B 🕐 0.094 seconds delay ⬆ B

Advanced Options

Selecting **Advanced Options** allows you to select a Windows action/command that can be mapped to a button on your Raptor M40 mouse. The following options are available, under the Basic and Advanced Commands pull-down menus:

Basic Commands   **Advanced Commands**

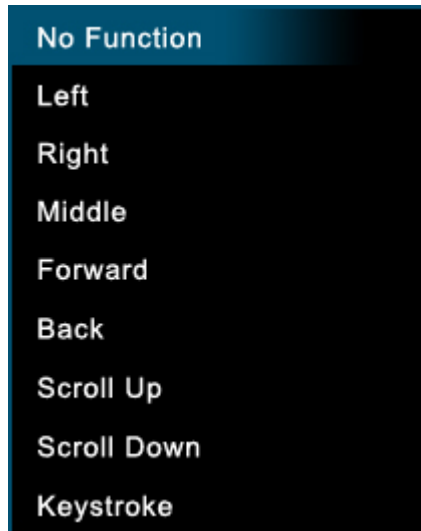| Basic Commands	Advanced Commands
Copy	Close Window
Paste	Lock PC
Cut	Open Explorer
Select All	Run
Find	Show Desktop
New	Launch Program
Print	
Save	

After selecting the command you want, click **+** to assign it to the button. Some commands, like **Launch Program**, will bring up an additional dialog box before the action is complete.
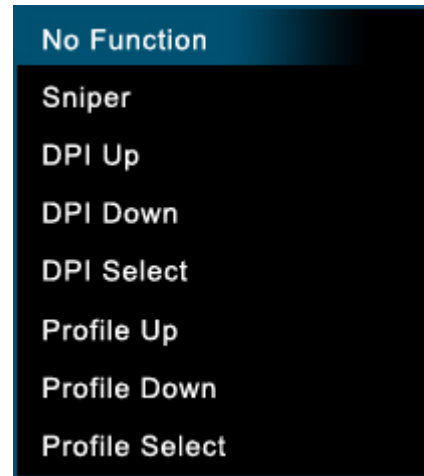
Button Options

Selecting Button Options allows you to select a mouse-specific action that can be mapped to a button on your Raptor M40 mouse. The following options are available, under the Basic and Advanced Buttons pull-down menus:

Basic Buttons

No Function
Left
Right
Middle
Forward
Back
Scroll Up
Scroll Down
Keystroke

Advanced Buttons

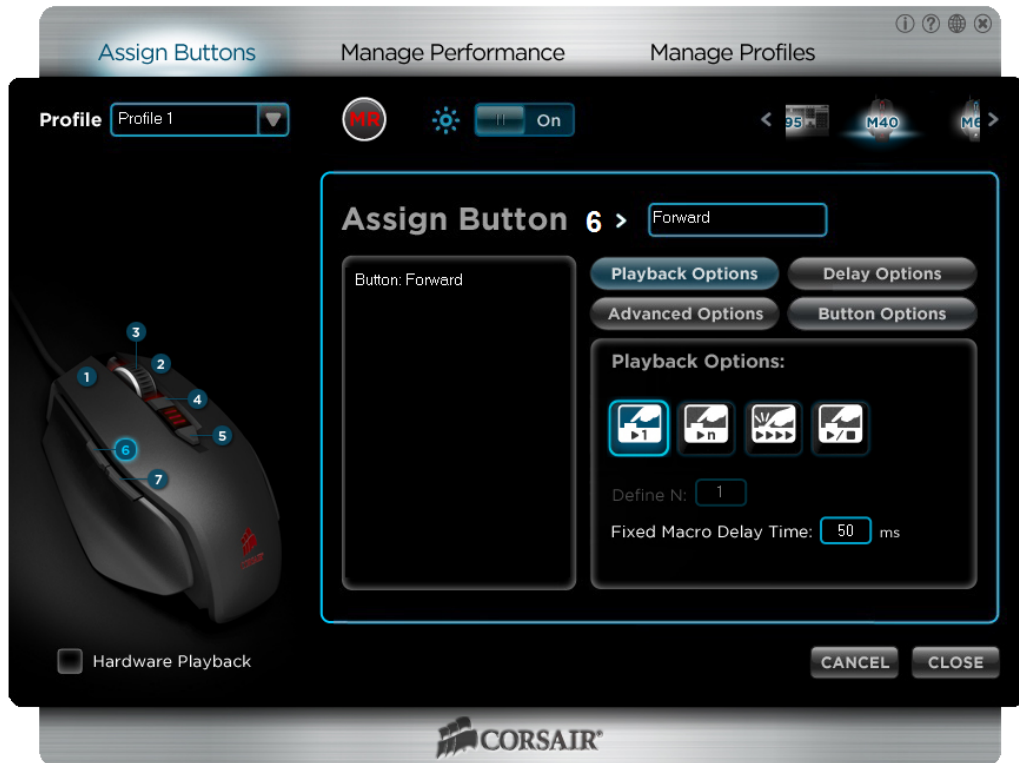| No Function |
| --- |
| Sniper |
| DPI Up |
| DPI Down |
| DPI Select |
| Profile Up |
| Profile Down |
| Profile Select |

