



User's Manual

Cymouse User's Manual



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(Refer to Appendix C for further detail.)

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Chapter 1

Introduction



Cymouse is a revolutionary 3-D game controller designed to provide you with a new level of game control. Cymouse is a head-worn game controller, so it uses the motion of your head to control games. Because you can use Cymouse as a second set of hands, you don't give up any of your existing game controllers.

You can use Cymouse with any Windows-based game that supports a mouse, keyboard or joystick. Cyprofiler—the software utility that comes with Cymouse—works in conjunction with Cymouse to let you make amazing moves you could have only imagined until now. With Cyprofiler, you can perform one command or a combination of commands—up to 50—with a single head movement!

How It Works

Cymouse tracks the motion and rotation of your head in a 3-D space by sending and receiving an infrared signal to and from a Cymouse sensor attached to your PC. By exchanging information with the sensor, Cymouse knows the exact location of your head in a 3-D space. In the Cymouse world, we call this the “direction”. The direction of Cymouse changes when you move or tilt your head in any direction.

Using Cyprofiler, you can set up commands that are generated when your head moves in each of ten directions. These commands are the same commands that you have set up in your game. For example, if you press the W key to walk during a game, you can set up Cyprofiler to press the W key when you look right. Therefore, when you look right, you will walk during the game.

You can use Cymouse without setting up any commands. In this case, the mouse cursor will simply move in the direction in which you look.

Chapter 2

Installing Cymouse



Requirements

Cymouse must be used with a PC that meets the following minimum requirements:

Hardware

- Pentium II class CPU running at 400 MHz or faster
- 32 MB of RAM
- CD ROM drive
- Available USB port

Software

- Windows 98 Second Edition, or later
- DirectX version 8.0 or later (included on Cymouse Installation CD)

Installation

1. Remove the contents from the Cymouse box and verify that you have one each of the following:

- Cymouse Installation CD
- Cymouse headset
- Cyhub
- Monitor sensor with extra Velcro pad
- USB cable



Cymouse contents (manual and CD not shown)

2. Insert the Cymouse CD into the CD ROM drive of your PC.
3. If the Installation program appears, proceed to step 4. If it does not appear, select Run from the Start menu. In the Run box, enter d:\setup.exe and click **OK** (where d: is the designation for CD-ROM drive).
4. Follow the on-screen instructions in the Installation program.
5. Connect the Cymouse headset cable to the headset port on the Cyhub as shown in figure 2-1.



Figure 2-1. Connecting the Cymouse Headset Cable

6. Connect the monitor sensor cable to the monitor port on the Cyhub as shown in figure 2-2.



Figure 2-2. Connecting the Monitor Sensor Cable

7. Remove the protective plastic and attach the extra Velcro pad to the center top of your computer monitor in the location shown in figure 2-3.



Figure 2-3. Velcro Pad Attached to a Monitor

8. Attach the monitor sensor to the Velcro pad on your computer monitor as shown in figure 2-4.



Figure 2-4. Monitor Sensor Attached to the Velcro Pad

9. Plug the square shaped end of the USB cable into the USB port on the front of the Cyhub, as shown in figure 2-5, and the rectangular-shaped end of the USB cable into a free USB port on your computer.

If you have properly connected the components, the red lamp on Cyhub will be on to indicate that the hub is powered on and the green lamp will be off to indicate that Cymouse is inactive. When Cymouse is active, the green lamp will light.



Figure 2-5. Cyhub USB Port

Calibration

As with any new game controller, you should calibrate Cymouse at least once. This will tell Cymouse approximately how far you are able to comfortably move and turn your head.

1. From the Start menu, select **Settings >> Control Panel**. The Control Panel dialog box will appear.
2. Double-click the **Game Controllers** icon (also called Gaming Options on some systems). The Game Controllers dialog box will appear.
3. Click on Cymouse in the list of available game controllers, and click **Properties**. The Properties dialog box will appear.
4. Click the **Settings** tab.
5. Click the **Calibrate** button.
6. Follow the on-screen instructions.

