# **Programming the Mouse**

Introduction Example of programming with "Mouse Function" Example of programming with "Keystroke" Example of programming with "Multikey Macro" Example of using "Profiles"

#### INTRODUCTION

1. Install the Logitech software & open the program to reveal the home screen (Figure 1):





2. Clicking in the areas highlighted in blue brings you to a programming screen like **Figure 2** (your screen may have different functions programmed into the buttons):

Logitech Gaming Software Middle Click (Button 3) F7 F7 Right Click (Button 2)	Profiles  Profile 1  Profile 2  Profile 3  Profile 4  Profile 5
DPI Cycling Pointer Settings	
Left Click (Button 1)         Switch Profile         Multikey Macro         DPI Sensitivity Levels         5         Number of levels	
Multikey Macro 600 🗘	Assign Default
Ctrl + F12 900 0	
Forward         Show Desktop (F11)         1500            1800          1         1	
Dashboard (F12) Report Rate	
Choose a polling rate for your mouse (reports per second)	
	00 250 333 500 1000
Advanced	
Power Mode	Power Saver V Restore Defaults

- Figure 2.
- a. In the upper right corner of **Figure 2** is the menu **Profiles**. Profile 1 is selected. This means that all the buttons that you program now are for Profile 1. You can program various functions into the buttons on different profiles by unclicking this profile and choosing a different one. **Why would you want to do this?** 
  - If a person will be using the same mouse at different computers, s/he can customize each profile for each computer. For example, imagine that on computer A keystroke A performs one function but on computer B keystroke B performs that function. The user can program keystroke A into a button on "Profile 1" and keystroke B into the same button on "Profile 2". Now s/he can use "Profile 1" at computer A and "Profile 2" at computer B.
  - ii. If 3<sup>rd</sup> party plug-ins are in different positions on different computers, you can customize each profile for each computer.
  - iii. If you present at a podium often, you can customize the profiles to easily switch between your computer and the podium computer.
- b. On the right side of Figure 2, you will see a menu titled Pointer Settings.
  - i. Here you can change the Pointer Settings to whatever is most convenient for you. For example, there are 5 **DPI Sensitivity Levels** (how fast you want your cursor to move), which here are programmed at 600, 900, 1200, 1500, and 1800. Increasing the sensitivity level increases the cursor speed and decreasing the sensitivity level decreases the cursor speed.
  - ii. Below DPI Sensitivity Levels is Report Rate. A lower rate uses less battery, whereas a higher rate uses more. For daily radiology practice, a report rate of 125 improves performance and is more than sufficient.

- iii. At the bottom of the **Pointer Settings** menu you'll see **Advanced**. Setting the **Power Mode** to **Power Saver** helps preserve battery life.
- 3. The buttons in **Figure 2** have functions associated with them. The 3 ways to program these functions into the buttons using the Logitech software are listed below. Later in the tutorial you will see a step-by-step example of each way of programming:
  - a. **Mouse function**: This option presents a list of premade functions that are built into the Logitech software. A few functions included in this list are Scroll Left, Scroll Right, DPU cycling, and Switch Profile. You can choose one function per button per profile on the mouse.
  - b. **Keystroke**: If pressing one or a combination of keys can complete a function in your PACS, you can program this function into the mouse. For example, if F5 brings up the "Localizer" for you, you can program F5 into a button.
  - c. **Multikey Macro**: When a function requires a series of steps to complete, this option allows you to consolidate those steps into one button. For instance, if your PACS's "Ruler" function is several clicks away for you, you can program those step into a single button.

### **EXAMPLE OF PROGRAMMING WITH "MOUSE FUNCTION"**

One of the premade functions that you can program to a button on your mouse is **DPI Cycling**. Again, this function allows you to change the cursor speed.



Figure 3.

- 1. On the left side of **Figure 3**, you will see a button named **DPI Cycling** highlighted in blue (blue arrow points to it) with a drop-down menu next to it.
- To program DPI cycling to a button, in the Logitech Gaming Software click on the button you wish to program. I have done that in Figure 3, which is why the button is outlined in blue. Next to the button, a menu appears listing the functions "Edit...", "Use Generic", and "Unassign".
- 3. Click on "Edit..." which brings you to a screen like Figure 4 below;
- 4. On the left side of the **Command Editor screen**, you will see a panel with 3 functions: Mouse Function, Keystroke, and Multikey Macro;
- 5. Click on "Mouse Function" if it is not highlighted for you already;
- 6. You will see a list of functions named **Button functions.** From this list, you can **choose "DPI Cycling**" to program that function into the button;
- 7. Click OK to save your choice.



### EXAMPLE OF PROGRAMMING WITH "KEYSTROKE"

Here is one way to program a function that is not already in the "Button functions" list, like "Spine Labeling."



Figure 5.

- 1. **Click on the button** in the Logitech Gaming Software that you wish to program and **choose** "**Edit**" from the drop-down menu (**Figure 5**, blue arrow points to highlighted button).
- 2. When the Command Editor screen appears, **click "Keystroke**" from the left panel. This will bring you to a screen like **Figure 6**.



Figure 6.