After selecting the command you want, click **✚** to assign it to the button.

How to: Changing a button mapping

You can control what happens when you click any button on the Raptor M40. To illustrate how this is done, we'll map the DPI Up and DPI down actions to buttons that currently have no function assigned.

1. Open the Corsair Gaming Software application
2. Select the **Assign Buttons** activity
3. Choose a profile to change. In this example, you can simply use the default **Profile 1**. You can also select an existing profile from the drop-down menu or create a new profile using the **Manage Profiles** activity.
4. In the **Button Selection** area, click the button to which you want to map a new action. In this case, select 6. Assuming your mouse is set up with the factory defaults, you should see the following screen:

5. Click on **Button Options** and then click in the **Advanced Buttons** box. You should see the following screen:
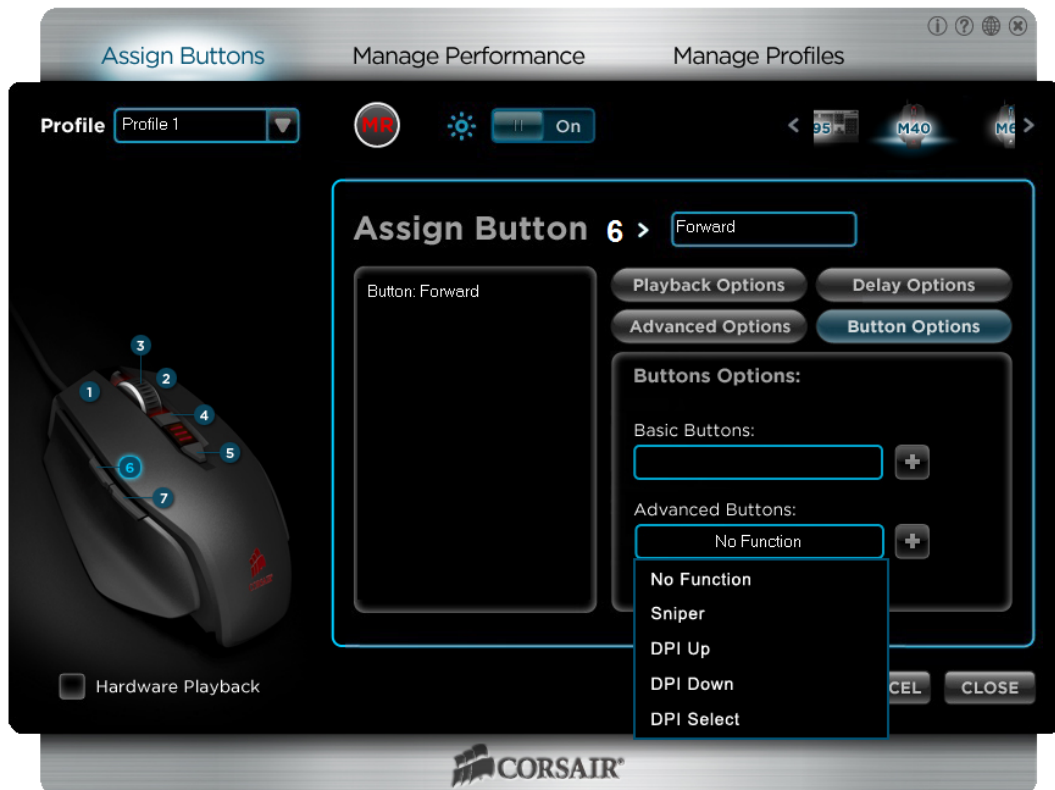
6. Click **DPI Up** to select that function, and then click **+** to assign the function to button **6** on the mouse. You can change the name of the button by clicking in the text box next to **"Assign Button 6 >"** and typing in a new name.
7. Now click on **7**, select **Advanced Buttons**, click on **DPI Down**, and then **+** to assign the function.
8. Now click **Close**.
9. That's it! You've mapped DPI Up to button 6 and DPI Down to button 7.

