



# R.A.T.<sup>TM</sup> 8

OPTICAL GAMING MOUSE / OPTICAL GAMING-MAUS / SOURIS DE JEU OPTIQUE

PRODUCT GUIDE – Version 1.0

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## 1. Introduction

The original RATs set the benchmark for PC gaming peripheral design, engineering, and functionality with their launch back in 2010. For 2016, Mad Catz are delivering an upgraded range of seven products, to consumers that demand the best possible hardware for gaming.

Every member of the RAT family has been enhanced from the ground up. Including, new sensors, switch components, customizable lighting and expanded programming features. All under a bold colour scheme, designed to appeal to gamers and non-gamers alike.

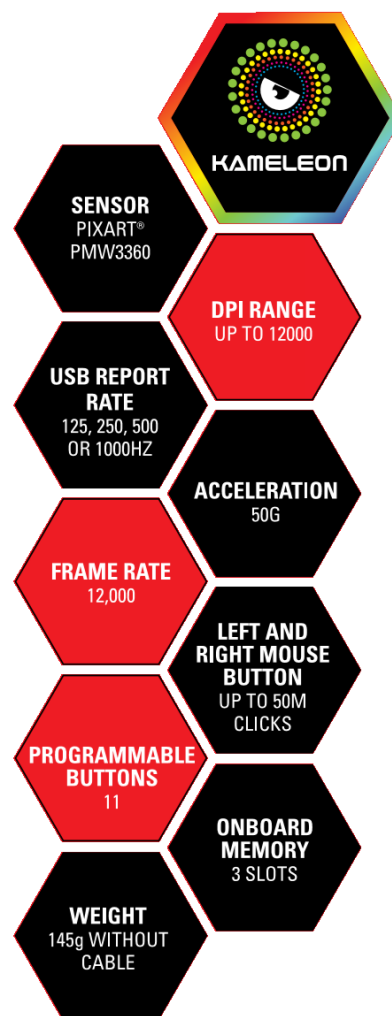
All gamers are different. The RATs are precision engineered, making key parts of the product adjustable, to accommodate different sized hands and grip styles. We call this *Dynamic Ergonomics*, and it is a key feature that runs through every product to improve the gaming experience. From adjustable palm rests on the *RAT<sup>8</sup>*, up to ultimate customization of every surface of the product on *RAT<sup>PRO X+</sup>*, customers can tweak their RAT until it feels perfect for them.

The world's most customizable mice, wrapped in a bold colour scheme designed to appeal to gamers and non-gamers alike, have also been given integrated intelligent lighting, powered by *Kameleon RGB* technology. Multiple illumination zones enable users to select from up to 16.8 million colour variations and apply various illumination effects, making the RAT mouse the centrepiece of their gaming rig.

RAT customization goes beyond the physical. The performance of the sensor and button configurations are just as important as how the product feels in your hand. Regardless of your preferred genre or style of play, our *FLUX<sup>TM</sup> Software Interface* can be used to quickly and intuitively tune all aspects of the sensor, macro buttons, and LEDs.

The *RAT<sup>8</sup>* is a highly adjustable product with one of the most accurate optical sensors available. Additional buttons are placed so that they can be easily accessed. Both the weight and palm rest can be adjusted to further tune the feel of the product. In addition, both the pinkie and thumb rests can be adjusted to provide further support and comfort for your preferred grip.

For added convenience, the *RAT<sup>8</sup>* includes on board memory, so that all your favourite button mappings, sensor settings and lighting configurations can be stored on the device and taken anywhere.

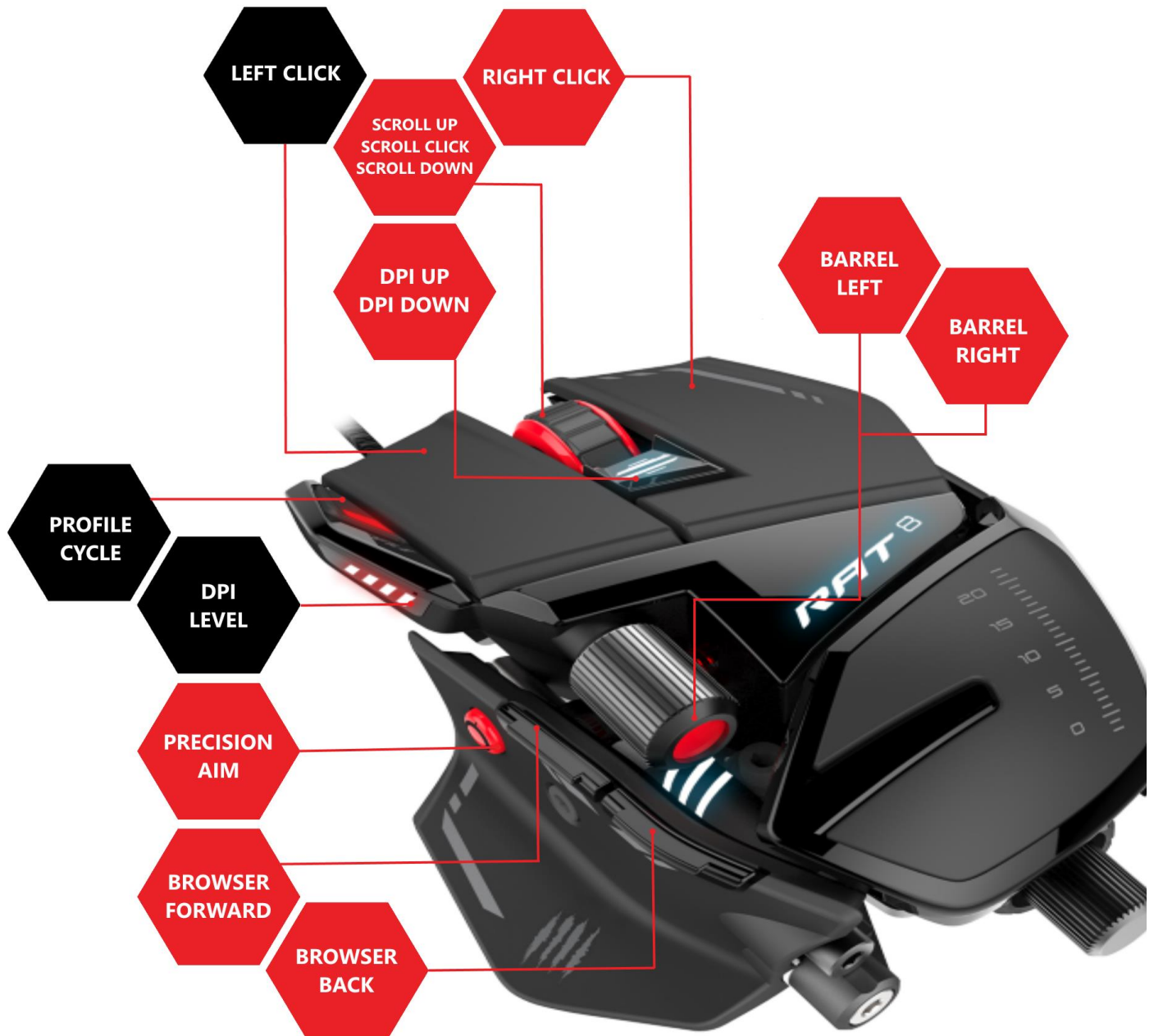


## 2. Feature Overview

This section will provide you with an overview of all of the controls, indicators and features that make up the product.

### Controls and Indicators

RAT8 has 11 programmable controls, these are highlighted red in the below image.



## What is a profile, and how does the on-board memory work?

All of the additional functions and programmable controls can be used to your advantage when coupled with our FLUX software interface. FLUX can be used to create button mapping profiles, consisting of crucial commands for your favourite games and apps. Profiles are ideal for increasing in-game performance speed, and your efficiency in desktop applications. By assigning important in-game actions to the buttons on the RAT, such as Reload or Throw Grenade, you can access these controls faster, and keeps the focus of your left hand on the movement of your character.

In addition to button mappings, RAT8 profiles consist of settings information, such as D.P.I. and Poll Rate. The Kameleon RGB LED colours and effects are also contained within a profile. This means that features such as D.P.I. and Lighting can be completely different from profile-to-profile and hence game-to-game.

Profiles are created and configured via the FLUX interface. You can then use the software to send the setup data within the profile to the available slots in the on-board memory of the device. So, depending on what Profile Slot is selected, you can have a completely different setup configuration. You could have specific profiles for different character classes within a single game, or have each slot dedicated to a different game or application. It's up to you. These profiles remain in the slots of the RAT, so that you connect it to another PC and all your different settings will be ready to go, without the need to install the software again.



Profile slots can be quickly accessed on-the-fly. To change profile slot, simply press the Profile button to cycle through them. The LED beneath the button indicates the active Profile Mode.

- Off = Profile Slot A
- Red = Profile Slot 1
- Blue = Profile Slot 2
- Purple = Profile Slot 3

Profiles can also be linked to specific applications or games. When the linked game or application window is in focus the associated profile will be automatically loaded into the currently selected profile slot. When the linked game application is closed, the profile that was originally loaded into the slot will be re-applied. This feature can only be used when the FLUX application is installed.

For a comprehensive guide on profile creation and all aspects of the FLUX Interface, please jump to Section 4.

## Precision Aim

Precision Aim is an important feature of the RAT series. By adjusting the Precision Aim slider in the software, the gamer can press and hold the button to slow their cursor movement to help steady their aim for that crucial shot. On RAT8, you can also make the cursor go quicker when the button is pressed. This is because the Precision Aim button can output a specific D.P.I. value. The Precision Aim feature can also be assigned to any of the programmable buttons on the RAT. The feature can be turned off entirely, if you just want the extra programmable button.



## How does D.P.I. Adjustment work?

The sensor resolution (D.P.I.), and hence, the speed of cursor movement, is freely adjustable. In addition, you can also save 4 different D.P.I. levels to the product. Pressing the D.P.I. switch up or down will select a D.P.I. level indicated by the 4 red LEDs. This is ideal for quickly increasing or decreasing the sensor resolution for the best cursor response in-game or in general use.

There are multiple ways this feature can be adjusted. Firstly, D.P.I. up or down can be assigned to any of the programmable buttons on the RAT. Or, if you prefer to stick with one D.P.I. level, it can be turned off entirely. In addition, if you prefer to use just one button to cycle through your D.P.I. levels, this can be assigned to any of the programmable buttons.



The D.P.I. Level is indicated by the 4 Red LEDs on the side of the product.

- Level 1 is set to 800 D.P.I. by default.
- Level 2 is set to 1600 D.P.I. by default.
- Level 3 is set to 3200 D.P.I. by default.
- Level 4 is set to 12000 D.P.I. by default.

For more information on profiles, and how to configure the Precision Aim and D.P.I. levels to your preference, please jump to Section 4.

## Kameleon RGB Lighting

RAT8 has three independent illumination zones that can be configured to output your choice of RGB colour and effect. The following effects can be applied to the LEDs:

1. Breath
2. Heartbeat
3. Rainbow
4. Colour Chase
5. Colour Cycle

For more information on profiles, and how to configure the RGB LEDs to your preference, please jump to Section 4.



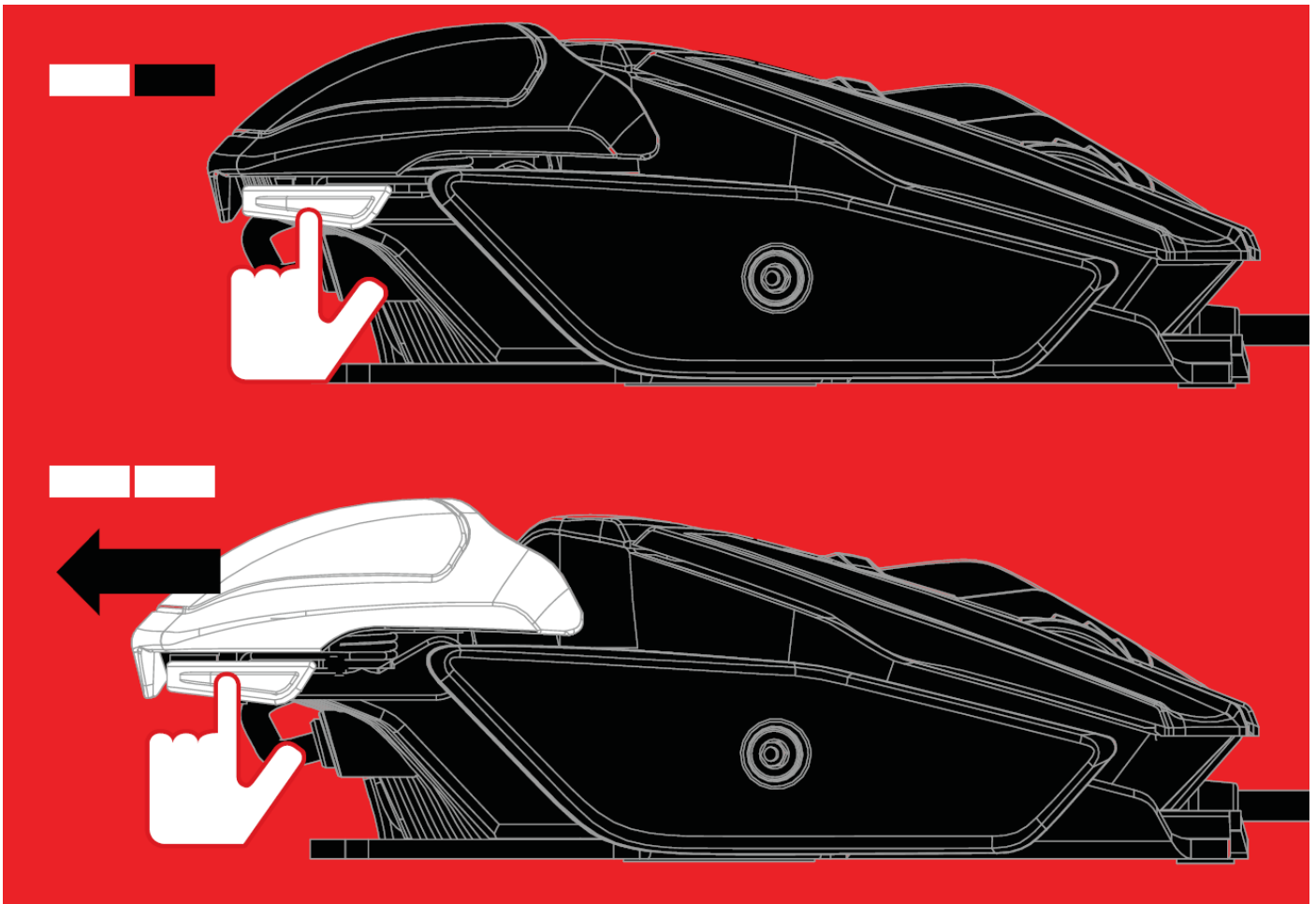
## Dynamic Ergonomics

The ability to alter one product to suit a variety of different hand shapes and grip styles, is a core pillar of the RAT range. On RAT8, both the length of the palm rest and the weight can be adjusted. In addition, both the pinkie and palm rests can be swapped out for completely different shapes. The thumb rest area can also be adjusted to better suit your grip.

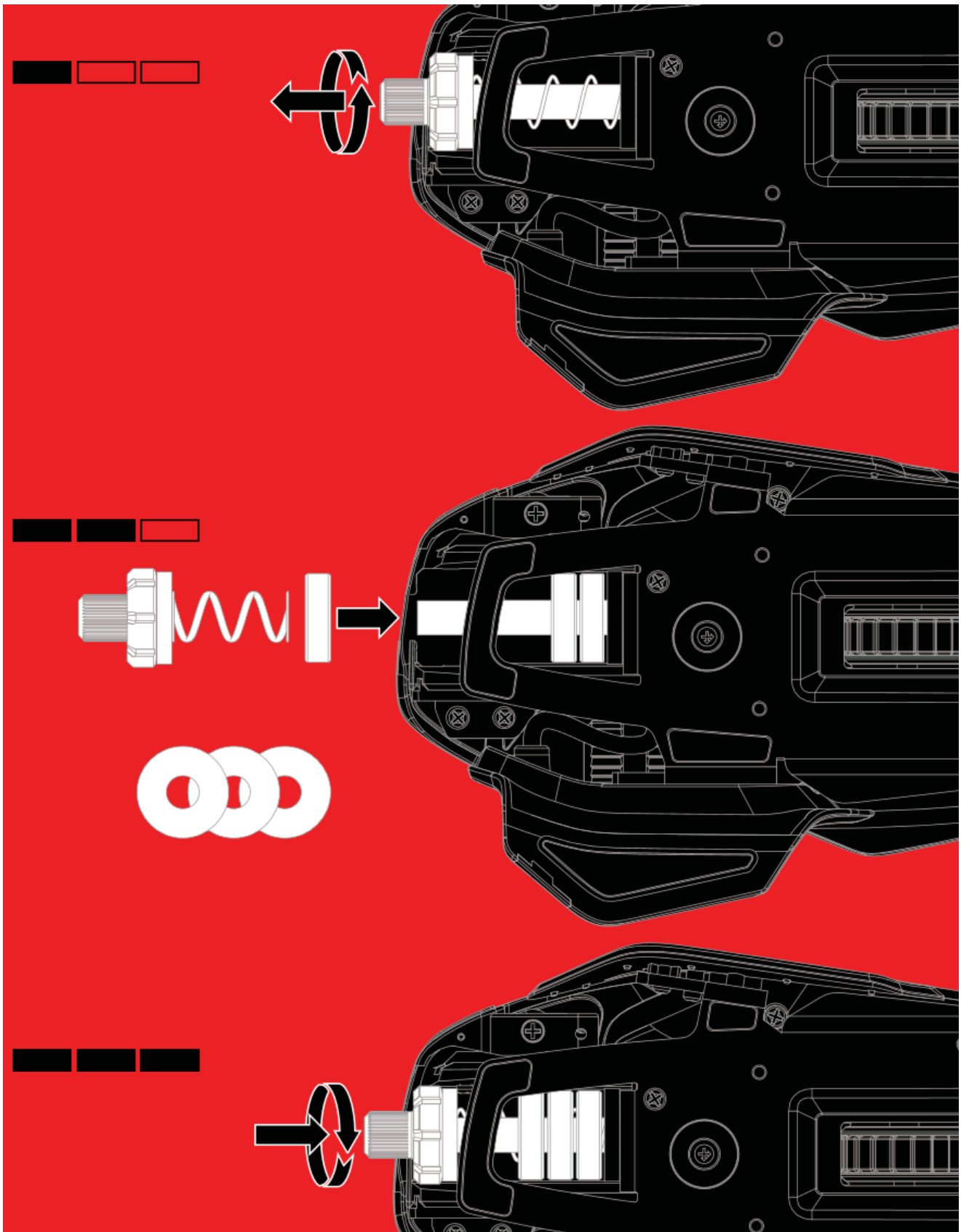
The adjustable palm is invaluable for getting the product to feel just right in your hand. If you have a larger hand, the overall length of the product can be adjusted by altering the palm rest. This results in a much more natural grip and reduces fatigue over a long period of use.

