



Vengeance® K90 Gaming Software

User Guide

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Introducing the Vengeance Gaming Software

Welcome

Thanks for choosing the Vengeance K90 MMO Gaming Keyboard 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 keyboard. You can find a community of other Vengeance-equipped gamers at www.corsair.com/forums, on Facebook at www.facebook.com/VengeanceGaming, and on Twitter @CorsairMemory.

Using This Guide

To help make it easy and quick to learn how to use the Vengeance 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: **G1**

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 this are tips for making your experience with the Vengeance Gaming Software and the Vengeance K90 MMO Gaming Keyboard better.

Compatible Products

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

This User Guide covers the Vengeance K90 MMO Gaming Keyboard. Other User Guides cover the other Vengeance gaming peripherals.

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

User Interface Overview

The Vengeance 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 Vengeance Gaming Software: **Assign Buttons**, **Manage Performance**, and **Manage Profiles**.

Assign Keys

This activity allows you to change the keyboard functions or individual keyboard keystrokes assigned to a G-key. You can also record, edit, and delete macros, and bind them to the G-key of your choice on the Vengeance K90 MMO Gaming Keyboard. You can also change how the macros will be played back.

Manage Profiles

The Vengeance K90 MMO Gaming Keyboard can store up to 6 profiles that can be selected on-the-fly. Each profile independently stores all the G-key assignments and macros along with their G-key assignments. The **Manage Profiles** activity allows you to manage your profiles, including creating new profiles, importing and exporting profiles, and assigning a profile to the onboard memory of the Vengeance K90.

B. Help Buttons

The help buttons provide access to important information about the Vengeance 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 keyboard.

Selecting ? opens your browser to the Vengeance 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 Vengeance gaming peripherals that are installed on your system, and allows you to choose which one the Vengeance Gaming Software is modifying. You can scroll through devices by clicking on the ◀ and ▶ arrow symbols on the screen. Select the Vengeance gaming peripheral you wish to configure by clicking on the appropriate image.

D. G-key Selection

The G-key Selection area displays an image of the Vengeance K90 MMO Gaming Keyboard, 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

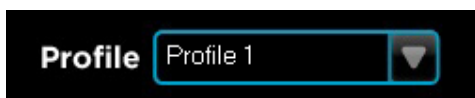
Generally speaking, most changes you make in the Vengeance Gaming Software are saved automatically to the keyboard. The **Cancel** button provides a single-level undo for any changes that haven't yet been saved to the keyboard.

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 keyboard and you cannot cancel them.

Selecting **Close** will minimize the application to the task bar whenever **Notification** is enabled. The Vengeance 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 Vengeance 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



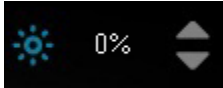
This pull-down allows you to select the profile that you will be modifying. You can only select existing profiles; if you need to create a new profile, use the **Manage Profiles** activity.

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.

Backlighting Control



The backlighting control allows you to set the intensity of the backlighting for the keyboard – off, low (33%), medium (66%), or high (100%) intensity. Backlighting intensity is not saved to a profile.

Using the Vengeance Gaming Software

Software versus Hardware Playback

The Vengeance 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 Vengeance 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 one profile 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 Vengeance 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 Vengeance K90 MMO Gaming Keyboard is limited to a maximum of one onboard profile. If you want to be able to choose between more than just the single active profile, you'll need to use the software mode.

Disadvantages of software playback

The main disadvantage of software playback is that 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, and the M-key state (M1, M2, or M3) the profile is being set to. 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 Vengeance K90 MMO Gaming Keyboard 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 advantage 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 Vengeance K90 MMO Gaming Keyboard before they can be used; and 3) auto-switching of profiles does not work.

With up to 54 keystroke assignments or macros (18 G-keys x 3 mode states) and the broadest compatibility with games, hardware playback is the mode used by most of the gamers here at Corsair. Unless you're using more than three mode states worth of key mappings at a time, this is probably your best choice for gaming.