> If you are using Hardware playback, you need to save the updated profile to your Raptor M40 mouse before the new button mapping will be available. You can do this using the Manage Profiles TAB. Left-click on **Save to M40**. Once the progress indicator reaches 100%, click **Close**. Your updates are now saved to the Raptor M40.

> Because Windows only recognizes 5 mouse buttons natively, in order to assign functions in a game to your mouse's buttons you must first program them to emulate a keystroke or macro (series of keystrokes) from a keyboard.

How-to: Assign a keystroke

You can assign a keystroke to any button on the Raptor M40. To illustrate how this is done, we'll create a simple macro that types "Hello World" in any application.

1. Open the Corsair Gaming Software application
2. Select the **Assign Buttons** activity
3. Choose a profile to change. In this example, you can simply use the default **Profile 1**. You can also select an existing profile from the drop-down menu or create a new profile using the **Manage Profiles** activity.
4. In the **Button Selection** area, click the button to which you want to assign the keystroke. In this case, select **6**.

5. Click on **Button Options** and select the **Basic Buttons** control. Select **Keystroke** - the bottom option in the list, then click **+**.

6. Press the keyboard key you would like to bind to button 6, and then press **OK**. In this example we are using 5.
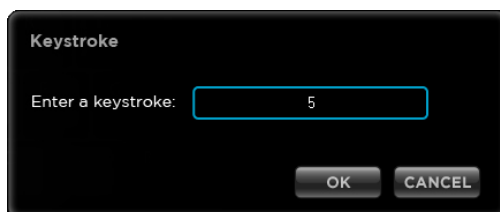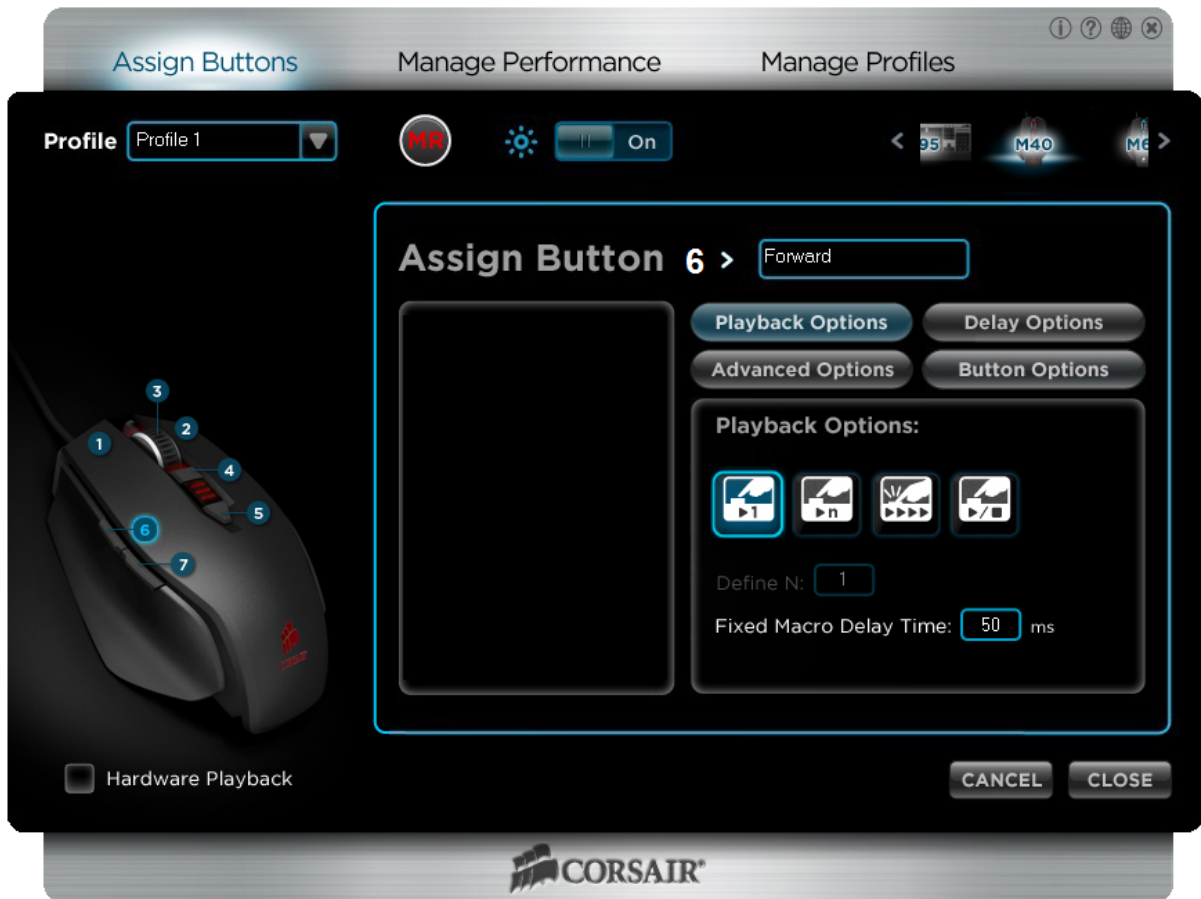

7. Now click Close.