To alter the palm rest position, locate and press the release catch on the lower right side of the palm rest. With the release catch held in, pull the palm rest back. Gradually ease off pressure on the release catch, and it will naturally click into one of the securing holes along the length of the product. Once the catch has engaged, release it, and the palm rest will remain in place.

To swap to one of the additional palm rests (Grip or Raised), simply carry on moving the default palm rest back until it comes off of the main carrier rail. Then slide the new palm rest on, and into your preferred position.



The weight of the product can also be adjusted for people who prefer a lighter product, or slightly heavier. The baseline weight of the product is 145g. A further 18g can be added via the three 6g weights. Changing weights is a simple case of removing the end cap and spring, setting the correct weight, and then replacing the spring and end cap.

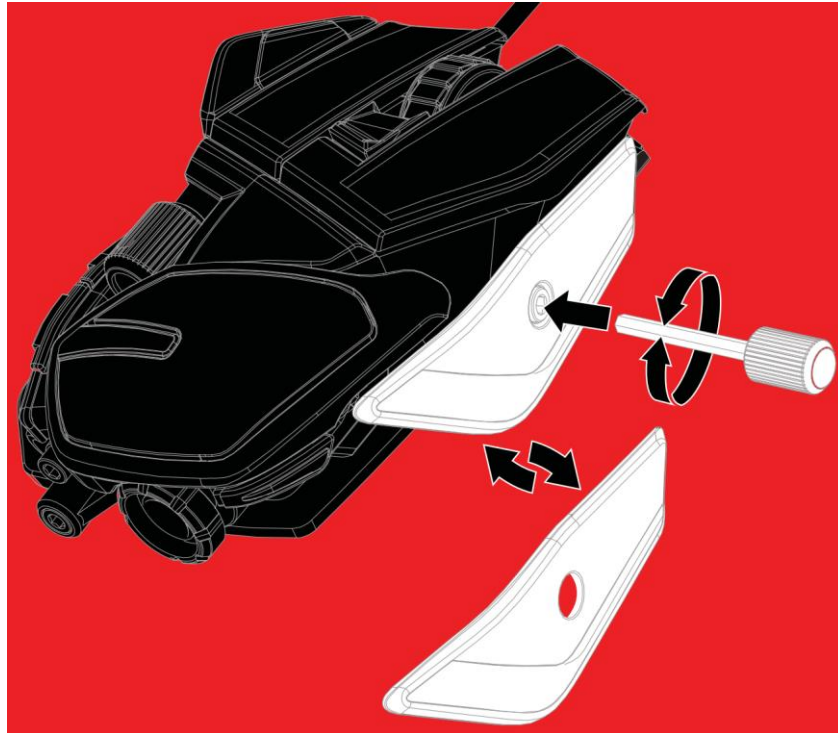




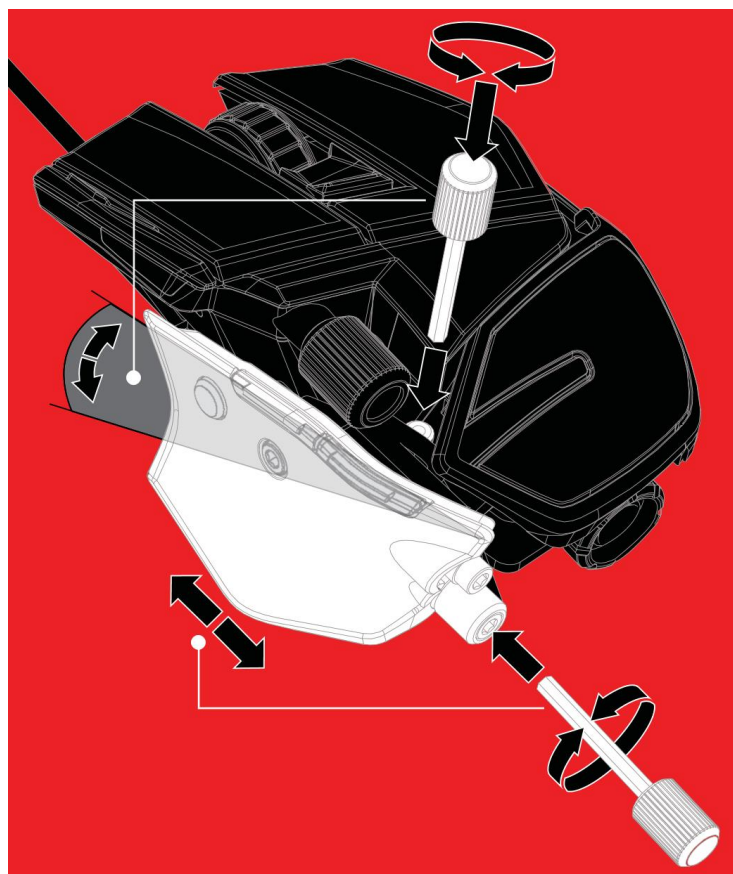
RAT8 comes with additional parts to enhance your grip, and make things more comfortable for gaming over long periods of time. The grippy parts are great for making twitch shots, and lifting the RAT. The raised and finned parts also help support your hand especially with the palm grip.



To make an adjustment to the pinkie rest, simply remove the tool from the back of the RAT. Remove the screw that holds the pinkie rest, replace with your preferred rest and then tighten the screw back up.



The length and angle of the thumb rest can also be adjusted, so that your thumb is in the perfect position to access the Precision Aim and browser buttons. Using the tool to turn the lower screw left or right will move the thumb rest further forward or backward. To adjust the angle, loosen the top screw, adjust the angle and then tighten the screw to secure the position.



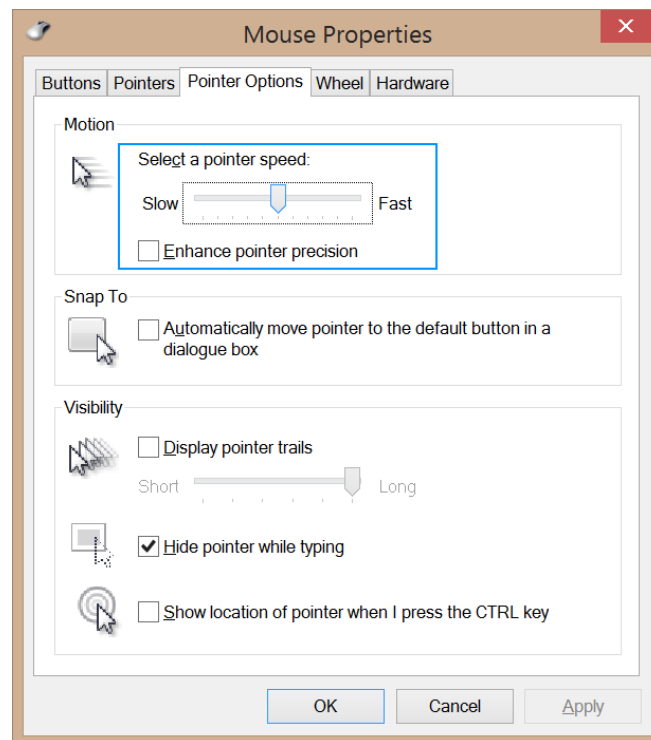
### 3. First-Time Setup and Software Installation

The **RAT8** can be used as a basic mouse when plugged into a PC via USB. However, if you would like to configure button response, and the performance of the sensor, both the product driver and software application will need to be downloaded and installed.

#### Connecting the RAT and configuring Windows

1. Make sure the PC is powered on.
2. Remove the label from the sensor aperture.
3. Plug the USB cable into an available port.
4. Windows will briefly install generic drivers for the RAT. It will then function as a basic 5 button mouse.

To make sure Windows is correctly configured, go to **Control Panel > Mouse**. Click on the **Pointer Options** tab. Make sure that the **Pointer Speed** slider is set to the middle position and that the **Enhance Pointer Precision** option does not have a tick.



#### Driver and Software Installation

In order to customize the product settings and make game profiles, you will need to download the software application from Madcatz.com.

1. Go to <http://madcatz.com/downloads/>.
2. Select your operating system and product in the **Software Download** area. You will then be given a link to download the software application.
3. Install the software application. *If this is the first time you have installed our software, Windows may require you to install an update .net framework. This is normal.*
4. Once it is installed, you will see a RAT8 icon on your desktop, and a RAT8 icon in the system tray of your task bar. *If the system tray icon is not immediately visible, check the hidden icons by clicking the vertical arrow next to the system tray.*
5. The product is ready for customization.

## 4. Mad Catz RAT8 FLUX™ Software for Windows

A powerful software application for **RAT8** is supplied for Window users. As well as offering first-line support and setup tips, the software's two key functions are to allow the user to configure the performance settings of the product and to create game-specific profiles. The following section will tell you everything you need to know to get the product functioning how you want it to.



The desktop software enables the creation of game-specific profiles for your favourite games and apps. Profiles consist of three core areas, button programming, settings and Kameleon lighting. For example, for a game like Battlefield, you can set commands like Throw Grenade, or Melee Attack to the additional RAT buttons to make it faster and easier to carry out these actions in-game. The profile could also have distinct sensor and lighting settings to suit how you play that particular game.

Each of the three core aspects of a profile (Programming, Settings and Kameleon Lighting) will be explained with examples of how to best to configure the RAT for your requirements.

The RAT has multiple memory slots for storing your profiles. So, depending on what Profile Slot is selected, you can have a completely different product setup. You could have specific profiles for different character classes in a single game, or have each slot dedicated to a different game or application. It's up to you. These profiles remain in the slots of the RAT, so that you can take it to another PC and all your different settings will be ready to go, without the need to install any software.

Once a profile has been created, it can also be linked to a game or application. So that, when the program or game window is in focus, the profile is automatically activated on the product.

FLUX is also fully compatible with commonly used cloud storage services. For example, you can link the Drop Box folder on your PC to the profile folder within FLUX. This means that you can easily back-up your profiles, and quickly access them on different PCs to make crucial adjustments.

The following controls on the RAT8 can be programmed:

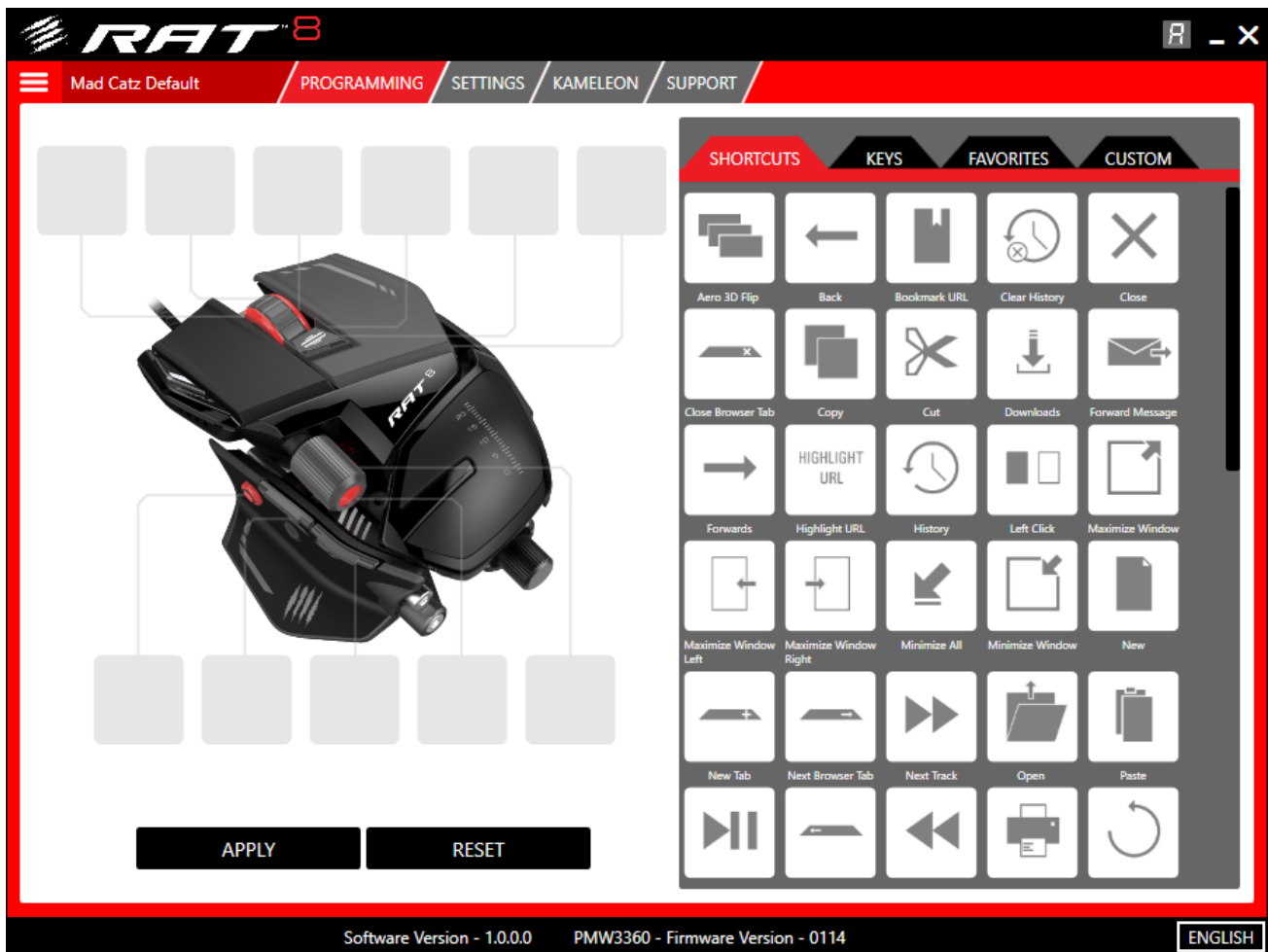
- Right RAT button
- Scroll Wheel Up
- Scroll Wheel Down
- Scroll Wheel Click
- D.P.I. Up
- D.P.I. Down
- Precision Aim
- Browser Forward
- Browser Back
- Thumb Barrel Left
- Thumb Barrel Right

### Before you begin:

- Only the software application for the product needs to be installed. RAT8 is driverless.
- Profiles are stored locally in **Public\Documents\Mad Catz\RAT8** folder.
- Profiles are stored as .pr0 and .xml files and can be transferred to other computers that have the software installed.