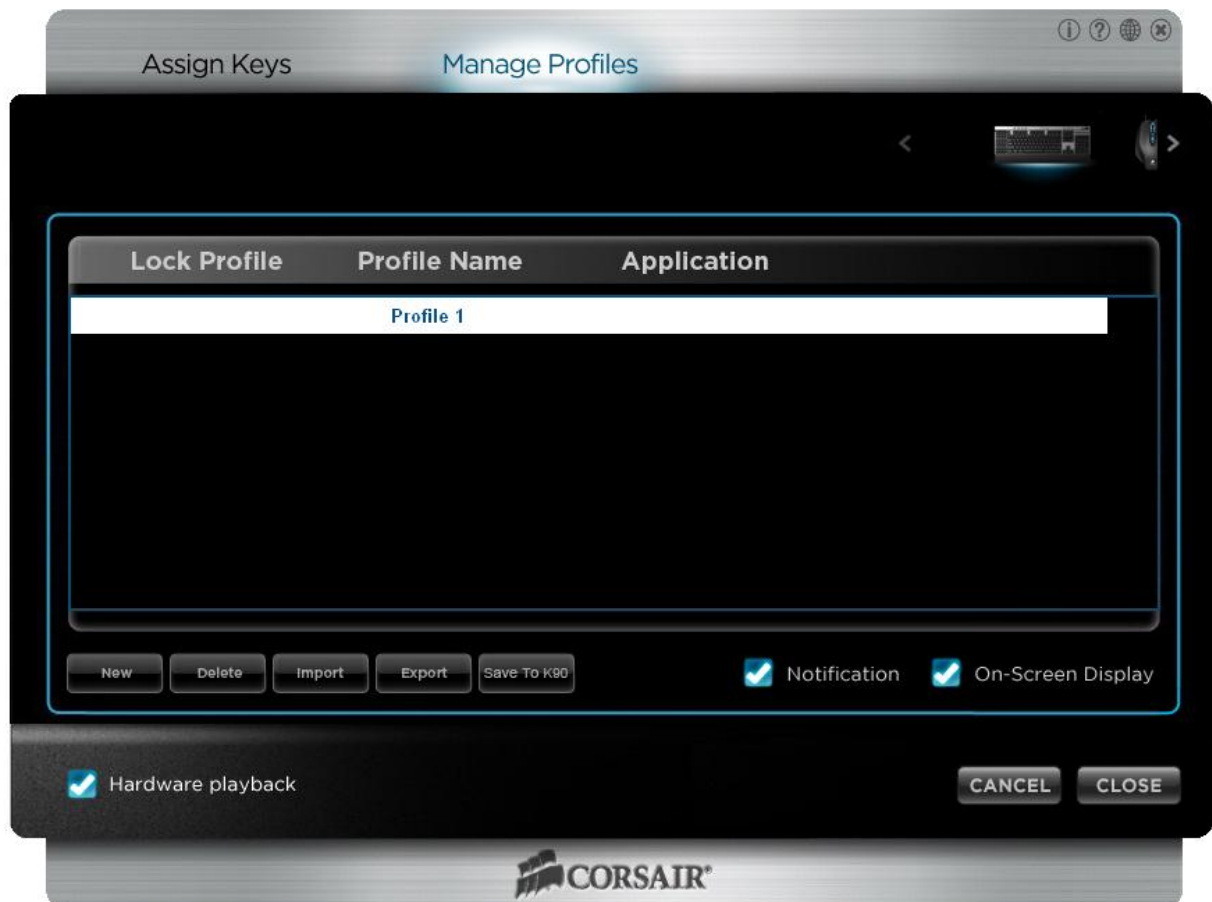
Manage Profiles Activity

Profiles store information on how your keyboard's G-keys are mapped, and any macros that you may have recorded. This allows on-the-fly customization of your keyboard 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 with the three different mode states set up for Assault, Engineer, and Recon. Or you may create a different profile for each of your favorite games. With control over individual keystrokes as well as multi-key macros, you can match the Vengeance K90 to whatever game or gaming style you prefer.