8. That's it! You've assigned your first keystroke and now it's time to test it out. Open Notepad or Word (or your favorite text editor), start a new document, and then press button 6 on your Raptor M40. You should see the number 5 appear as if you were typing it.

> If you are using Hardware playback, you need to save the updated profile to your Raptor M40 mouse before the new button mapping will be available. You can do this using the Manage Profiles TAB. Left-click on **Save to M40**. Once the progress indicator reaches 100%, click **Close**. Your updates are now saved to the Raptor M40.

How-to: Record and assign a macro

You can record a macro (a series of keystrokes) and assign that to any button on the Raptor M40. To illustrate how this is done, we'll create a simple macro that types "Hello World" in any application.

9. Open the Corsair Gaming Software application
10. Select the **Assign Buttons** activity
11. Choose a profile to change. In this example, you can simply use the default **Profile 1**. You can also select an existing profile from the drop-down menu or create a new profile using the **Manage Profiles** activity.
12. To start recording a macro, first click on the **MR** (Macro Record) button.
13. In the **Button Selection** area, click the button to which you want to bind the macro. In this case, select 6. Assuming your mouse is set up with the factory defaults, you should see the following screen:

14. Now, type "**Hello World**" (without the quotes) on your keyboard. Use the shift key to capitalize the H and W. When you're done typing, click the **MR** button to stop the recording. You should see a screen similar to this:

Corsair Gaming Software User Guide
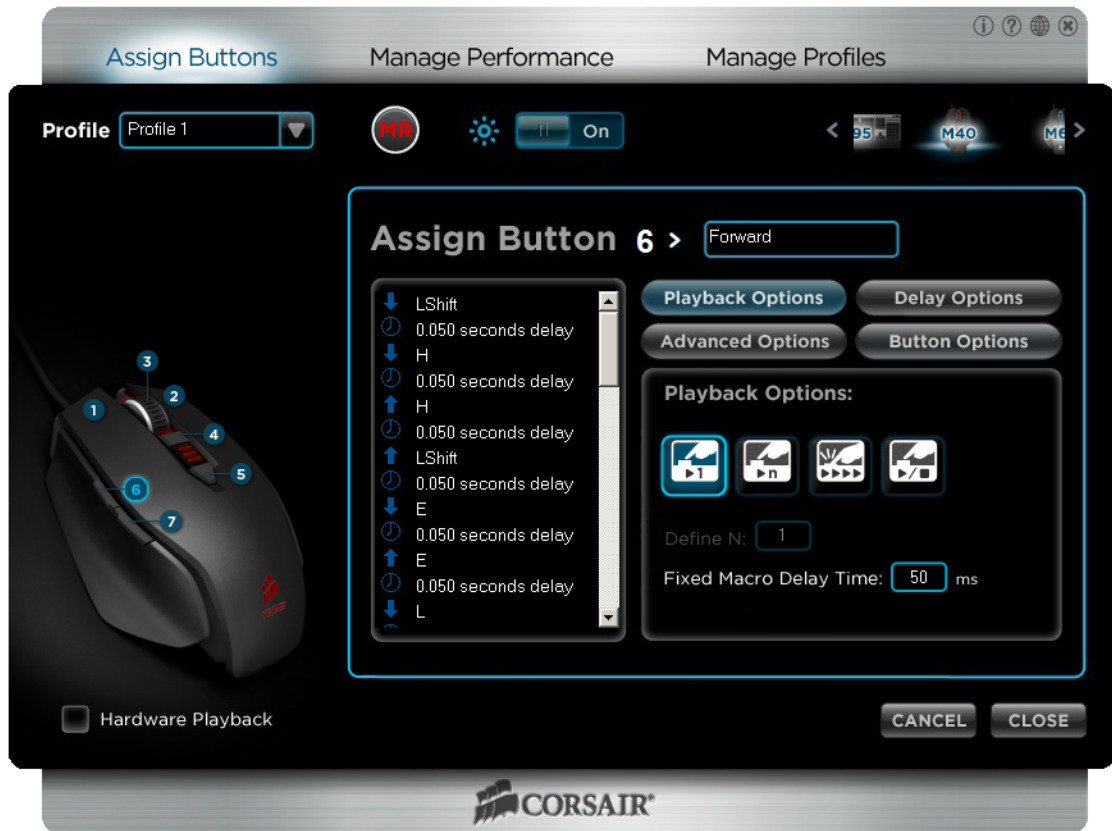
15. Now, let's give the macro a name. Click in the text box next to **Assign Button 6>** . Delete the existing name ("Forward"), type in "Test" and then press **Enter**.
16. Now click **Close**.
17. That's it! You've created your first macro and now it's time to test it out. Open Notepad or Word (or your favorite text editor), start a new document, and then press button **6** on your Raptor M40. You should see Hello World appear as if you were typing it.

> If you are using Hardware playback, you need to save the updated profile to your Raptor M40 mouse before the new button mapping will be available. You can do this using the Manage Profiles TAB. Left-click on **Save to M40**. Once the progress indicator reaches 100%, click **Close**. Your updates are now saved to the Raptor M40.

How-to: Edit a macro

Once you've recorded a macro, you may want to edit it to remove an extra keypress or add one you missed, or change the delay. To illustrate how this is done, we'll edit our Test macro from the "*How-to: Record a macro*" section in this guide.