## FLUX Programming Overview

The following section will take guide you through the layout of the user interface and how each element operates. When you first load up FLUX, it will look like this:



### Key Elements:

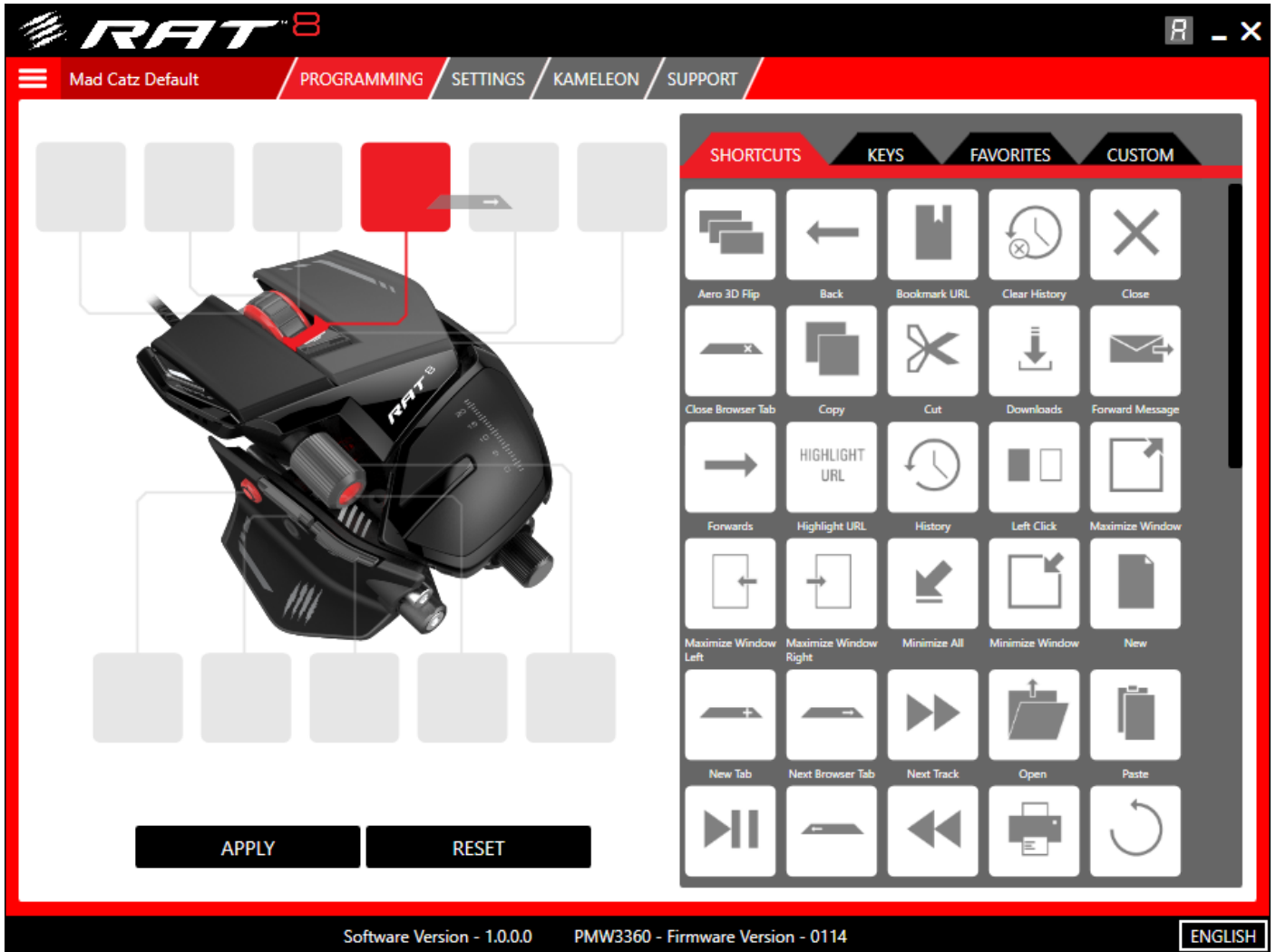
1. In the top right hand corner (next to Minimize and Close), is a handy indicator to tell you what Profile Slot is currently selected on the RAT. When you press the Profile button on the RAT, this indicator will change to match the LED status.
2. Running along the top of the app are the main tabs. Programming is selected by default. Click the button to change to the desired page. When a new version of software is available, an update tab will appear with direct download links.
3. The Programming page features an image of the product along with callouts to each of the programmable controls.
4. To the right of the image is the Command Library. The first tab contains pre-made shortcuts such as copy, paste, and other useful functions. The second tab contains single keyboard key presses. These are useful for ultra-quick profile setup. The third tab is for your favourite commands. If you right-click a command you can add it to favourites. This command will then always be visible regardless of what profile you are editing. Finally, the custom tab allows you to create your own commands. More on that later...
5. Directly below the product image are the Apply and Reset buttons. Clicking Apply will allow you to send a profile to one of the RAT's memory slots. Clicking Reset will clear the profile of all commands that have been mapped to the buttons.
6. To the top left of the image, is the Profile Menu button. This will reveal/hide the different profiles you can edit. The area next to the menu button displays the name of the current profile that is open for editing.

## Quick Programming of the Mad Catz Default Profile

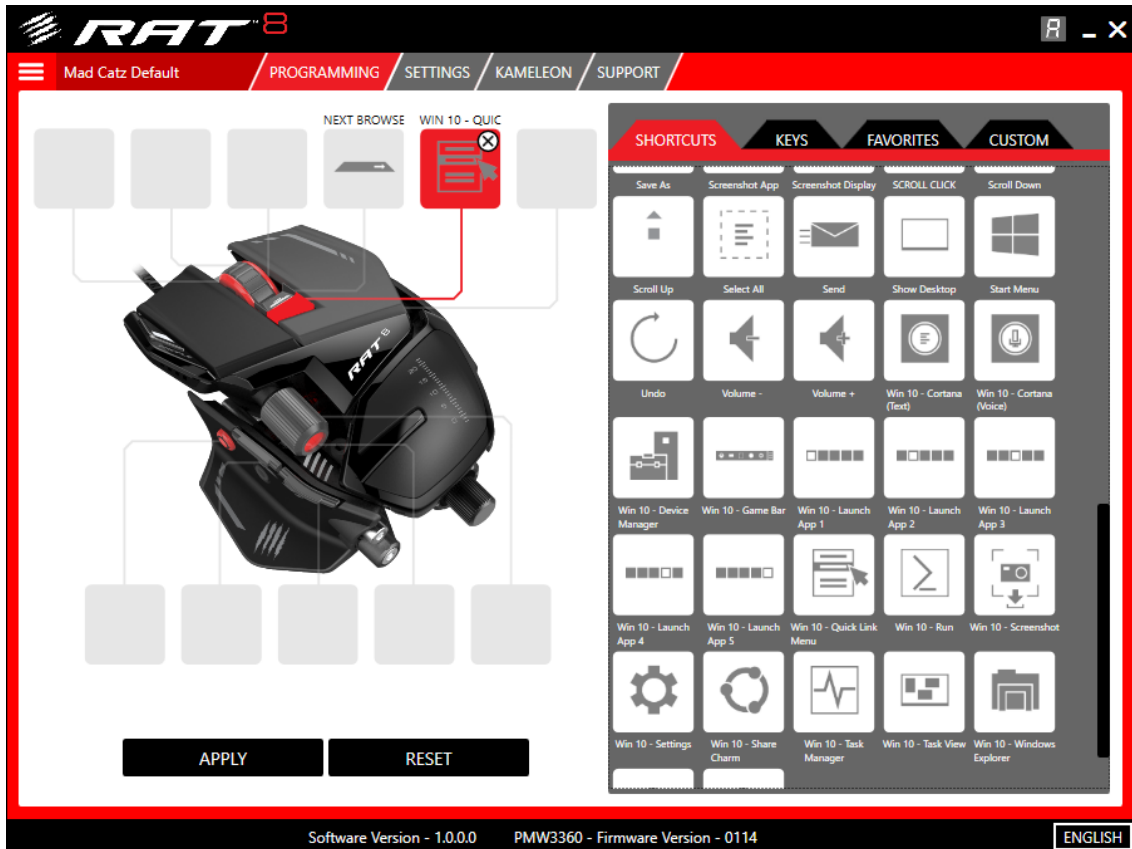
When you first load up the software, the profile presented for editing is the Mad Catz Default Profile. The default profile is great for applying commands that make browsing the Internet and controlling media, quick and intuitive. You don't have to use this profile though, as you can create your own profiles (more on that later).

To assign a command to a button, left-click and drag an icon from Command Library over to one of the callouts. When you release the left RAT button, the command will be assigned.

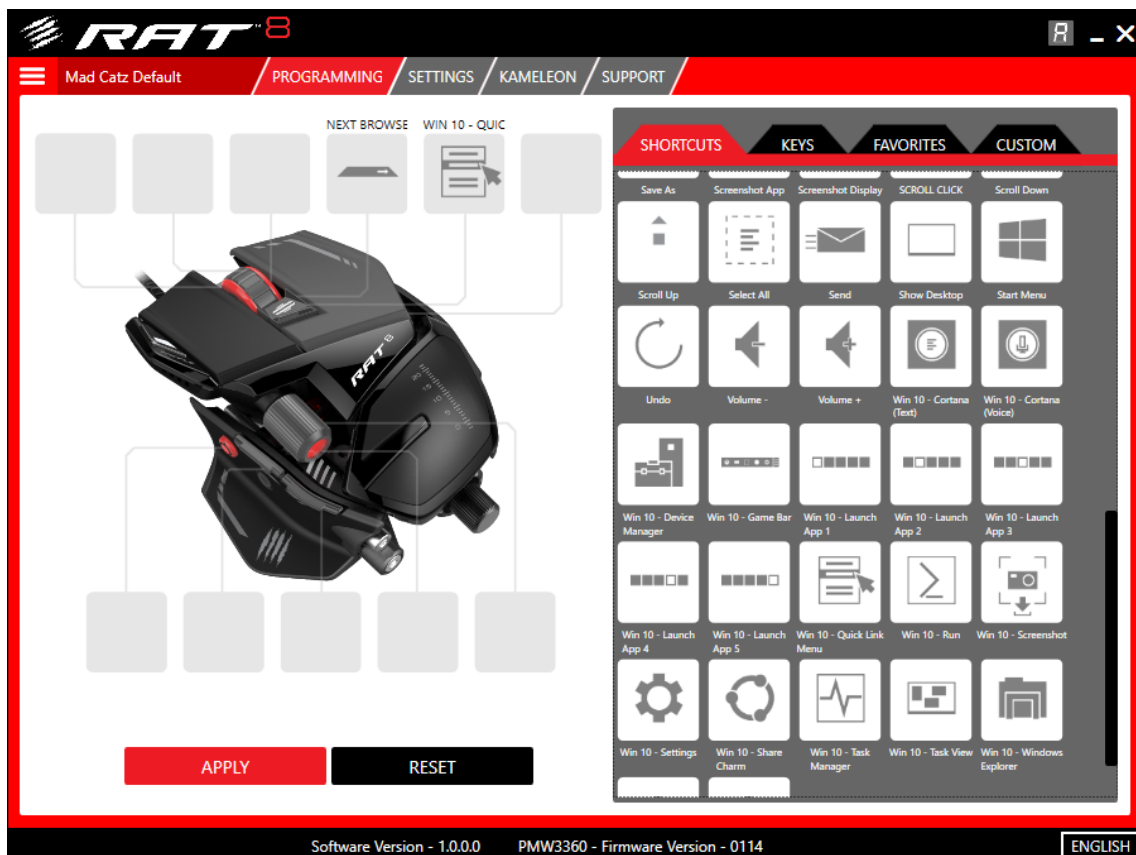
Repeat this process to assign all of the commands you need to the RAT.



To remove a command from a button, hover your RAT cursor over the callout. When the cross appears, left-click it.

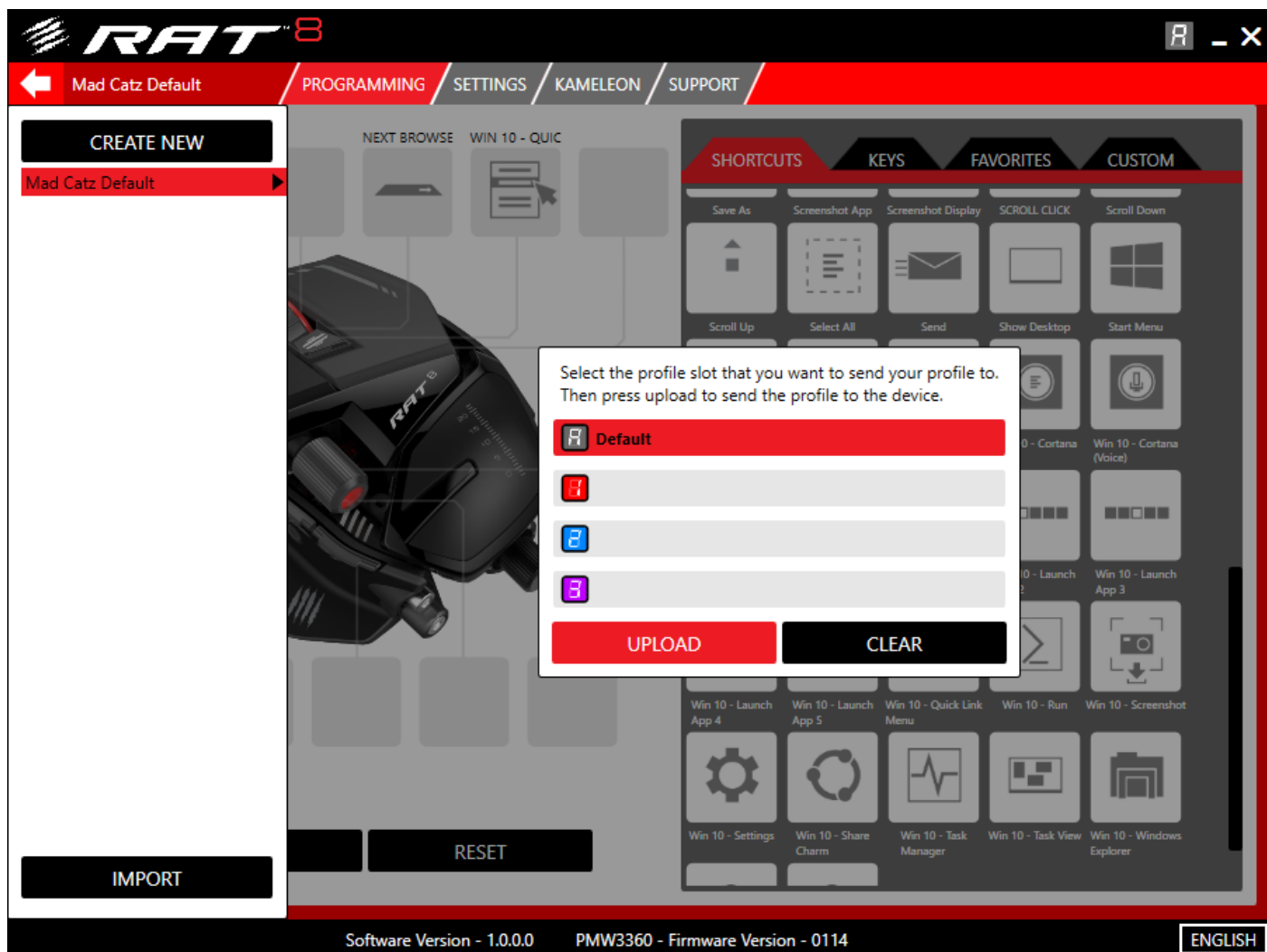


Once you are happy with the assignments, click the Apply button.





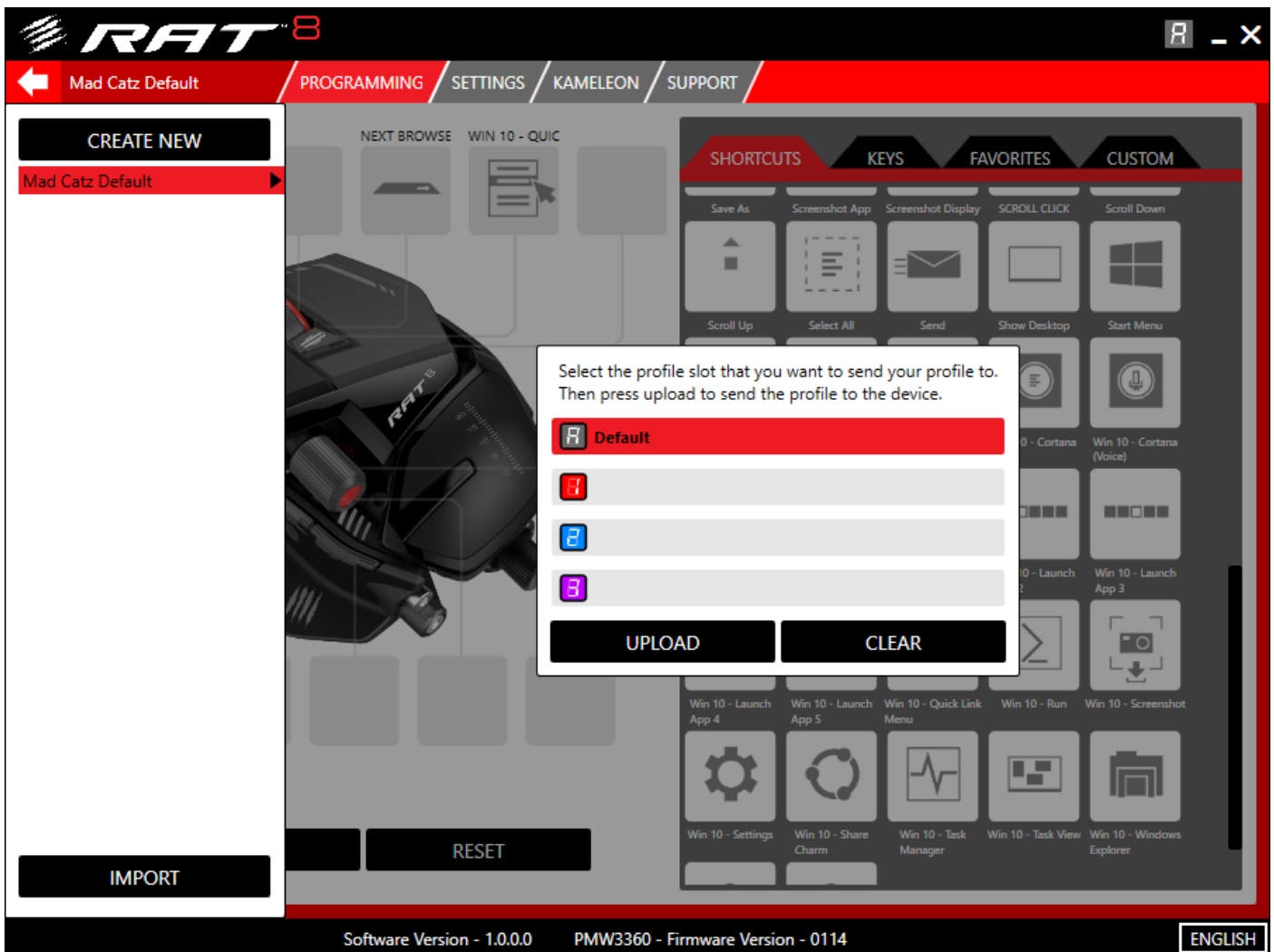
This will reveal the Profile Menu and allow you to select a memory slot for the profile. Click Upload, and the assignments will now be active on the RAT.