When you are using the Vengeance Gaming Software to edit macros or remap keys, be sure to select the correct profile. Many of the changes you make with the Vengeance 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



Lock Profile

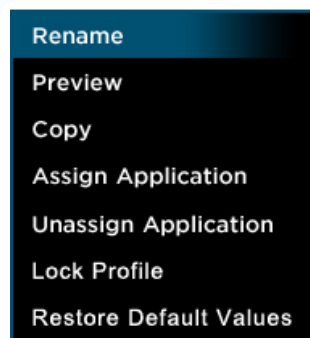
Lock Profile is used in association with the application detection and automatic profile selection, and works only in software playback mode.

When you launch a new application or change focus to an application, and that application is assigned to a profile, the Vengeance Gaming Software will automatically switch to that profile. If you have a locked profile, once that profile is active, the Vengeance Gaming Software will not be able to switch to different profile automatically.

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.

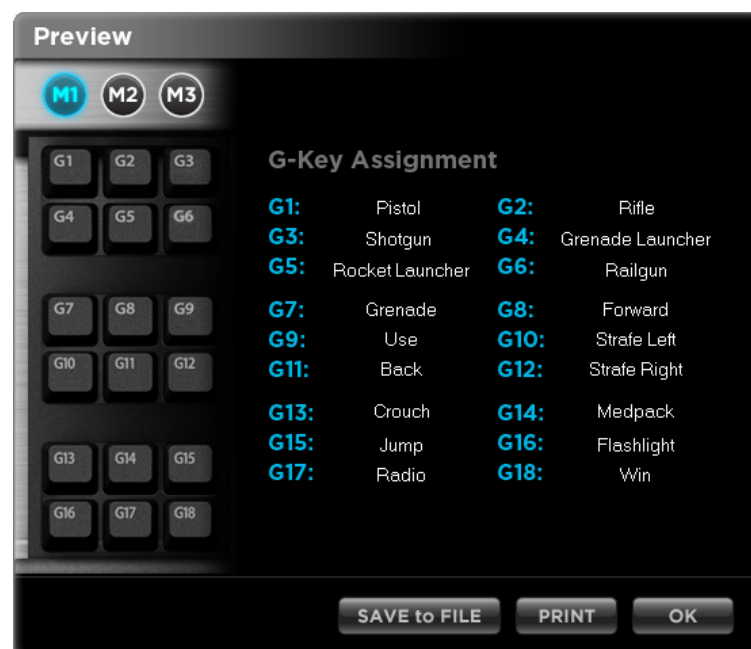
Profile Name and Application

The names of all the profiles stored on your system are shown under Profile Name, whether or not they are saved to the memory of your Vengeance K90. 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 allows you to rename the current profile.

Preview allows you to select a mode state so you can view its current configuration. Clicking it 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 Vengeance Gaming Software detects the application is running and has focus, the Vengeance K90 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 Vengeance K90 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.

Use **Save to K90** to load the selected profile to their onboard memory of the Vengeance K90. When you click the button, you will see the progress expressed as a percentage. Once the save reaches 100%, you should click OK to close the Profile Slot dialog box.

If you enable the **Hardware playback** feature, you *must* save your profiles to the Vengeance K90 as the Vengeance Gaming Software will not be used to manage your button assignments or playback your macros. Changes to your button assignments or macros made in the application will not be available in **Hardware playback** mode unless they are saved to the Vengeance K90.

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 accidentally 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 Vengeance Gaming Software XML format. You can import profiles you’ve exported as a backup or profiles that you receive from other Vengeance Gaming Software users.

Information stored in a profile includes button mappings and macros. If you import a profile from another Vengeance 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 Vengeance 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 Vengeance K90 owners. Simply send them the exported XML profile and they can use their Vengeance Gaming Software to import them and use them on their Vengeance K90.