> You can only edit macros that are bound to a button on your mouse. If you have macros that you have saved (using the **Export** function) and want to edit, you must first assign them to a button on the mouse.

1. Open the Corsair Gaming Software application
2. Select the **Assign Buttons** activity
3. Choose a profile to change. Assuming you're using the Test macro we created in the *Record a macro* exercise, you can simply use the default **Profile 1**.

4. In the **Button Selection** area, click the button to which the macro you want to edit is assigned. In this case, select **6**. If you're editing our Test macro, you should see the following screen:
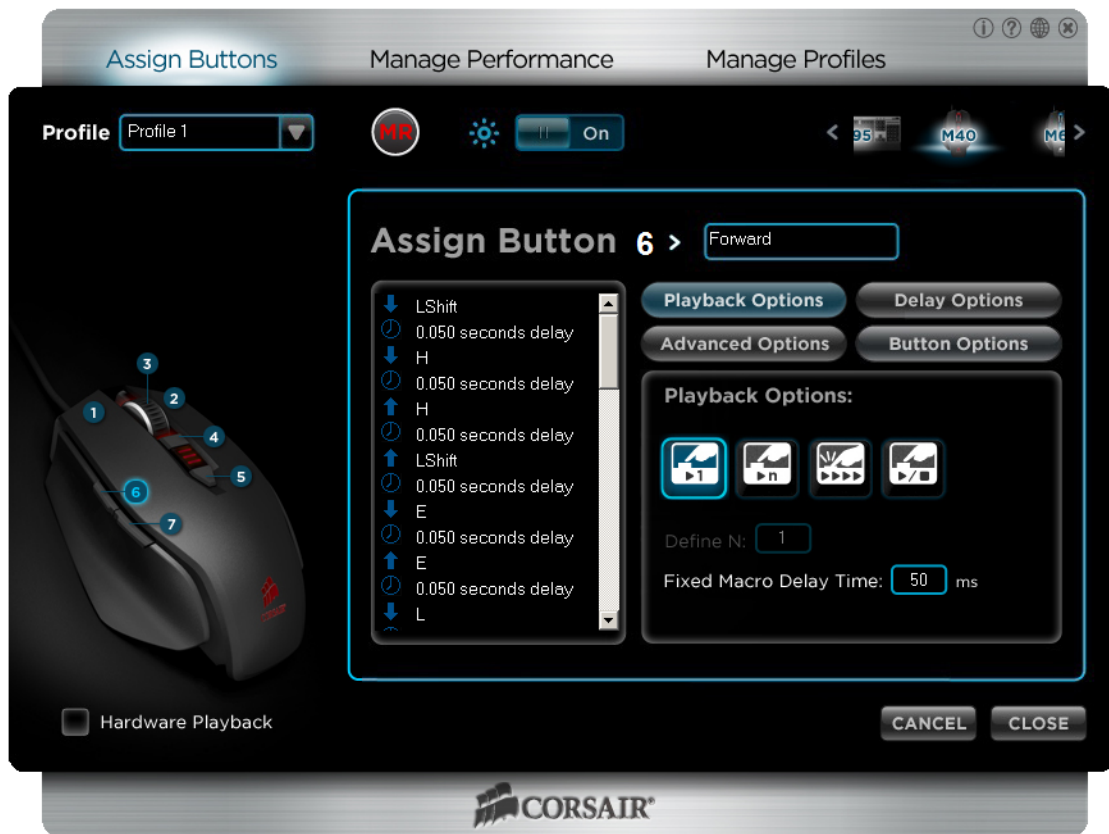
5. For this example, let's first add a couple of keystrokes to change the macro from creating "Hello World" to "A Jello World". Start by right-clicking on the first occurrence of ⏱ **0.050 seconds delay** (just below ⬇ **LShift**) to open the edit menu, which looks like this:

6. We will be adding a keypress, so select **Insert ⬇ Key** and the following dialog box will appear:

7. Enter the letter A, click OK and then select the ⬇ **A**
8. Now click **Insert Delay**, which inserts the default 50ms delay.