Congratulations! Your Cymouse is now calibrated and ready for use.

Quickstart



Cyprofiler by default is set to control the mouse cursor based on the direction in which you look. For example, looking to your left will cause the cursor to move to the left on the screen. The farther you look in one direction, the faster the cursor will move.

1. With Cymouse placed on your head, open Cyprofiler from your PC desktop. The main screen (shown in figure 3-1) will appear.

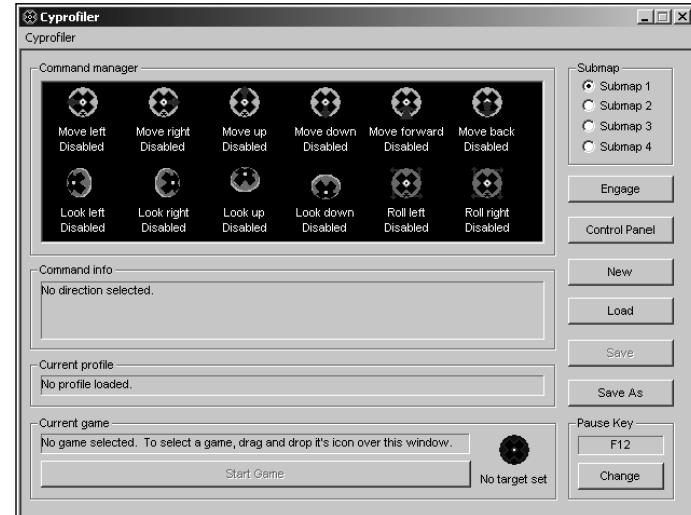


Figure 3-1. Cyprofiler Main Screen

2. Drag and drop the desired game icon from your desktop or from your Start menu anywhere over the Cyprofiler window. (This is a game icon you use to start the game.)
3. Click the **Change** button in the Pause Key frame to set a pause key. *See 'Note' below for more pause key information.*

4. When the on-screen keyboard appears, click the key you will use to pause Cymouse, and click **OK**.
5. Click **Start Game** to launch the game and activate Cymouse.

During the game, you can use Cymouse for the look left, look right, look up and look down directions. These are the default settings for your Cymouse. To change and customize these settings, refer to Chapter 6, Setting Up Game Profiles.

Note: If you have difficulty controlling the cursor at any time while using Cyprofiler or while setting up your game, use the Pause key to pause Cymouse until you play the game. See page 23 for details about the Pause key.

Cyprofiler Overview



Cyprofiler is a software utility that enables you to fully customize the behavior of Cymouse. Cyprofiler can perform commands that any game can understand:

Mouse buttons clicks. Cyprofiler can generate five unique mouse button clicks: left, middle, right, 4, and 5. (The side buttons on Microsoft's Intellimouse, buttons 4 and 5 are available only when Cymouse is used with Windows 2000 and later.) Although you do not need to use a five-button mouse to be able to generate these commands, you may need to set the commands in the game.

Mouse wheel scrolls. Cyprofiler can scroll the mouse wheel in either direction up or down.

Keystrokes. Cyprofiler can generate any key on the keyboard, with the exception of the Pause key.

For Cyprofiler to generate these commands within a game, you must assign the command to a direction icon in the Cyprofiler command menu screen and set the same command within the game. Once you have set up a profile for a game, Cyprofiler lets you launch that game and the corresponding Cymouse profile—with the single click of the mouse.

Launching Cyprofiler

From the Start menu, select **Programs >> Cymouse >> Cyprofiler**. The Cyprofiler program will execute and the main screen (shown in figure 4-1) will appear.