## Profile Management

If you find that using a single profile is too restrictive, you have the freedom to create as many as you want.

First, click the Profile Menu button to reveal the additional parts of the interface.

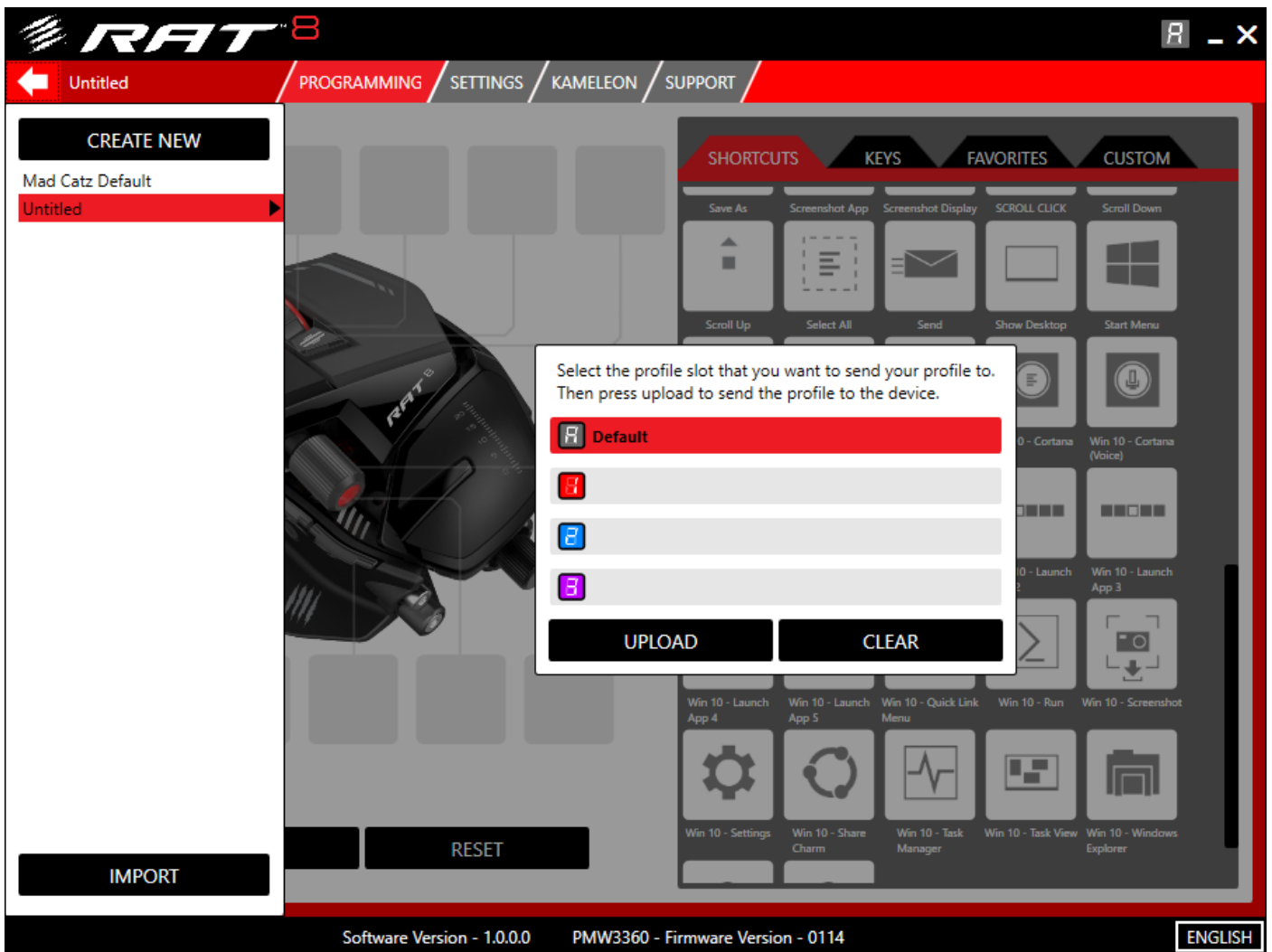


### Key Elements:

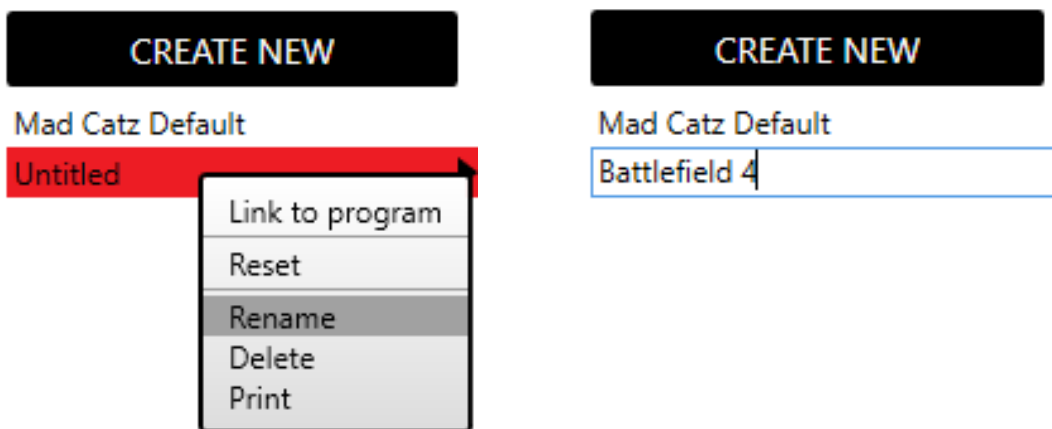
1. The Profile Menu contains all of the profiles that are stored locally on your system. It can also contain folder links to other locations on your PC such as a different Hard Drive, or a Cloud storage folder such as Drop Box.
2. At the top of the Profile Menu is the **Create New** button. When this is clicked a blank untitled profile is added to the list.
3. Below the Create New button is the entry for the Mad Catz Default profile. The profile name is also highlighted red. This means that the profile is currently selected for editing.
4. The Import button opens a file explorer window. This allows you to browse your hard disk or removable storage to import previously backed up profiles.
5. Each profile has a context menu that contains additional options. This can be accessed by either left-clicking the black triangle to the right of the profile name, or by just right clicking the profile entry.
6. To the right of the Profile Menu is the overview of the memory slots on the RAT. This is where you select a memory slot, and then upload a profile to the RAT. You can either left-click a slot to select it, or press the Profile button on the RAT to cycle the red selection highlight. The Upload button sends a profile to a memory slot. The Clear button removes a profile from a memory slot, and reverts the slot back its factory default values.

## Create your own Profile

Click the Create New button. It will generate a new untitled profile. It will be automatically selected for you to begin editing.



Right-click the profile to reveal the context menu and select Rename. Enter the desired profile name and hit enter on your keyboard.

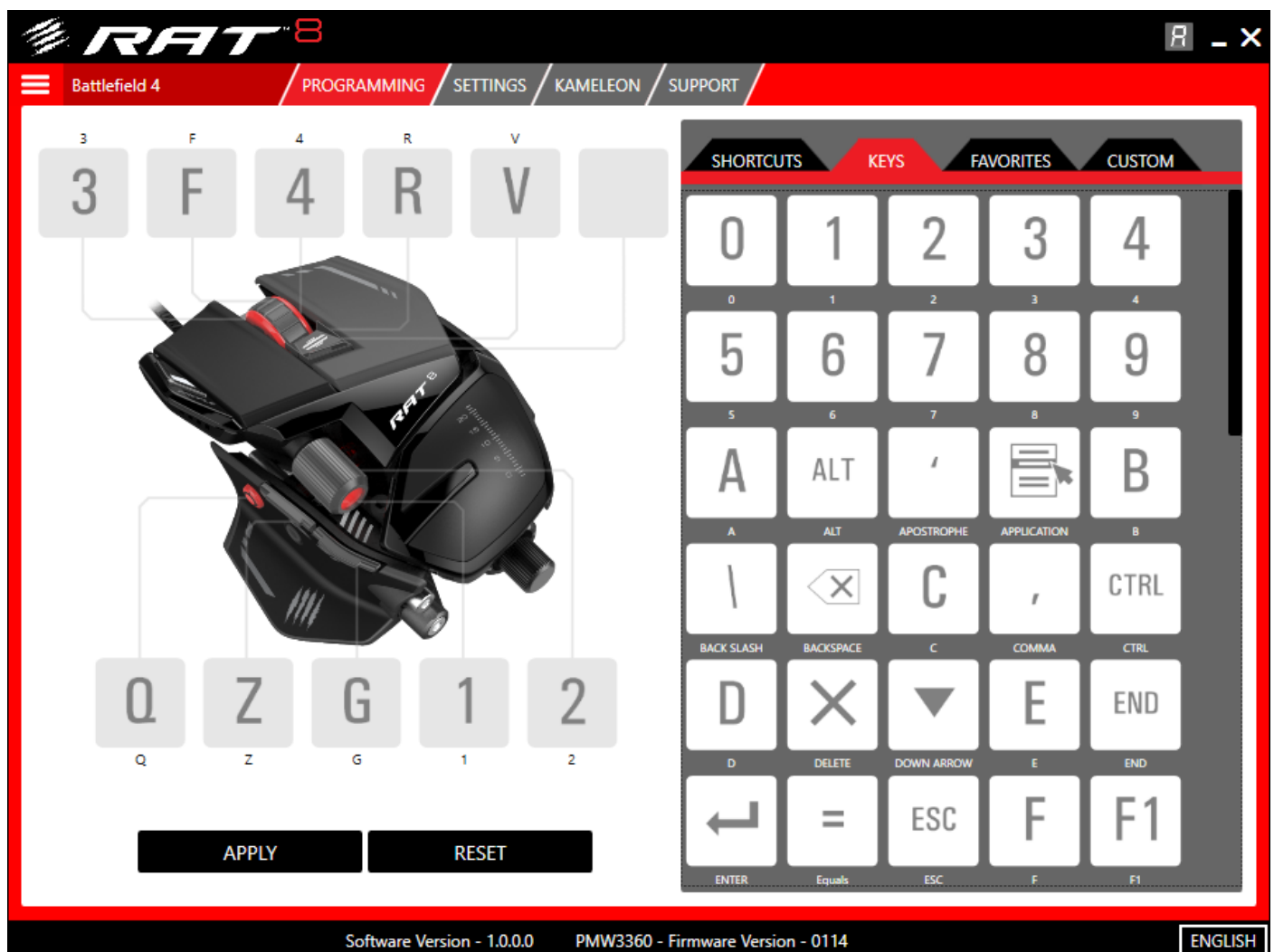


You can now assign commands to the buttons across all the profile modes. If you find that the Command Library is too difficult to view or navigate, you have two options:

1. Hide the profile menu. Now that your new profile is selected for editing, it will not change until you select a different profile.
2. Right-click inside the Command Library to reveal its context menu. This will allow you to quickly jump to the different command tabs and resize the command icons to your preference.



In the image below, I have selected the Keys tab in the Command Library and added my preferred in-game actions to the programmable buttons.



You can now **Apply** the profile and start gaming. Before you do, here are the explanations for the additional options in the Profile Context Menu.

- **Link to Program** – This will open up a file explorer window. You will need to browse to, and select, the .exe file that is associated with the game or application you want the profile to be associated with. The profile will then be automatically activated when that program window is in focus. If the linked profile is not already on the RAT, it will be temporarily loaded into the currently selected profile slot until the linked program window is no longer in focus. If the linked profile is already in a memory slot on the RAT, that slot will be automatically selected when the linked program window is in focus. When the linked program window is not in focus, the profile slot will revert back to its original state.
- **Rename** – Activates the text input cursor in order to rename the profile.
- **Delete** – Deletes a profile from your system.
- **Print** – Prints the profile and its assignments for reference.

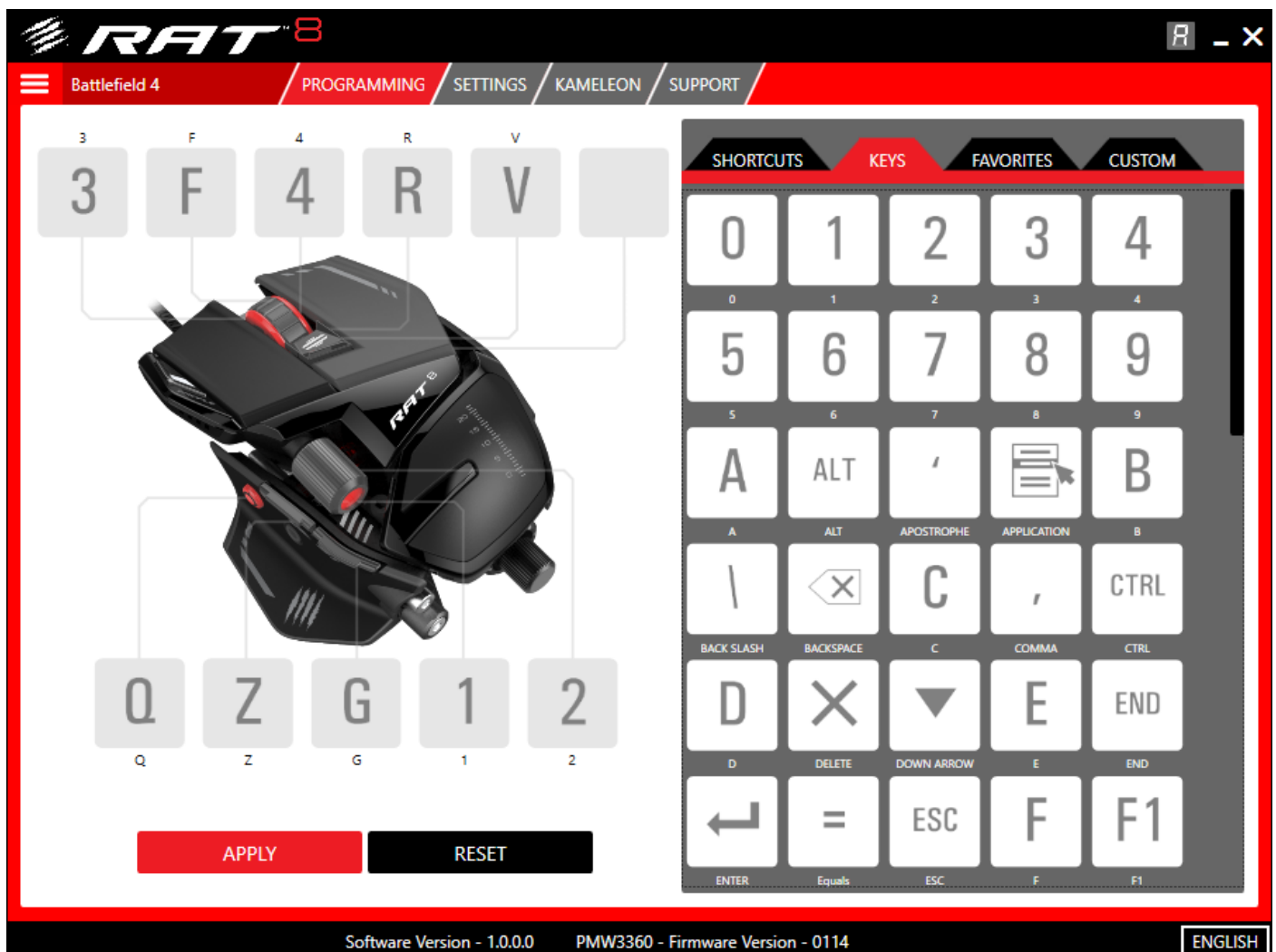
**CREATE NEW**

Mad Catz Default

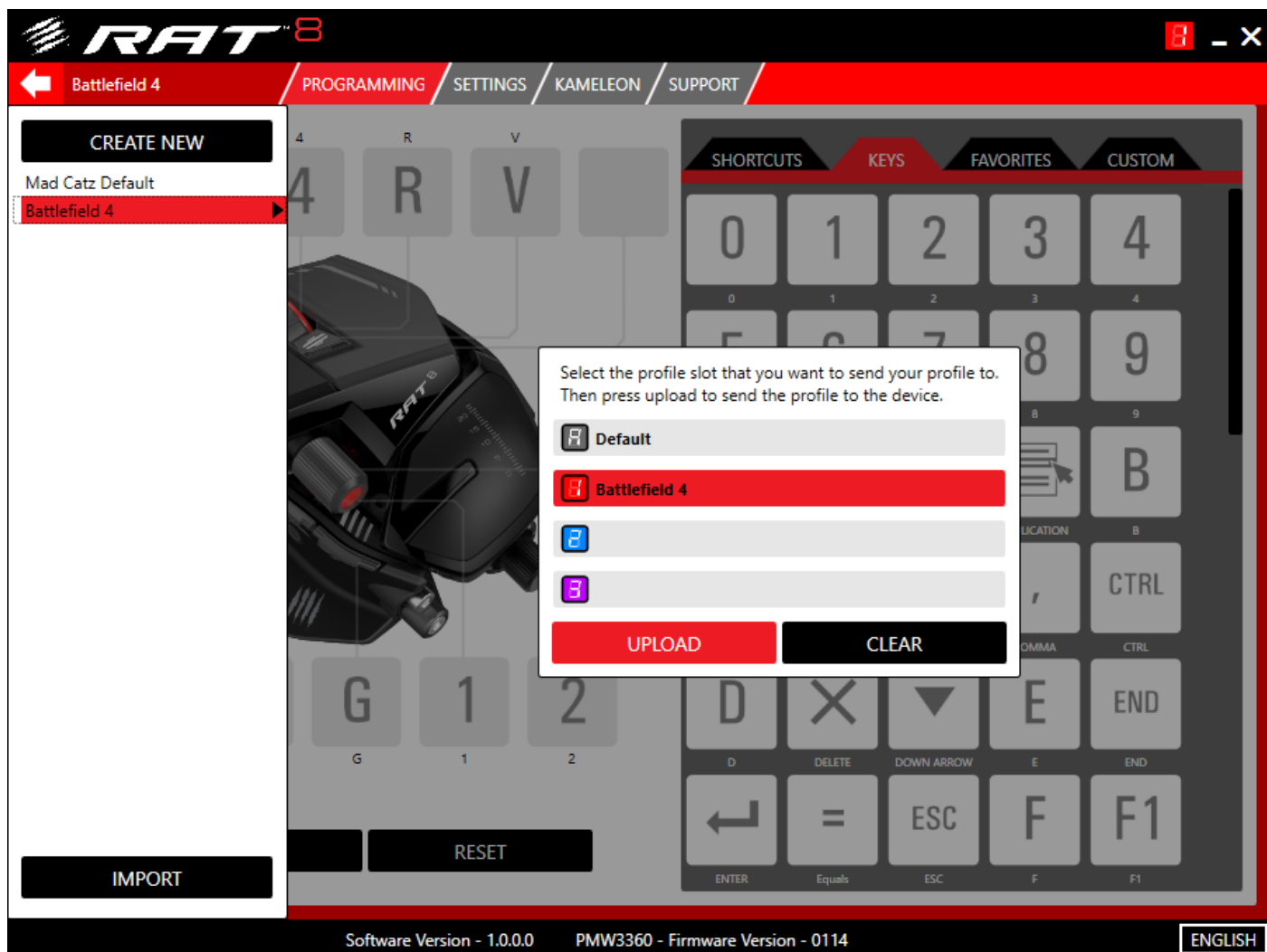
Battlefield 4

- Link to program
- Reset
- Rename
- Delete
- Print

Once you are happy with your profile, click Apply.