You can change the default value for the delay under **Assign Buttons > Delay Options**, or if you want a different value for just this delay, you can use the **Edit** function from the right-click menu to change it.

9. We've added the keypress of the letter A and now we need to enter the keyrelease. Right-click on the delay you just added, select **Insert ⬆ Key**, enter A in the dialog box and then click OK.
10. Add another delay by right-clicking the ⬆ **A** entry and selecting **Insert Delay**.
11. Do this same sequence to insert the space character: **Insert ⬇ Key**, press the space bar and OK, **Insert Delay**, **Insert ⬆ Key**, press the space bar and OK, and then Insert Delay to create the sequence that inserts a space.
12. Finally, let's change the H to a J and finish the macro. Right-click on ⬆ **H**, select **Edit**., change the H to a J in the dialog box, and click OK.
13. Do the same for the ⬇ **H** entry and you've finished editing your macro.
14. Now test it out. Open Notepad or Word (or your favorite text editor), start a new document, and then press button **6** on your Raptor M40. You should see: A Jello World appear as if you were typing it.

If you are using Hardware playback, you need to save the updated profile to your Raptor M40 mouse before the new button mapping will be available. You can do this using the Manage Profiles TAB. Left-click on **Save to M40**. Once the progress indicator reaches 100%, click **Close**. Your updates are now saved to the Raptor M40.

Manage Performance Activity

The Manage Performance activity allows you to control many of the parameters of the advanced Avago sensor used in the Raptor M40. Settings such as DPI, report rate, and lift height can be tuned to match your gaming style and gaming surface, allowing you to elevate your PC gaming to a new level.

Manage Performance Screen

DPI Selection

The Raptor M40 gaming mouse can be assigned up to four simultaneous DPI settings: three that can be selected on-the-fly, and one that is mapped to the Sniper button option under Advanced Buttons.

By default, the three are set to 1600, 3200 and 4000 DPI. To set a new DPI, click on the button you wish to change and move the slider to the DPI setting you wish to use.

Sniper

The Raptor M40 does not have a dedicated sniper button like the Vengeance M65 FPS-optimized gaming mouse, but the Sniper function can be mapped to any mouse button. The sniper function instantly lowers the DPI of the sensor while it is being pressed, and then restores the prior DPI setting as soon as it is released.

Set the DPI used by the sniper function by clicking **Sniper** and adjusting the slider to the setting you wish to use.

The Sniper function can be used whenever you need more control over the mouse. At higher DPI settings, even small movements of the mouse can result in large movements of the cursor on-screen. By lowering the DPI, the cursor is easier to control. This can be very useful when using long-range weapons in first-person shooters, or even when editing a pixel mask in Photoshop. Any time you need more control over the cursor, try using the Sniper button.

Report Rate Setting

The report rate determines how often the mouse sends data to the system. The default USB reporting rate is 8ms, or 125 reports per second. In its factory configuration, the Raptor M40 gaming mouse is set to use a 1ms report rate, which means it sends data 1000 times per second.

The higher the report rate, the higher the burden on the CPU but a 1ms report rate isn't a problem for modern CPU. However, if your system seems to slow down when using the mouse, you can adjust the reporting rate to reduce the load.

To change the report rate, simply click on the button corresponding to the setting you wish to use.

Surface Quality

The kind of surface you use for your mouse can have a dramatic impact on the performance of the mouse. The Avago sensor found in the Raptor M40 works best on a smooth, dark surface that is free of dust, dirt and oils. However, the sensor is capable of functioning on a wide variety of surfaces.