- On my computer's PACS, "Spine Labeling" was set in my Preferences as "Ctrl F12". To program this into the selected button, in the textbox under "Enter your keystroke including any modifiers", type in Ctrl F12 (Figure 6) or whatever shortcut is programmed into your computer's PACS Preferences. "Ctrl F12" will appear in the textbox as "Ctrl + F12".
- 4. Click OK to save the change.

#### **EXAMPLE OF PROGRAMMING WITH "MULTIKEY MACRO"**

To program a function into a button that on your computer requires several clicks, you can program a **Multikey Macro**.

When would you need to do this?

For example, to get the Ruler function in PACS (**Figure 7**). Notice that for me to bring up the Ruler function, I have to:

- Right click on the image to bring up a menu;
- Click "Measurements", which in the menu is second from the top. This brings up an adjacent menu;
- Then click on "Ruler", which in the adjacent menu is the first item.



Figure 7.

How do you program this?

- 1. In the Logitech Gaming Software, **click on the button that you wish to program** and **choose "Edit"** from the drop-down menu.
- 2. When the **Command Editor** screen appears, **click "Multikey Macro"** from the left panel. This will bring you to a screen like **Figure 8**.



Figure 8.

- 3. Click "Start Recording" under the Keystrokes textbox
- 4. In the **Keystrokes** textbox in Command Editor, complete the steps (aside from "right click", because I will show you how to do that in just a moment) that you take to perform that function on your computer. For me to get the ruler, I would:
  - i. **Press the "down arrow" twice** on the keyboard to get to "Measurements" (remember, in Figure 7 this is the 2<sup>nd</sup> item from the top in the menu);
  - ii. Press the "right arrow" once on the keyboard (in Figure 7, clicking on "Measurements" brought up an adjacent menu. Pressing the right arrow takes the cursor to this adjacent menu);
  - iii. **Press "Enter"** on the keyboard to select "Ruler". This brings up the ruler function in my PACS;
  - iv. Under the Keystrokes textbox click "Stop Recording";
  - v. Now you can insert the "right click"
    - 1. In the Keystrokes textbox right click on first down arrow;
    - 2. In the dropdown menu, run cursor over "Insert Mouse Event";
    - 3. Run cursor over "Right Button";
    - 4. Click "Click"
  - vi. Click OK to save the change.
- 5. You will notice that in the "Keystrokes" textbox in **Figure 8**, every action has a reciprocal action. For example, "Right button down" (which is how Right click shows up) is followed by "Right button up". This just means that the Right click has been released.

## **EXAMPLE OF USING "PROFILES"**

In **Figure 9**, you'll notice that **Initiate Dictation** (indicated with an arrow) is second from the bottom in the menu. However, at our institution the location of this plug-in within the menu changes depending on the computer. Having multiple profiles allows users to switch easily among computers.



Figure. 9

To program **Initiate Dictation** as it is shown in **Figure 9** into a button:

- 1. In the Logitech Gaming Software with **Profile 1 selected**, **click on the button that you wish to program** and **choose "Edit"** from the drop-down menu.
- 2. When the **Command Editor** screen appears, **click "Multikey Macro"** from the left panel. This will bring you to a screen like **Figure 10**.
- 3. Click "Start Recording" under the Keystrokes textbox.
- 4. In the **Keystrokes** textbox in Command Editor, complete the steps that you take to perform that function on your computer. For me to **Initiate Dictation**, I would:
  - a. **Press the "up arrow" twice** on the keyboard (in **Figure 10**, "**Initiate Dictation**" is the 2<sup>nd</sup> item from the bottom in the menu, so pressing the up arrow twice brings you to this item);
  - b. Press "Enter" to select Initiate Dictation;
  - c. Under the Keystrokes textbox, click "Stop Recording"
  - d. Now we can insert "right click"
  - e. In the Keystrokes textbox right click on first up arrow
  - f. In the dropdown menu, run cursor over "Insert Mouse Event"
  - g. Run cursor over "Right Button"
  - h. Select "Click", then Select OK to save the change.



Figure 10.

To customize the Profiles according to the location of Initiate Dictation:

- 1. In the Logitech Gaming Software, with "Profile 1" still checked, select "Profile 2" or whichever profile you would like to use to program;
- 2. **Unselect "Profile 1".** Only Profile 2 will be selected (**Figure 11**)
- 3. Select the same button that you used to program Initiate Dictation in Profile 1
- 4. Repeat steps ii and iii from part 7.a.
- 5. In the **Keystrokes** textbox in Command Editor, complete the steps that you take to perform the function on your computer. If **Initiate Dictation** on your other computer is 3<sup>rd</sup> from the bottom in your menu, **repeat steps 1-5 from 7.a.iv. but in step 2, press the "up arrow" 3 times not twice**.
- 6. Switching profiles has now allowed you to use the same buttons to perform the same functions on different computers or different PACS.



Figure 11.

You have now learned the basics of programming the Logitech G700/G700s mouse! For more information on the use of this mouse, please see <u>http://www.umassmed.edu/radiology/special-projects/special-projects/programmable-mouse/</u>.

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