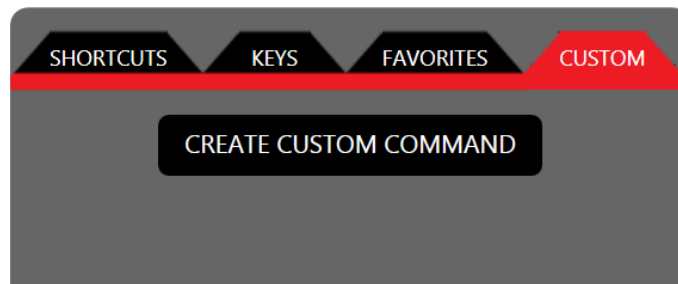
Select a memory slot and then click the Upload button to make the programming active on the RAT.



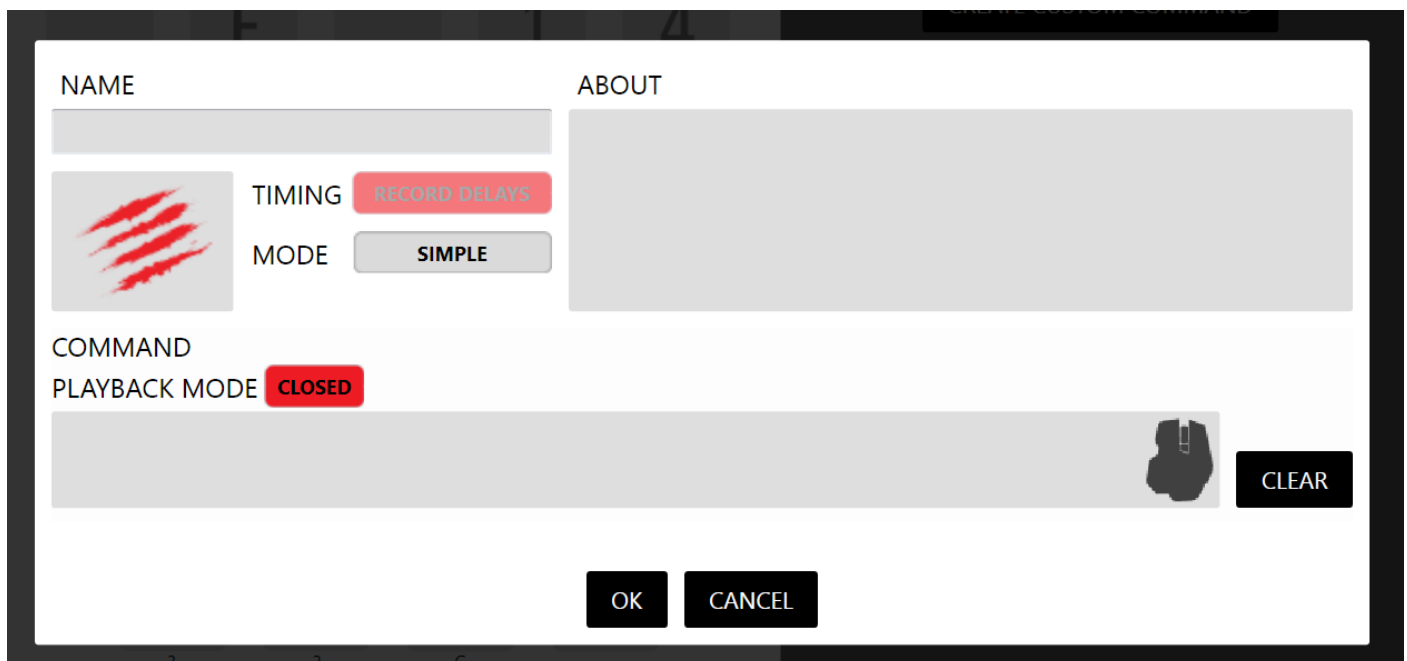
## Custom Command Creation

Until now, this guide has dealt with the pre-made commands in the Command Library. This section will take you through the process of creating your own commands and adding them to your profiles.

In the Command Library, click the Custom tab and then click Create Custom Command.



This will open the Custom Command Editor.



### Key Elements:

1. At the top of the Editor is the Name box. This is where you type the name of the command.
2. Beneath the Name, is a box that contains the Mad Catz scratches. Our software enables you to associate your commands with icons or images. For example, the command for selecting a Pistol in Battlefield could be an image of the pistol itself. The default command icon is the Mad Catz slash logo. Click the icon box to open up a file explorer window. You can now browse to the image you want to add to the command. Alternatively, drag and drop the image file straight into the box to quickly assign it. To delete an icon image, hover your RAT cursor over the icon until the cross appears, then click to delete it.
3. To the right of the Icon box are two buttons that set the type of command you want to create:
  - a. **Timing.** The editor can either record the exact timing of your key presses or ignore them. If Record Delays is turned off any gaps between key presses will be removed so that the command will output as fast as possible.
  - b. **Mode.** When this is set to Simple, your command options are limited. Firstly, the delays between key press events are not recorded. Secondly, you can only program the press event of a physical button. If you click the Mode button to change it to Advanced, you are free to record

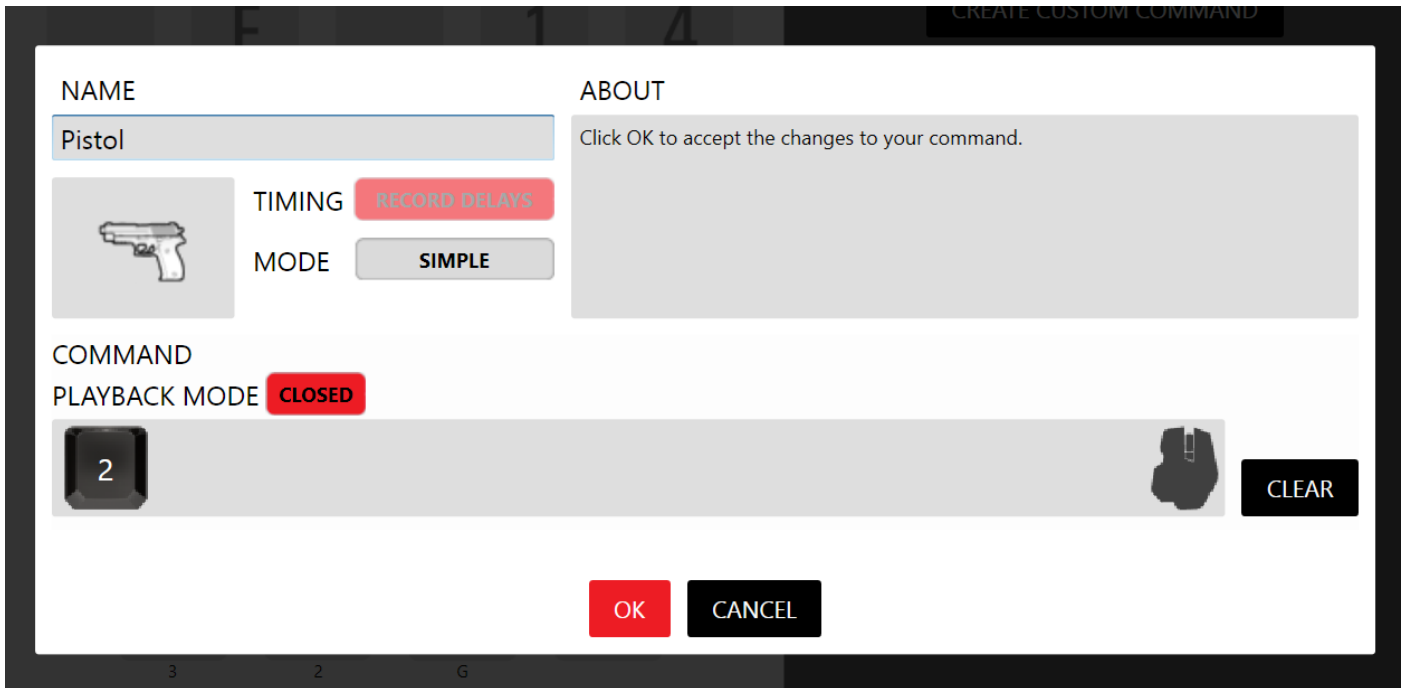
and adjust keypress timings. You can also program every aspect of a physical key press. We define these as Press (button down), Repeat (button held), and Release (button up).

4. Underneath the Icon Box resides the Command Creation area.
  - a. **Playback Mode.** This defines how the command is output or 'played' when the button is pressed. When set to closed, the entire key press string of a command will be played, even if you quickly press and release the button. When set to open, you need to press and hold the programmed button down for the entire duration of the key press string. If you release the button midway through the string, you will only get partial output to the game or software.
  - b. **Command Entry Box.** This is where you type in the command you want to assign. Hover your RAT cursor inside the box to start entering your key presses. If you move your cursor out of this area, the editor will stop recording keyboard or RAT input. Note the RAT icon in the Command Entry Box. If you hover your RAT cursor over this icon, it will turn red. At this point, you can click any of the main RAT buttons or scroll up or down and the editor will record this input. This enables you to mix both keyboard key presses and RAT button presses to create more complex in-game commands.
5. The **Clear** button will remove all key press data from a command.
6. The **OK** button confirms the command and returns to the main Programming page.
7. The **Cancel** button rejects any command editing and returns to the main Programming page.
8. Finally, the **About** box gives you a helping hand if needed. Hover your RAT cursor over any aspect of the Custom Command Editor to get a reminder of what the feature does and how it can be used.

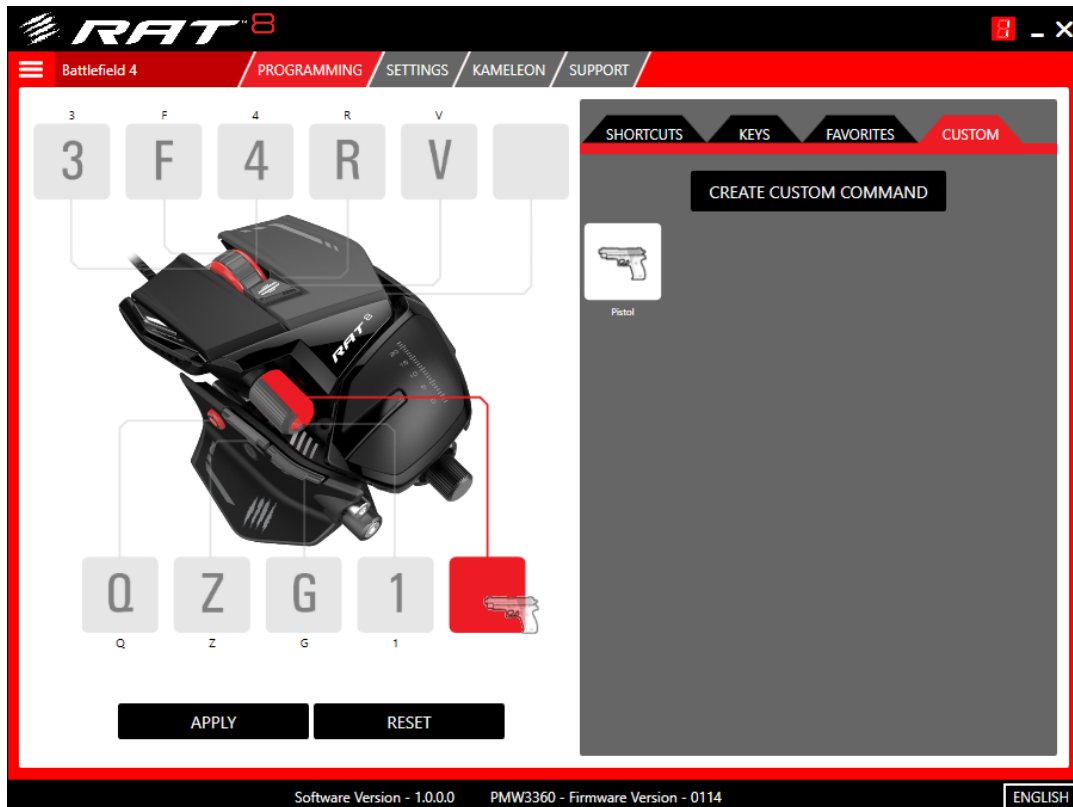


## Create a Simple Custom Command

In this example, I have typed the name of the command, moved my cursor into the Command area and pressed the number 2 on my keyboard, and then clicked in the icon area to browse to the image I want associated with the command.



When the command is complete, click ok. It will now appear on the Custom tab, ready to be dragged and dropped onto one of the programmable buttons.

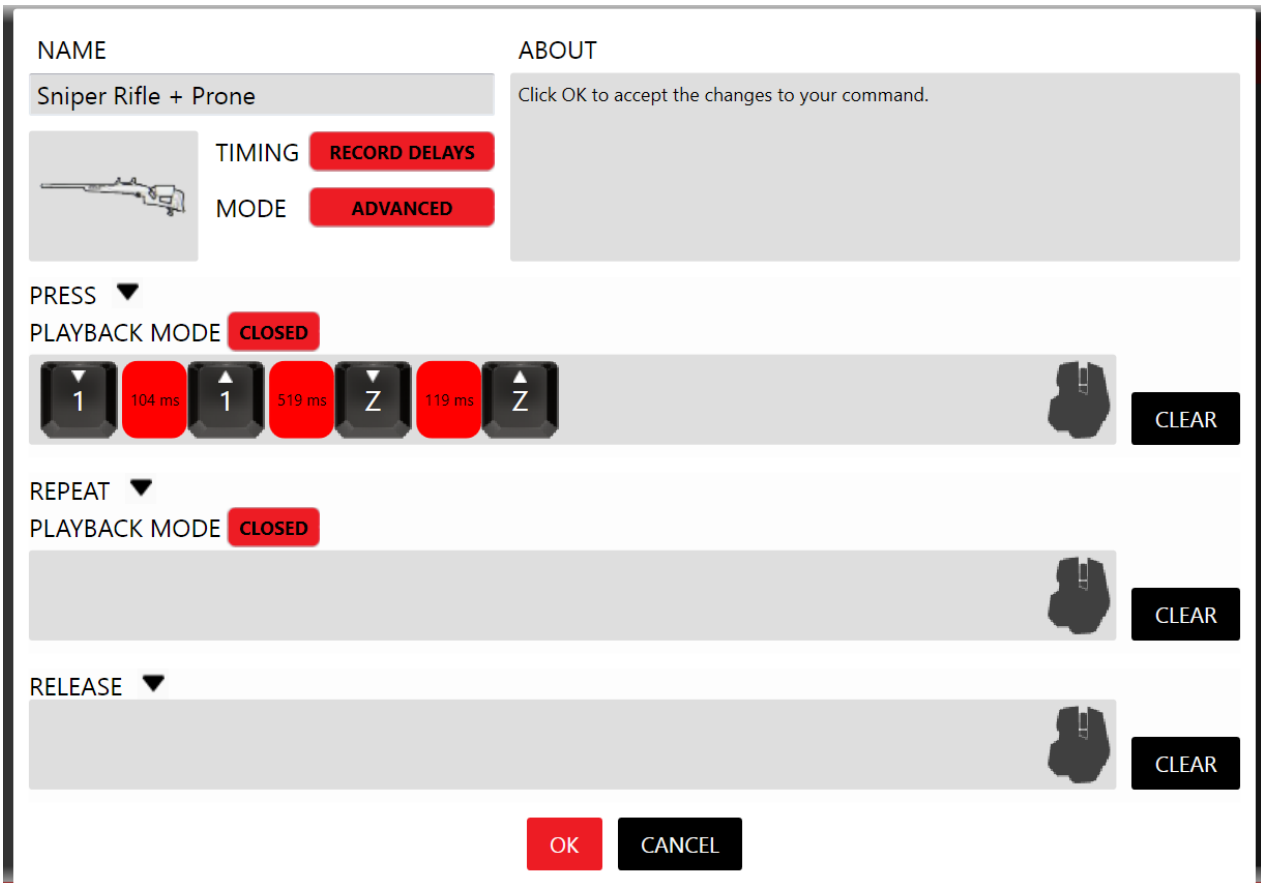


To delete a Custom Command, hover your RAT cursor over the icon and then click the X. If you want to edit an existing custom command, go to the Custom tab and left-click the command icon.