Click the **Test** button to start the test mode. As you move the mouse across the surface, the sensor will report the quality of the signal. Here are two examples of surface tests (the first is a clean, dark wood desktop, the second was a grimy, light wood desktop):
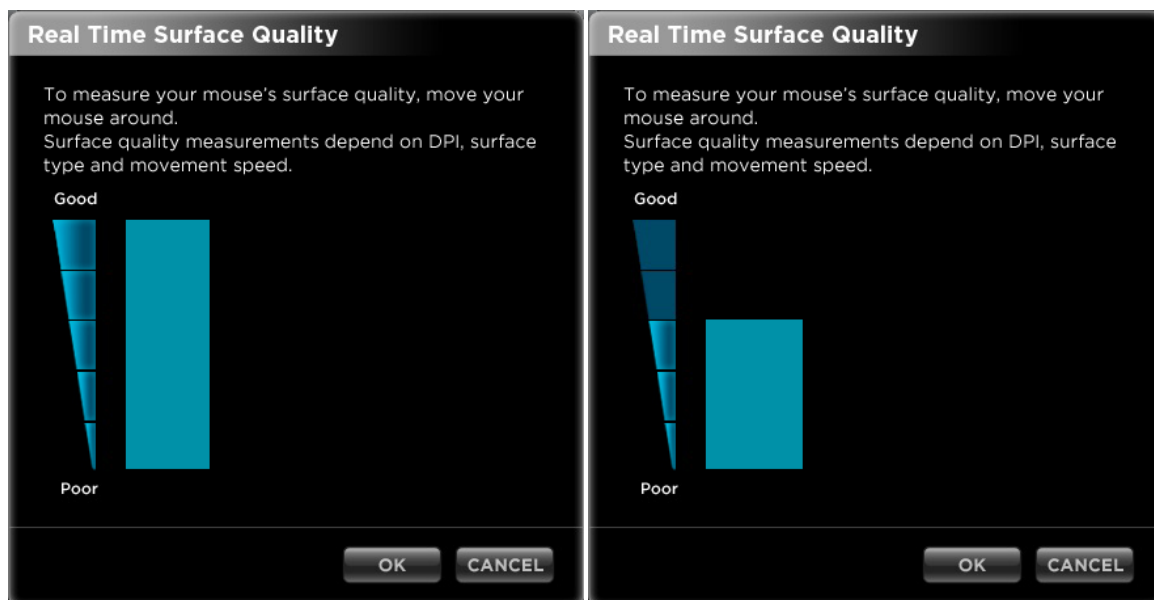

If you are experiencing problems with your cursor lagging behind your movements, jumping around on the screen, or not tracking your movements of the mouse, you should check your surface quality. If you are getting a poor result, try a different surface or invest in a mouse mat to increase the surface quality.

Lift Height

If you use your mouse by "skipping" or "skating" across the surface, as many FPS gamers do, you will frequently lift your mouse above the surface it is on. This can sometimes result in jerky cursor movement. The Raptor M40 uses lift detection to compensate for this, making your movements smoother.

By default, the Lift Height is set to Middle. If you are experiencing problems with tracking accuracy while "skating" the mouse, you can try adjusting the lift height. Click on the Lift Height button to see the following screen:
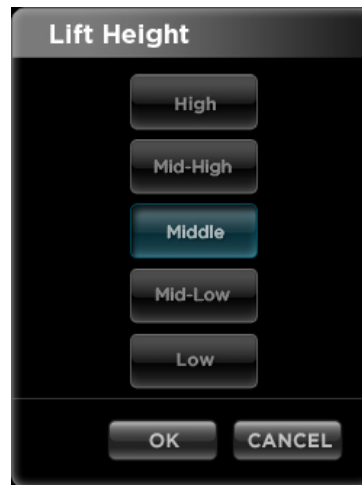
There are five possible choices: Low, Mid-Low, Middle, Mid-High, and High. By default, the Raptor M40 is set to Middle. For dark surfaces, you probably will not get good results below this setting; for light/white surfaces, you can try any of the settings.

On some cloth black surfaces the "LOW" setting may not be detected by the sensor.