Notification

When **Notification** is enabled, the Vengeance 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 Vengeance 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 keyboard, such as the name of the profile or the M-mode (M1, M2, or M3) 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 G-key on the Vengeance K90 MMO Gaming keyboard does, as well as bind keystrokes or macros to G-keys, and define how the macros are played back when the G-key is pressed.

The button assignments, macros, and other settings for your Vengeance K90 MMO Gaming Keyboard 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 Vengeance K90 gaming mice. Your exported macros can be found in the Macro folder under the Corsair Vengeance\K90 keyboard\ folder on your system. To share a macro, simply send it to another Vengeance K90 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

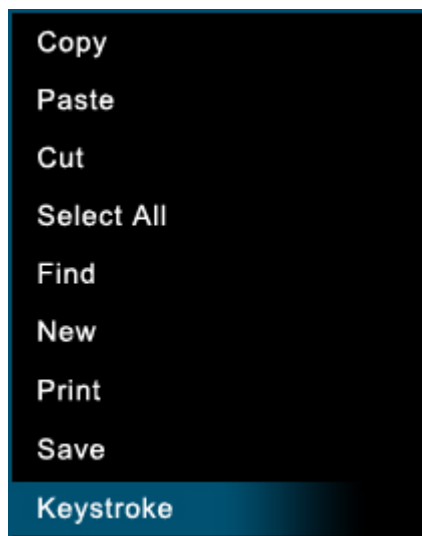
The following table illustrates the result of each option using a simple macro (press the A key then the B key):

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

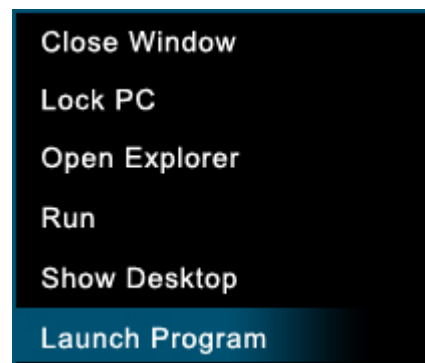
Advanced Options

Selecting Advanced Options allows you to select special actions that can be mapped to a G-key on your Vengeance K90 keyboard. The following options are available, under the Basic and Advanced Commands pull-down menus:

Basic Commands



Advanced Commands



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.

How to: Changing a button mapping

You can control what happens when you press any G-key on the Vengeance K90. To illustrate how this is done, we'll map the Copy and Paste actions to buttons that currently have no function assigned.

1. Open the Vengeance 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 **G-key Selection** area, click the G-key to which you want to map a new action. In this case, select **G1**. Assuming your keyboard is set up with the factory defaults, you should see the following screen:



- Click on **Advanced Options** and then click in the **Basic Commands** box. You should see the following screen:



- Click **Copy** to select that function, and then click **+** to assign the function to G-key **G1** on the keyboard. You can change the name of the button by clicking in the text box next to “**Assign Key G1 >**” and typing in a new name.
- Now click on **G2**, select **Basic Commands**, click on **Paste**, and then **+** to assign the function.
- Now click **Close**.
- That's it! You've mapped Copy to G-key 1 and Paste to G-key 2.

If you are using Hardware playback, you need to save the updated profile to your Vengeance K90 keyboard before the new key mapping will be available. You can do this using the Manage Profiles activity. Left-click on the profile name, and select **Save to K90**. Once the progress indicator reaches 100%, click **Close**. Your updates are now saved to the Vengeance K90.