## Create a Complex Custom Command

In this example, we will run through the creation of a multi-keypress command that takes into account the timing between keypress events. I want to create a command for Battlefield, that when activated, will get my Sniper Rifle out and then put me in the Prone position.

In the image below, I have opened the Custom Command Editor, set the Mode to Advanced, and Record Delays is on. I have also input the keyboard keypress as I would do it in the game. The timing delay between each keypress event is denoted by the red bars, in milliseconds (ms). Note how that, when the Mode is set to Advanced, both the down and the up component of a keyboard key press is recorded.

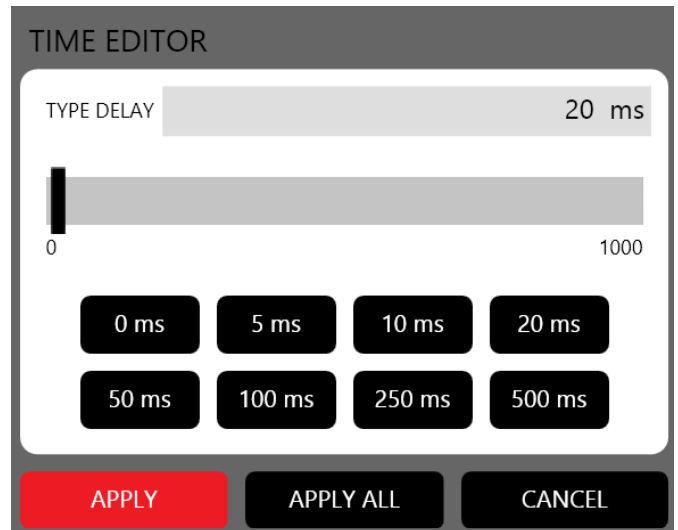


Don't worry if you make a mistake. You won't need to clear the whole command and start again. If you input the wrong key press, just hover your cursor over the keypress and click the X that appears. You can then re-enter the command.

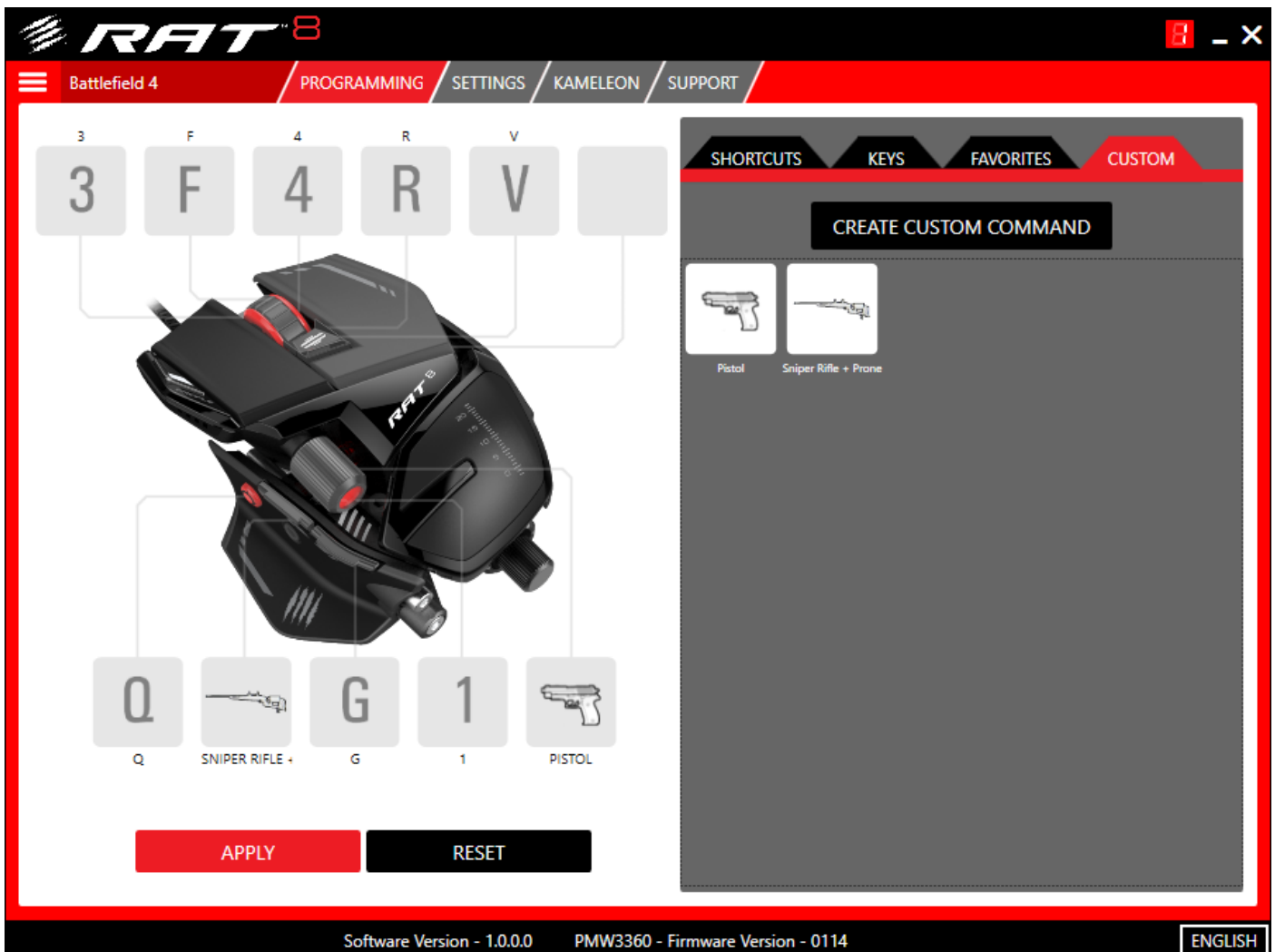


Once you are happy with the command, you can alter the timing between each keypress by left-clicking the red bars between the key press events. The Time Editor gives you multiple options for altering your command.

- Firstly, you can simply type in the desired ms delay.
- Secondly, you can drag a slider to the desired delay.
- Finally, you can select a preset delay from one of the option buttons.
- Once you are happy with your timing delay, you can either apply the update to a single delay between two key press events or apply the same delay to all the events in the command.



Once you are happy with the command, click ok. It can now be dragged onto one of the programmable buttons.



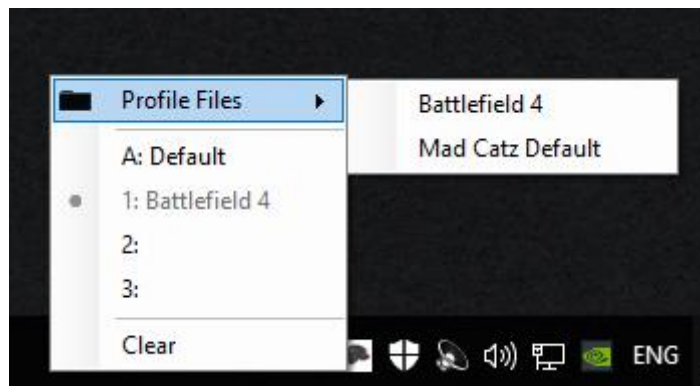
If you are happy with your profile, click the Apply button and re-Upload the profile changes to the RAT.

## Using the System Tray Icon

The system tray icon is a quick and convenient way to access FLUX and activate profiles without having to load the interface.

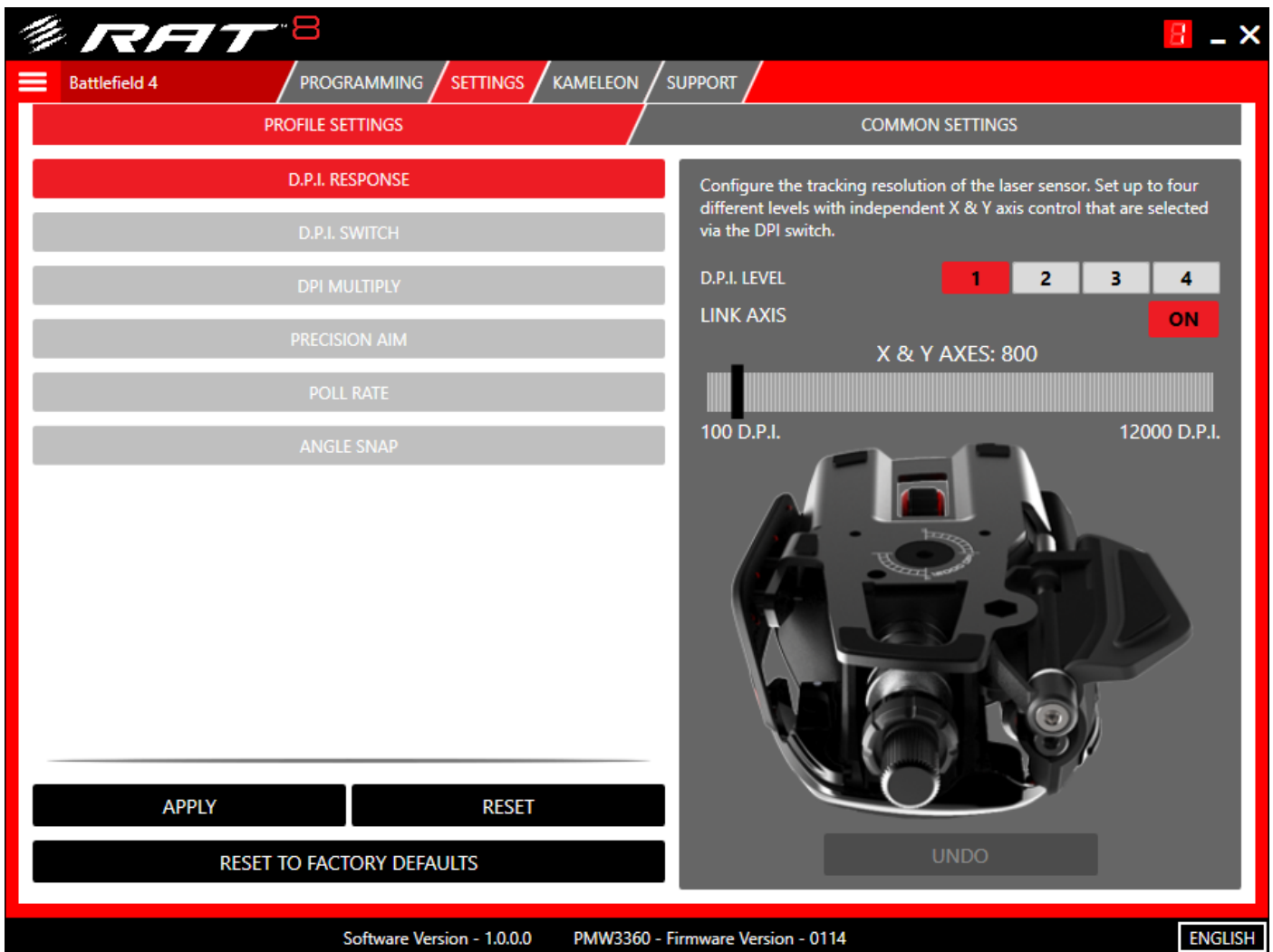
If you left-click the icon, the FLUX interface will open.

If you right-click the icon, a profile menu will appear. From here you can quickly upload profiles to the RAT, or clear existing memory slots. The black dot shows which profile slot is selected. To clear a memory slot, click the Clear option. To upload a profile, hover your cursor over the Profile Files folder and then left-click a Profile name to upload it to the RAT.



## FLUX Settings Overview

The Settings page allows you to access and adjust the key performance values of the product, such as D.P.I. and report rate. These options are also stored in the internal memory of the RAT.



### Key Elements:

1. Settings are split into two types:
  - a. **Profile Settings** – These settings are per-profile. Meaning you can have different D.P.I. or Poll Rate values depending on the game or application.
  - b. **Common Settings** – These are settings remain the same regardless of what profile you have active on the RAT.
2. Running down the left hand side of the screen are the different settings that you can configure. Once selected, the various options for that setting will be displayed on the right hand side of the screen.
3. Once a change has been made, an Undo button will become active so that you can revert the setting back the last saved value.
4. The Apply and Reset buttons function in the exact same way as they do on the Programming and Kameleon tabs. Apply opens the Profile Menu so that you can upload your profile alterations to a memory slot. The Reset button reverts all of the Profile Settings back to their default values.
5. Reset to Factory Defaults will wipe all the memory slots on the RAT and return it to how it was when it left the production line.

The screenshot displays the RAT 8 software interface for Battlefield 4. The main menu includes 'PROGRAMMING', 'SETTINGS', 'KAMELEON', and 'SUPPORT'. The 'PROFILE SETTINGS' section is active, showing a list of settings: 'D.P.I. RESPONSE', 'D.P.I. SWITCH', 'DPI MULTIPLY', 'PRECISION AIM', 'POLL RATE', and 'ANGLE SNAP'. The 'COMMON SETTINGS' section is also visible, containing the 'D.P.I. RESPONSE' configuration. This section includes a 'D.P.I. LEVEL' selector (set to 1), a 'LINK AXIS' toggle (set to OFF), and two sliders for 'X AXIS' and 'Y AXIS', both set to 800. The sliders range from 100 D.P.I. to 12000 D.P.I. Below the sliders is a 3D model of the mouse and an 'UNDO' button. At the bottom of the interface, there are buttons for 'APPLY', 'RESET', and 'RESET TO FACTORY DEFAULTS'. The footer shows 'Software Version - 1.0.0.0', 'PMW3360 - Firmware Version - 0114', and a language selector set to 'ENGLISH'.

Set the tracking resolution of the sensor. Each profile can contain up to four unique D.P.I. values. Both X and Y axes can be independently configured to suit the exact requirements of the game.

Each D.P.I. level is native to the sensor. This means that no interpolation or any other additional onboard processing is used to achieve a certain D.P.I. level.

Simply select a D.P.I. level, drag the slider to the desired value and then click apply. If you want to change the X and Y values separately then make sure Link Axis is set to off.

Any acceleration that is experienced would be at the OS level, and can be tweaked. For more information, visit our blog:

<http://cyborggaming.com/blog/post/2010/06/04/So-what-is-Mouse-Acceleration.aspx>

## D.P.I. Switch

The screenshot shows the RAT 8 software interface for Battlefield 4. The top navigation bar includes 'Battlefield 4', 'PROGRAMMING', 'SETTINGS', 'KAMELEON', and 'SUPPORT'. The 'SETTINGS' tab is active, and the 'PROFILE SETTINGS' section is selected. The 'D.P.I. SWITCH' option is highlighted in red. Below it are other settings: 'D.P.I. RESPONSE', 'DPI MULTIPLY', 'PRECISION AIM', 'POLL RATE', and 'ANGLE SNAP'. At the bottom of this section are 'APPLY', 'RESET', and 'RESET TO FACTORY DEFAULTS' buttons.

The 'COMMON SETTINGS' section on the right contains a descriptive text: 'The dpi buttons can be assigned to any button on the mouse. Each dpi feature can only be assigned to one button and does not alter the programming on that button, allowing you to also assign programming to the button as well.' Below this text are three dropdown menus: 'D.P.I. CYCLE' (set to 'No Button'), 'D.P.I. UP' (set to 'Rocker Up'), and 'D.P.I. DOWN' (set to 'Rocker Down'). Each dropdown menu is accompanied by a small image of the RAT 8 mouse showing the corresponding button. An 'UNDO' button is located at the bottom of this section.

At the bottom of the interface, the software version is '1.0.0.0' and the firmware version is 'PMW3360 - Firmware Version - 0114'. A language selector shows 'ENGLISH'.

By default, the D.P.I. rocker switch is used to select up to four D.P.I. levels indicated by the 4 red LEDs. These functions, along with D.P.I. Cycle (that only takes up one button) can be assigned to any of the programmable buttons on the RAT. To do so, simply select the preferred button from the drop down menu.

Alternatively, if you are happy with one D.P.I. level at all times, you can choose No Button from the drop down menu. This is recommended if you would rather program the buttons with in-game commands and would like to avoid changing the D.P.I. by accident.

# D.P.I. Multiplier

The screenshot shows the RAT 8 software interface for Battlefield 4. The 'SETTINGS' tab is active, and the 'DPI MULTIPLY' option is selected. The 'COMMON SETTINGS' panel on the right provides an explanation of the feature and a table of DPI modes.

The D.P.I. multiplier gives a greater D.P.I. range for the device at the cost of accuracy. For example if the multiply is set to 2 and D.P.I. set to 1000 the output will be 2000.