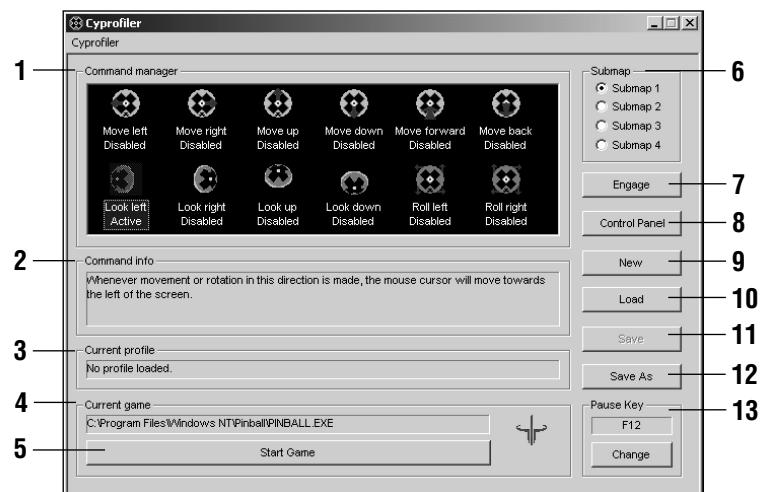


Figure 4-1. Cyprofiler Main Screen

Following is a description of each of the numbered items shown in Figure 4-1.

(1) Command Manager Contains twelve direction icons, each of which represents a distinct motion or rotation in which you can move Cymouse in 3D space. The name of the direction (which describes the direction you must move in order for Cymouse to perform the command(s)) is indicated just below the icon along with either "Active" or "Disabled" to identify if a command is set for that direction. (Refer to "Setting Commands for Direction Icons" in Chapter 7.)

Note: Roll features have been disabled in Cymouse for ergonomic reasons. The Roll Left and Roll Right icons in Command Manager are disabled. An ergonomic study is available at our website.

(2) Command Info	Displays information about the command set to the selected direction icon.
(3) Command Profile	Displays the name of the active (most recently saved or loaded) profile. Profiles are described in Chapter 5, Creating Game Profiles.
(4) Current Game	Displays the active game target. You set the game target by dragging and dropping the icon used to start the game over the Cyprofiler main screen. This action simply provides information to Cyprofiler about the game; it does not move the icon from its original location.
(5) Start Game	Activates Cymouse and starts the game that is set as the game target. This becomes active only after you have set the game target.
(6) Submap (Map 1 through Map 4)	Enables the use of up to four different control schemes to be changed "on the fly" while playing the game. (For details, see "Submaps" in Chapter 7, Advanced Settings.)
(7) Engage/Disengage	Engage turns on Cymouse, while Disengage turns off Cymouse.
(8) Control Panel	Opens the Windows Game Controllers (also called Gaming Options) applet so that you can calibrate Cymouse. (Calibration is described in Chapter 2, Installing Cymouse.)
(9) New	Creates a blank profile.
(10) Load	Opens a saved game profile.
(11) Save	Saves the current game profile.
(12) Save As	Saves the current game profile as a new profile.
(13) Pause Key	Sets the Pause key that enables you to pause Cyprofiler during a game. The Change button lets you change the selected key.

Chapter 5

Creating Game Profiles



A game profile contains all the commands for each available direction, as well as information about the game associated with the profile. Profiles are stored on your hard drive using the .cpf extension.

Several pre-defined profiles for popular PC games are provided on the Cymouse CD ROM. You can use these profiles as provided, customize the profiles for your own game play, or set up new profiles. In fact, there is no limit to the number of profiles you can create and store.

After you have created a new game profile, or to modify an existing game profile, you will assign commands to the Cymouse direction icons identified in the Cyprofiler main screen. Steps for assigning commands are described in the next chapter.

Creating a New Profile

1. Click **New** to create a blank profile in which the Mode setting in every command is set to No Output. (If you have not saved the current profile, you will be prompted to do so before the settings are reset for a new profile.)