Because Windows does not recognize G-keys natively, in order to assign functions in a game to your keyboard's G-keys 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 G-key on the Vengeance K90. To illustrate how this is done, we'll assign "Q" to **G3**

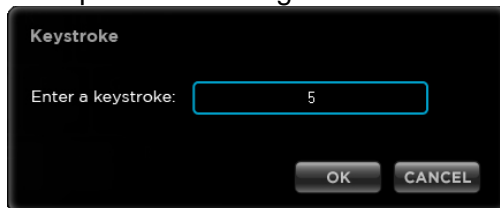
1. Open the Vengeance Gaming Software application
2. Select the **Assign Buttons** activity
3. Choose a profile to change. In this example, you can simply use the default **Profile 1**. You can also select an existing profile from the drop-down menu or create a new profile using the **Manage Profiles** activity.
4. In the **G-key Selection** area, click the G-key to which you want to assign the keystroke. In this case, select **G3**. Assuming your keyboard is set up with the factory defaults, you should see the following screen:



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



- Press the keyboard key you would like to bind to **G3**, and then press **OK**. In this example we are using 5.



- Now click Close.
- 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 **G3** on your Vengeance K90. 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 Vengeance K90 before the new keystroke assignment will be available. You can do this using the Manage Profiles activity. Left-click on the profile name, and select **Save to K90**. Once the progress indicator reaches 100%, click **Close**. Your updates are now saved to the Vengeance K90.

How-to: Record and assign a macro

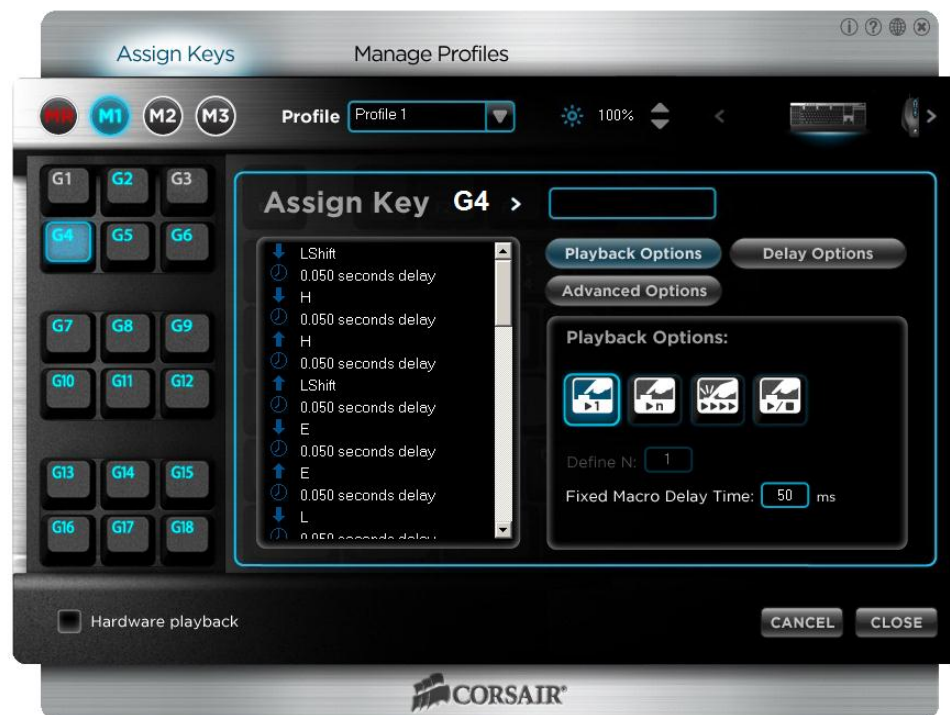
You can record a macro (a series of keystrokes) and assign that to any G-key on the Vengeance K90. To illustrate how this is done, we'll create a simple macro that types "Hello World" in any application.

- Open the Vengeance Gaming Software application
- Select the **Assign Buttons** activity
- 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 **G-key Selection** area, click the G-key to which you want to bind the macro. In this case, select **G4**. Assuming your keyboard 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:



15. Now, let's give the macro a name. Click in the text box next to **Assign Key G4 >** . 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 **G4** on your Vengeance K90. You should see Hello World appear as if you were typing it.