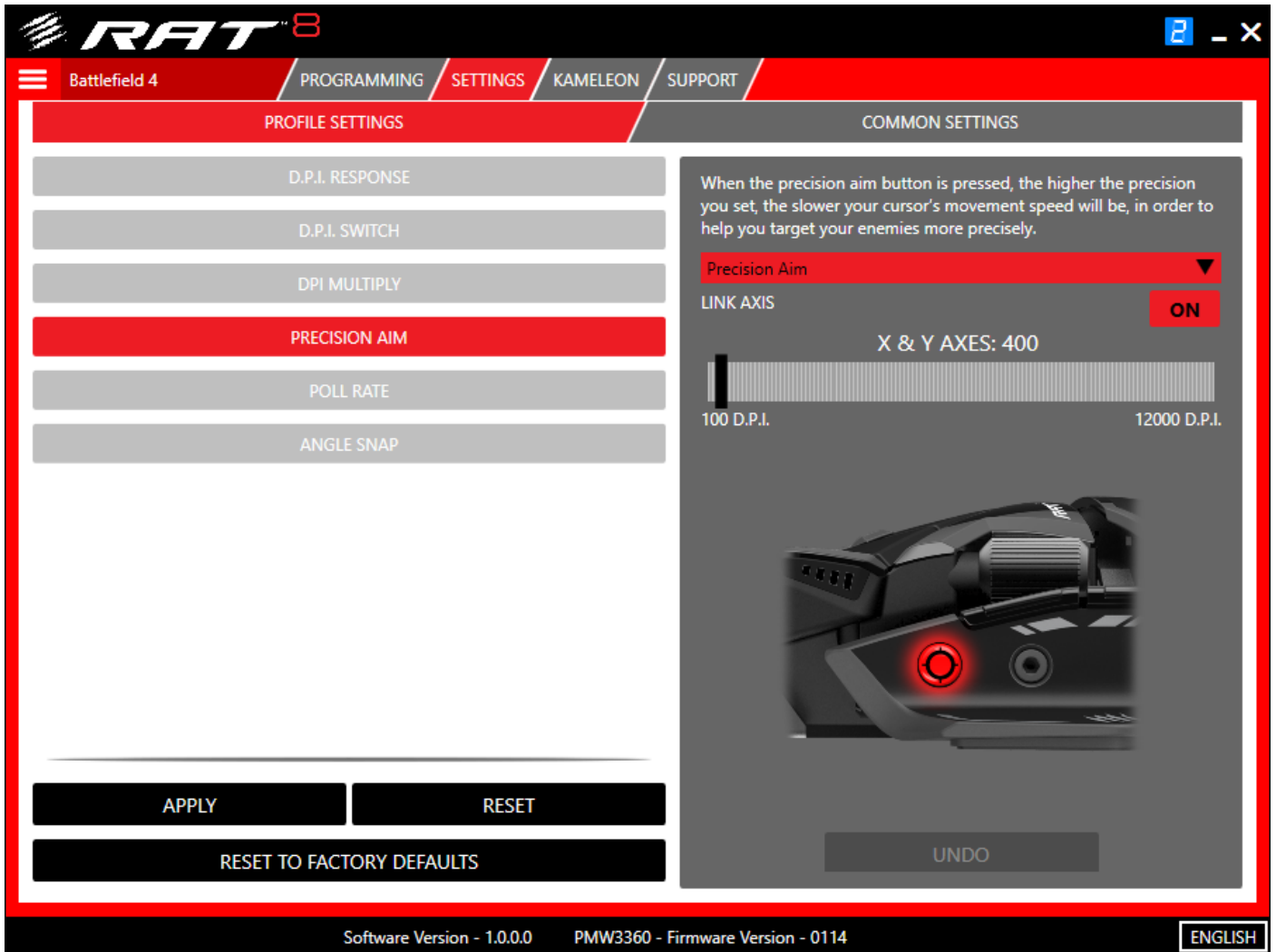
Multiplier	Current		Multiplied	
	X	Y	X	Y
1	800	800	800	800
2	1600	1600	1600	1600
3	3200	3200	3200	3200
4	12000	12000	12000	12000

Buttons: APPLY, RESET, RESET TO FACTORY DEFAULTS, UNDO

Software Version - 1.0.0.0 PMW3360 - Firmware Version - 0114 ENGLISH

This is a new feature, designed to give an additional performance boost to the sensor response. Selecting a value on this page will multiply the data counts from the sensor to boost the overall D.P.I. If you want unaltered sensor data, keep the setting at the default setting of 1.





By default, the red thumb button is set to Precision Aim and will cut the sensor speed to 400 D.P.I. This function can be assigned to any of the programmable buttons on the RAT. To do so, simply select the preferred button from the drop down menu.

Adjust the slider to set the desired precision aim D.P.I. value.

Alternatively, if you do not need the Precision Aim feature, you can choose No Button from the drop down menu. This is recommended if you would rather program the buttons with in-game commands and would like to avoid changing the D.P.I. by accident.

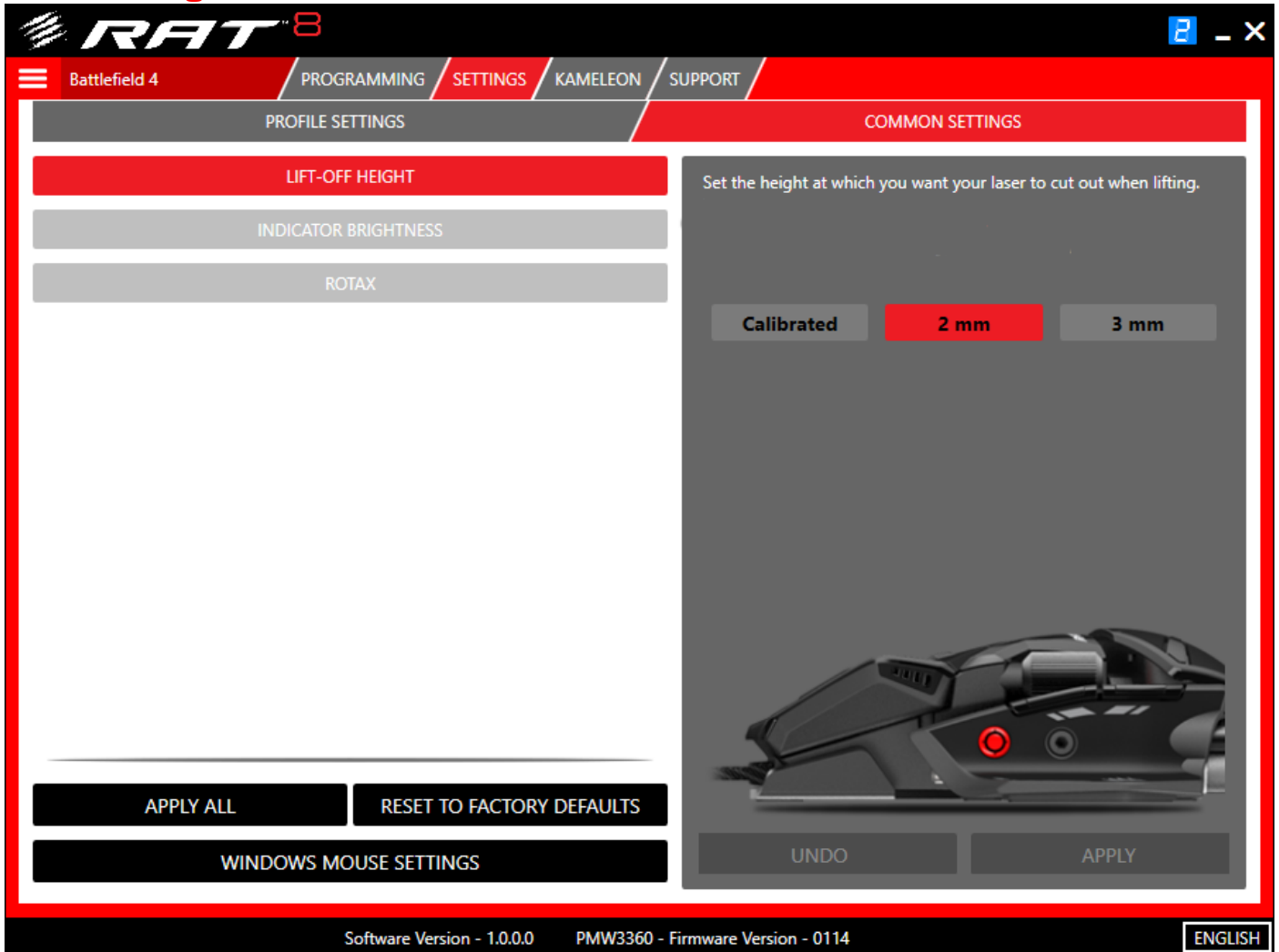
The screenshot shows the Razer RAT 8 software interface. At the top, there is a navigation bar with 'Battlefield 4', 'PROGRAMMING', 'SETTINGS', 'KAMELEON', and 'SUPPORT'. The 'SETTINGS' tab is active. Below this, there are two main sections: 'PROFILE SETTINGS' on the left and 'COMMON SETTINGS' on the right. In the 'PROFILE SETTINGS' section, the 'POLL RATE' option is highlighted in red. Below this section are buttons for 'APPLY', 'RESET', and 'RESET TO FACTORY DEFAULTS'. The 'COMMON SETTINGS' section contains a descriptive text box, a waveform graph, four frequency selection buttons (125hz, 250hz, 500hz, 1000hz), an image of the Razer RAT 8 mouse, and an 'UNDO' button. The '1000hz' button is selected. At the bottom of the interface, there is a footer with 'Software Version - 1.0.0.0', 'PMW3360 - Firmware Version - 0114', and a language selector set to 'ENGLISH'.

This setting determines how often input data is sent to the host computer. A higher value means faster data updates up to 1 ms (1000Hz).

The screenshot displays the Razer RAT 8 software interface. At the top, the 'RAT 8' logo is visible. Below it, a navigation bar includes 'Battlefield 4', 'PROGRAMMING', 'SETTINGS', 'KAMELEON', and 'SUPPORT'. The 'SETTINGS' tab is active, showing two main sections: 'PROFILE SETTINGS' and 'COMMON SETTINGS'. Under 'PROFILE SETTINGS', several options are listed: 'D.P.I. RESPONSE', 'D.P.I. SWITCH', 'DPI MULTIPLY', 'PRECISION AIM', 'POLL RATE', and 'ANGLE SNAP'. The 'ANGLE SNAP' option is highlighted in red. Below these settings are buttons for 'APPLY', 'RESET', and 'RESET TO FACTORY DEFAULTS'. The 'COMMON SETTINGS' section contains a descriptive text: 'This feature corrects minor deviations in cursor movement to produce consistent input. For example, when turned on, lines drawn in Paint will appear smooth. Turn this feature off for true unaltered sensor input.' Below the text is a graph showing a smooth, wavy line. Under the graph are 'ON' and 'OFF' buttons, with 'OFF' being highlighted in red. An image of the Razer RAT 8 mouse is shown below the graph, with an 'UNDO' button underneath it. At the bottom of the interface, the software version is '1.0.0.0' and the firmware version is '0114'. A language dropdown menu is set to 'ENGLISH'.

This is a feature within the sensor firmware that, when turned on, can correct tiny deviations in sensor movement. This can be beneficial in CAD/CAM applications where sometimes it is necessary to draw straight lines. However, when gaming, it is often better to have no interference between the movement of your hand and what gets reports to the PC and the game. With this in mind, this feature is turned off by default.

## Lift-Off Height



The Lift-Off height is crucial for ensuring the sensor is tracking correctly on your surface. It can also affect unwanted cursor movement if you lift the RAT a lot during gaming.

Use a higher lift-off height for more textured surfaces to ensure good tracking.

If you want a lower lift-off height that is specific to your gaming surface, click Calibrated and then click Apply. This will reveal a pop-up window asking you to move the RAT at a consistent speed for a short amount of time to allow for calibration. Once the pop-up box has gone, the sensor is calibrated to your surface.

## Indicator Brightness

The screenshot displays the Razer RAT 8 software interface. At the top, the 'RAT 8' logo is visible on the left, and window control buttons (minimize, maximize, close) are on the right. Below the logo, a navigation bar includes 'Battlefield 4', 'PROGRAMMING', 'SETTINGS' (highlighted in red), 'KAMELEON', and 'SUPPORT'. The main content area is divided into two sections: 'PROFILE SETTINGS' on the left and 'COMMON SETTINGS' on the right. Under 'PROFILE SETTINGS', there are three buttons: 'LIFT-OFF HEIGHT', 'INDICATOR BRIGHTNESS' (highlighted in red), and 'ROTAX'. Under 'COMMON SETTINGS', there is a text instruction: 'Adjust the sliders to select the desired brightness of the DPI Level and Profile LEDs.' Below this, there are two sliders. The first is labeled 'D.P.I. Level' and is set to 100%. The second is labeled 'Profile' and is also set to 100%. Each slider is accompanied by a 3D image of the mouse: the top image shows the side view with the DPI button, and the bottom image shows the front view with the profile LEDs. At the bottom of the 'COMMON SETTINGS' panel, there are 'UNDO' and 'APPLY' buttons. At the bottom of the entire interface, there are three buttons: 'APPLY ALL', 'RESET TO FACTORY DEFAULTS', and 'WINDOWS MOUSE SETTINGS'. The footer contains 'Software Version - 1.0.0.0', 'PMW3360 - Firmware Version - 0114', and a language selector set to 'ENGLISH'.

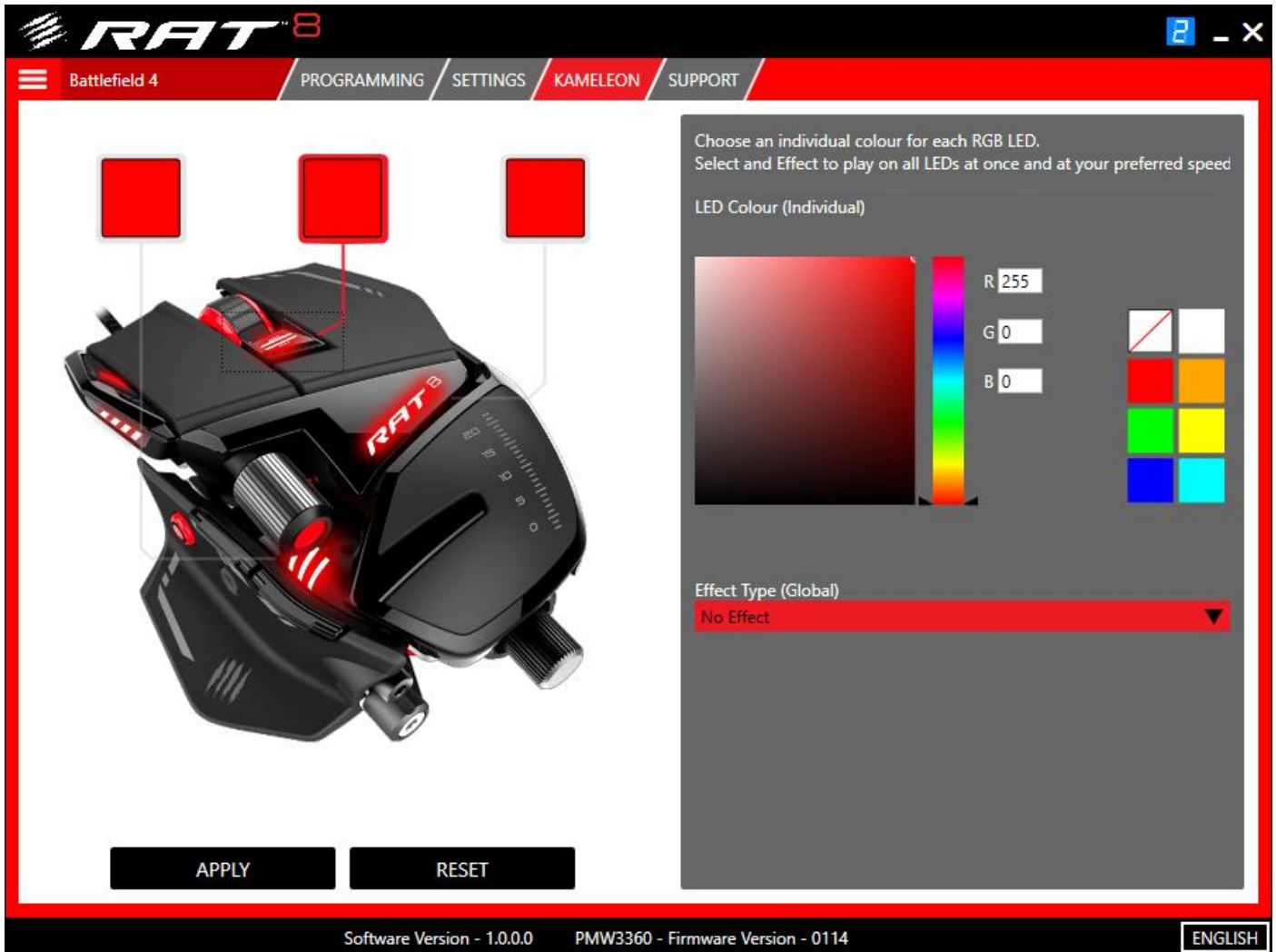
This setting allows you to alter the brightness of both the Profile LED and the D.P.I. Level LEDs.

The screenshot shows the RAT 8 software interface. At the top, there is a navigation menu with options: Battlefield 4, PROGRAMMING, SETTINGS (highlighted), KAMELEON, and SUPPORT. Below this, there are two main sections: PROFILE SETTINGS and COMMON SETTINGS. The COMMON SETTINGS section is currently active and contains the following options: LIFT-OFF HEIGHT, INDICATOR BRIGHTNESS, and ROTAX (highlighted in red). At the bottom of the COMMON SETTINGS section, there are buttons for APPLY ALL, RESET TO FACTORY DEFAULTS, and WINDOWS MOUSE SETTINGS. To the right of the COMMON SETTINGS section, there is a detailed view of the ROTAX tool. This view includes a text explanation: "If you normally hold your mouse at an angle off the normal vertical axis, you may experience slight vertical mouse cursor movement when you think you're just moving horizontally. Use this tool to offset this by rotating the image so that it matches the angle at which you hold your mouse." Below the text is a horizontal scale from -30° to 30° with a vertical line at 0°. Below the scale is a diagram of the RAT 8 mouse with a vertical axis and a horizontal axis, and a semi-circular arc indicating the range of rotation. At the bottom of this detailed view are buttons for UNDO and APPLY. At the very bottom of the software window, there is a footer with the text: Software Version - 1.0.0.0 PMW3360 - Firmware Version - 0114 and a language selection button for ENGLISH.

If you normally hold your RAT at an angle off the vertical axis, you may experience slight vertical RAT cursor movement when you think you're just moving it horizontally. Use this tool to offset this by rotating the image so that it matches the angle which you hold your RAT.

## FLUX Kameleon Overview

The Kameleon page allows you to customize the look and behaviour of the RGB LEDs. These lighting configurations are per-profile, so can change depending on what game or application you are using.



### Key Elements:

1. The left hand side of the page shows a picture of the RAT with a call out to each of the Kameleon lighting zones on the product. When the callout is highlighted red, the corresponding LED can be altered.
2. The right hand side of the page shows the different configuration options.
  - a. LED Colour (Individual) – Each independent lighting zone can be a different colour applied to it.
  - b. Effect Type (Global) – Effects can be assigned to the lighting zones. An effect plays across all LEDs simultaneously.
3. The Apply and Reset buttons function in the exact same way as they do on the Programming and Settings tabs. Apply opens the Profile Menu so that you can upload your profile alterations to a memory slot. The Reset button reverts all of the Kameleon values back to their defaults.

## Configuring the Kameleon Lighting Zones

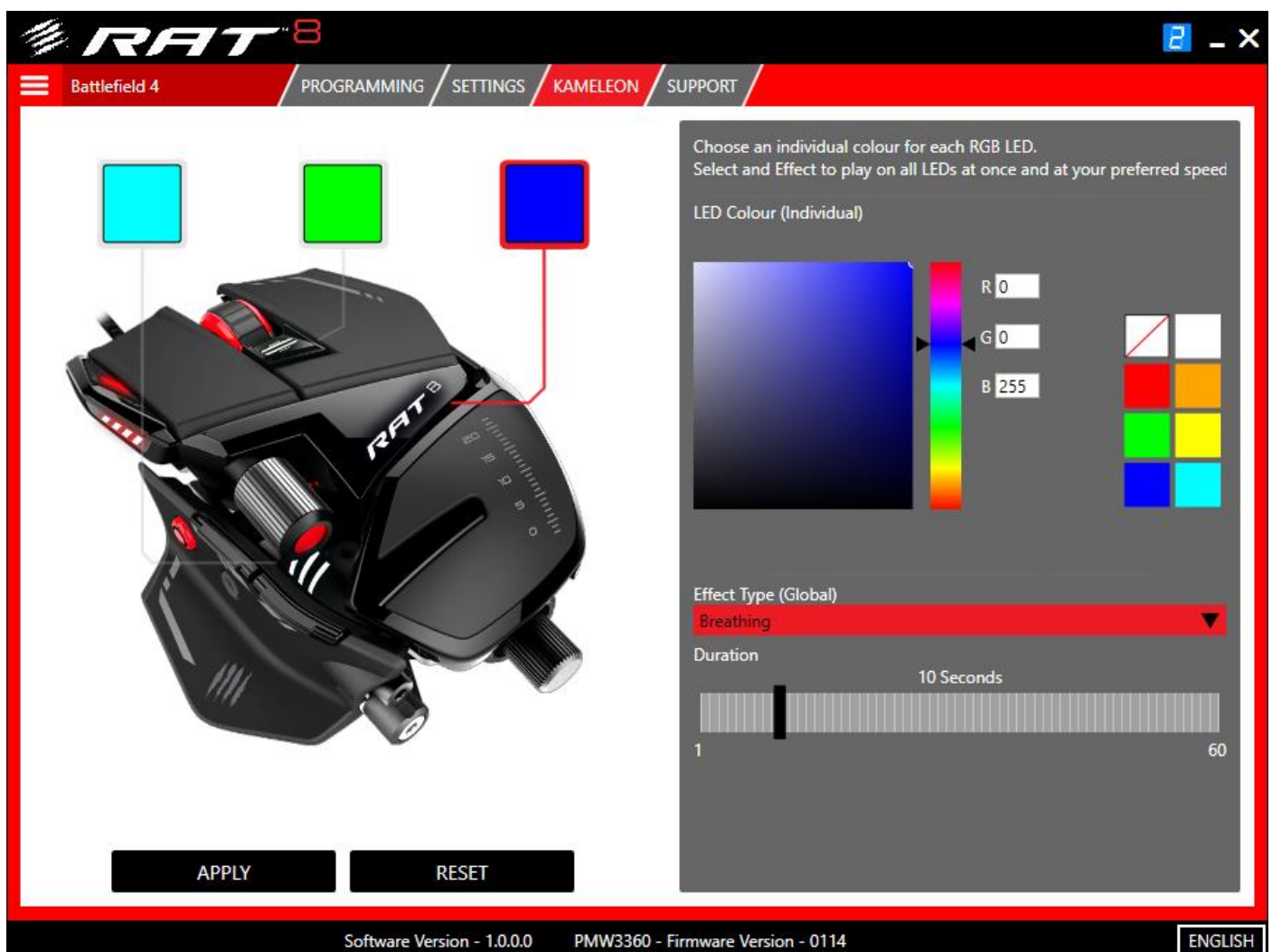
Left-click a Lighting Zone call out and then choose a colour for the zone. Repeat until all zones are set as you want them.

Next, select an effect from the drop down menu.

Effects may have different options associated with them. For example, the Rainbow effect allows you to set the speed and the brightness of the effect.

In the example below, the breath effect has been selected, with a duration of 10 seconds.

Once you are happy with the lighting options click Apply. Select a memory slot and then click the Upload button to update the lighting on the RAT



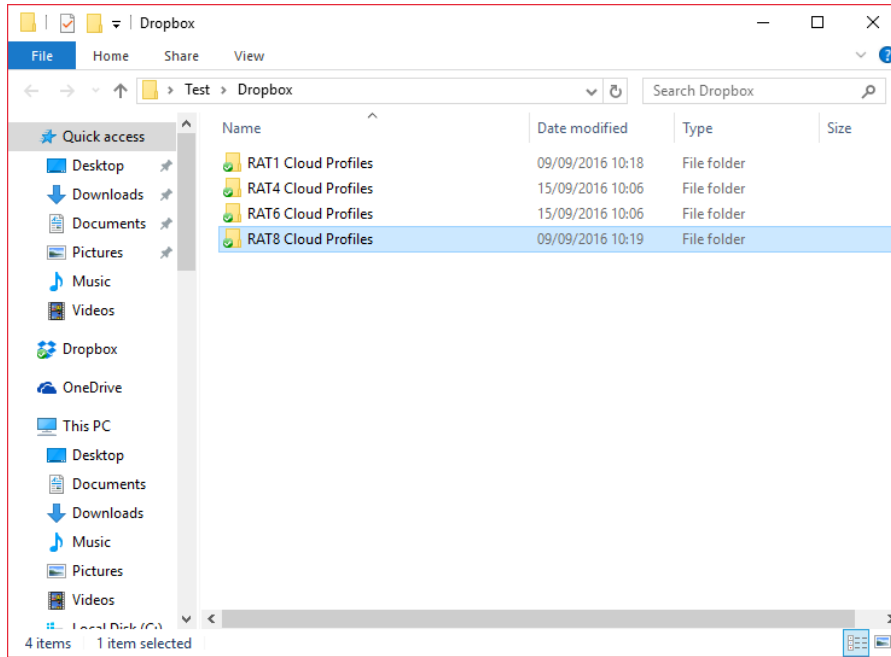
The screenshot shows the RAT 8 software interface. The top navigation bar includes 'Battlefield 4', 'PROGRAMMING', 'SETTINGS', 'KAMELEON', and 'SUPPORT'. The main area features a 3D model of the RAT 8 mouse with three color-coded callouts: cyan, green, and blue. To the right, the 'LED Colour (Individual)' section includes a color picker, RGB sliders (R: 0, G: 0, B: 255), and a color palette. Below this, the 'Effect Type (Global)' dropdown is set to 'Breathing', and the 'Duration' slider is set to 10 seconds. At the bottom, there are 'APPLY' and 'RESET' buttons. The footer displays 'Software Version - 1.0.0.0', 'PMW3360 - Firmware Version - 0114', and an 'ENGLISH' language selector.



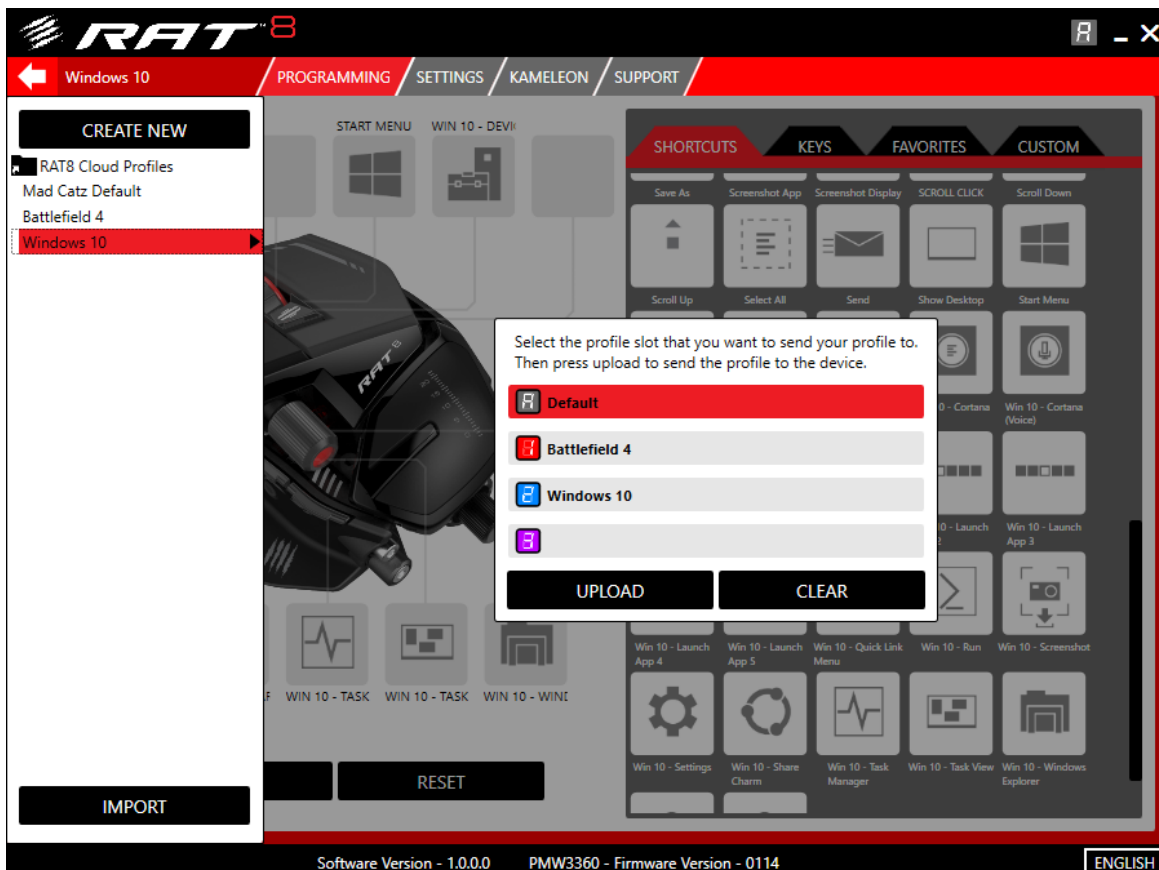
## Cloud Storage Backup

FLUX can work in tandem with most popular cloud storage services (Drop Box, OneDrive, Google Drive etc.). This is really useful for keeping your profiles backed up. In addition, if you use your RAT on multiple PCs, you can always access and use the same profiles.

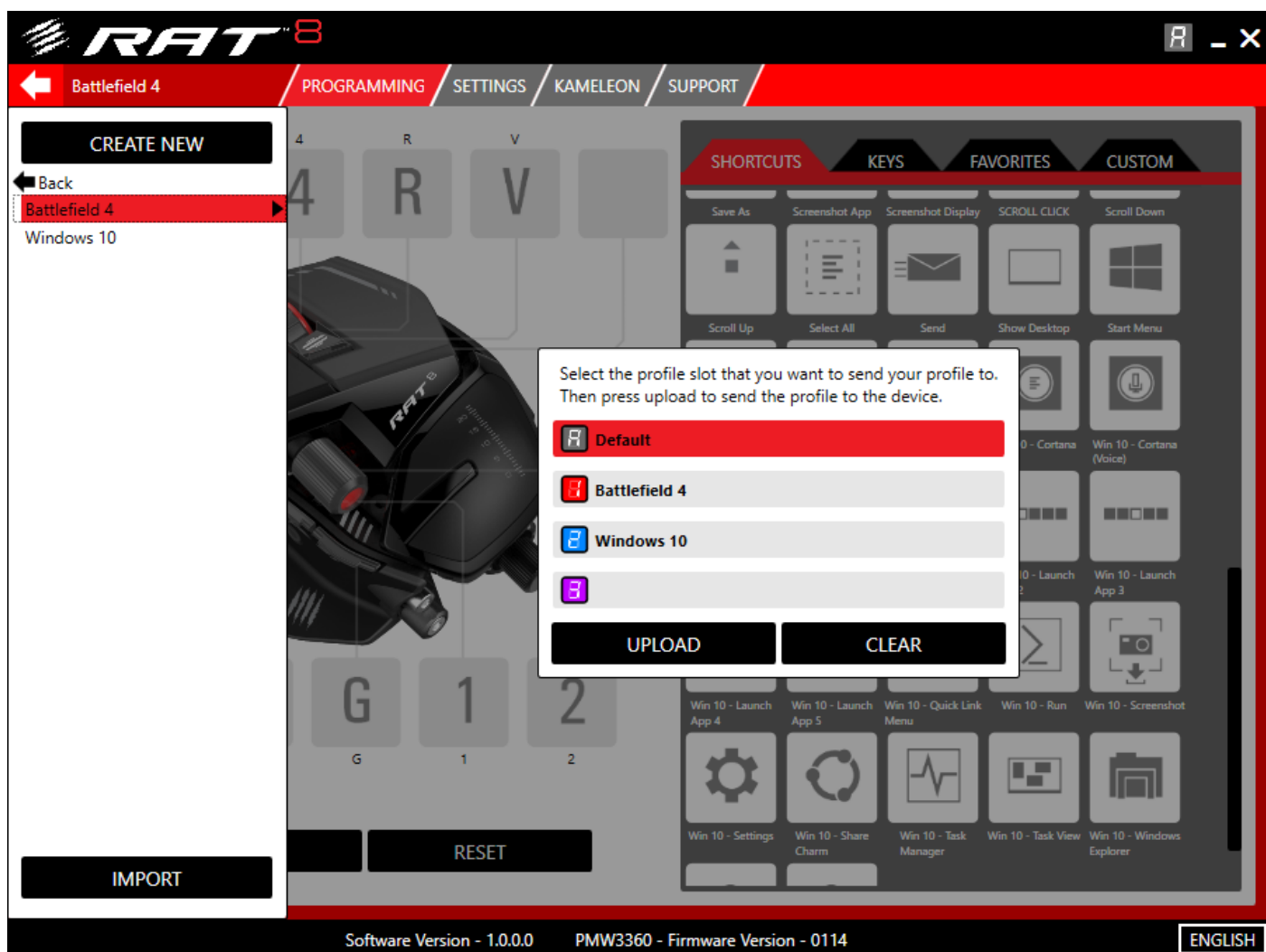
First, locate the folder on your PC that is associated with the cloud service. In the image below, I have created RAT specific folders within the main Dropbox directory.



Next, drag and drop your cloud service folder into the profile list, and it will appear.



Now you can access the cloud folder from within the software. Click the folder to open it. Once the folder is open, you can create and edit profiles, and they will remain consistent across multiple computers that are using the same cloud service.



Click the back button to navigate back out to the main profile folder on your system.

You can always remove the folder link by right-clicking it and selecting the option from the context menu.

## 5. Product Questions

### 1. Does the product support firmware updates?

- Yes. The product is firmware update compatible. If there are any updates to the firmware, Mad Catz will release a firmware update application to update the product.

### 2. Can the Profile button be programmed?

- No. The profile button is locked off from being programmed – and is there to cycle memory slots.

### 3. Can I set a custom profile to be active when my PC boots up?

- Yes. By nature of how the onboard memory works, once a profile has been uploaded to the RAT, it will always be active when the memory slot is selected. So, if you have a custom profile for Windows or your favourite application, just switch to the right memory slot, and the RAT will be ready to go.

### 4. Can the D.P.I., and other product settings be set per profile?

- Yes. RAT settings including D.P.I. and Poll Rate can be set to be different depending on the game or application you are using. Lift-Off and Indicator LED brightness are common settings, and remain the same regardless of what profile is applied.