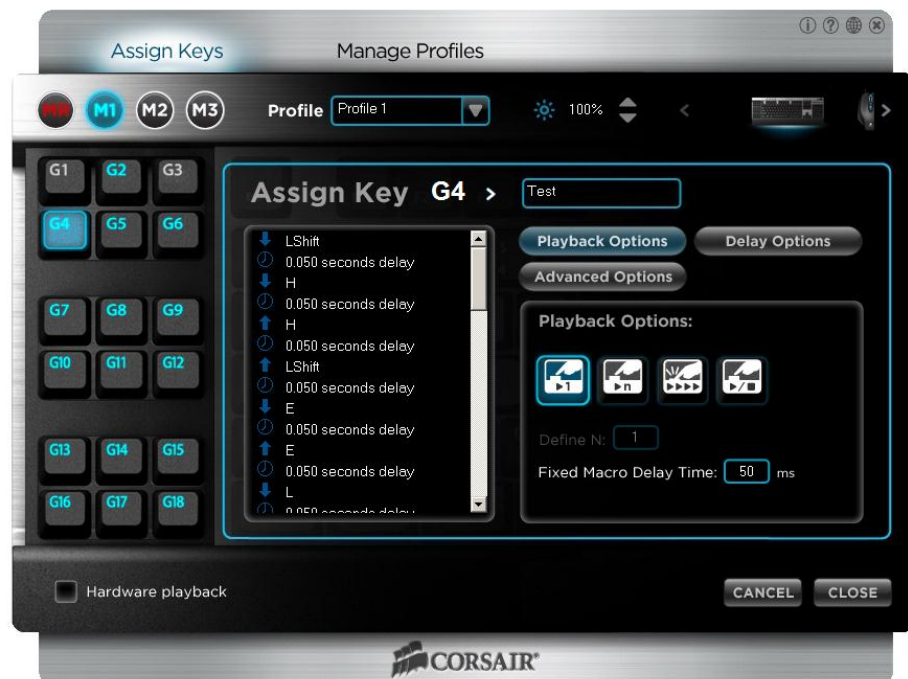
If you are using Hardware playback, you need to save the updated profile to your Vengeance K90 keyboard before the new macro will be available. You can do this using the Manage Profiles activity. Left-click on the LED icon next to the profile name, and select **Save to K90**. Once the progress indicator reaches 100%, click **Close**. Your updates are now saved to the Vengeance K90.

How-to: Edit a macro

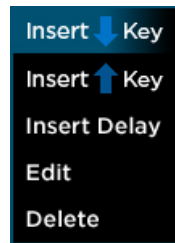
Once you've recorded a macro, you may want to edit it to remove an extra keypress or add one you missed, or change the delay. To illustrate how this is done, we'll edit our Test macro from the "How-to: Record a macro" section in this guide.

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

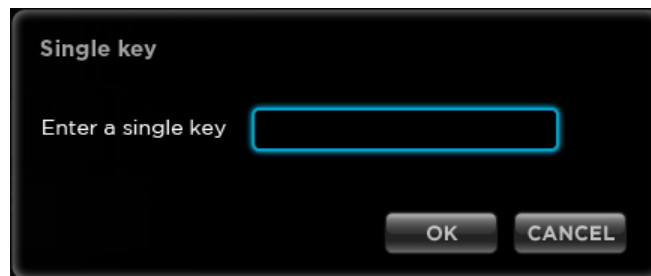
1. Open the Vengeance Gaming Software application
2. Select the **Assign Buttons** activity
3. Choose a profile to change. Assuming you're using the Test macro we created in the *Record a macro* exercise, you can simply use the default **Profile 1**.
4. In the **Key Selection** area, click the button to which the macro you want to edit is assigned. In this case, select **G4**. 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 **G4** on your Vengeance K90. 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 Vengeance K90 before your edited macro will be available. You can do this using the Manage Profiles activity. Left-click on the LED icon next to the profile name, and select **Save to K90**. Once the progress indicator reaches 100%, click **Close**. Your updates are now saved to the Vengeance K90.