Loading an Existing Profile

1. Click **Load**. (If you have not saved the current profile, you will be prompted to do so before you load the profile.) The Open dialog box will appear.
2. Click the profile (*.cpf) you wish to load from the list provided and click **Open**. The name of the current profile will appear in the Current Profile field.

Saving a Profile

1. Click **Save** to save your current profile and its settings.

or

1. Click **Save As** to save your current settings as a new profile name.
2. When the Save As dialog box appears, enter the new name for this profile and click **Save**. The name of the current profile will appear in the Current Profile field.

SPEED TIP: You can open Cyprofiler by double-clicking the icon of a saved profile in Windows Explorer. Doing so will make Cyprofiler load that *profile* during its startup process. That means you'll be able to press the Start Game button as soon as the main interface appears.

Chapter 6

Setting Up Game Profiles



In this chapter, you'll learn how to set up a game profile, including assigning a game to a profile, setting the pause key and setting commands for a direction icon.

Assigning a Game to a Profile

1. Drag and drop over the Cyprofiler window the icon of the game for which you wish to create a profile. As shown in figure 6-1, the directory location of the game appears in the Current Game field, the game icon appears to the right of this field, and the Start Game button becomes active.

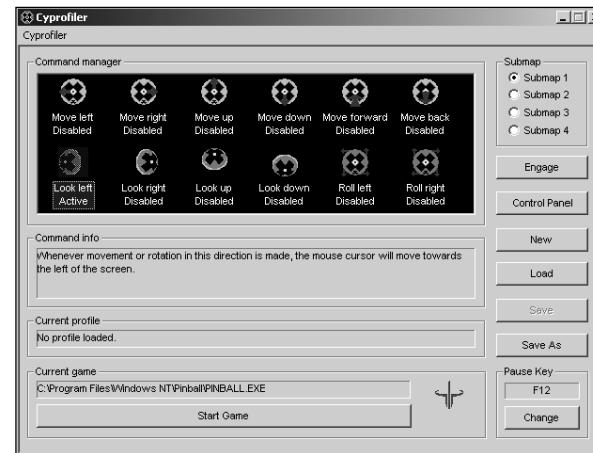


Figure 6-1. Game Information Displayed in Cyprofiler

2. At this point, you can start the game and use Cymouse for the look left, look right, look up and look down directions. Simply click **Start Game** to launch the game.

Setting the Pause Key

You can set up a pause key that will let you pause Cymouse while playing a game. You still have full control over all of your other peripheral devices while Cymouse is paused.

1. From the Cyprofiler main screen, click **Change**. The on-screen keyboard will appear to enable you to select a key.
2. Select a key and click **OK**. The name of the selected key will appear in the Pause Key field in the Cyprofiler main screen.



Figure 6-1. Example of the Pause Key Set for the F12 Key

Setting Commands for Direction Icons

Within a game profile you can set a command or series of commands that can be performed when Cymouse passes a trigger point. Ten (10) different direction icons can be used as follows:

Move Left – Move your entire head to the left of the center point.

Move Right – Move your entire head to the right of the center point.

Move Down – Move your entire head downward from the center point.

Move Up – Move your entire head upward from the center point.

Move Forward – Move your entire head straight toward the monitor.

Move Backward – Move your entire head straight back from the monitor.

Look Left – Turn your head to the left without moving your head away from the center point.

Look Right – Turn your head to the right without moving your head away from the center point.

Look Up – Look up without moving your head away from the center point.

Look Down – Look down without moving your head away from the center point.

Roll Right – Tilt and move your head right to the right of the center point. (This function is disabled for head-mounted devices.)

Roll Left – Tilt and move your head to the left of the center point. (This function is disabled for head-mounted devices.)

To assign commands to a Cymouse direction follow these steps:

1. Open the Command Settings Dialog Box

Double-click on one of the Cymouse direction icons (shown in figure 6-1) to open the Command Settings dialog box for that direction as shown in figure 6-2. With the exception of the Direction indication in the title bar, this screen is identical for each direction.

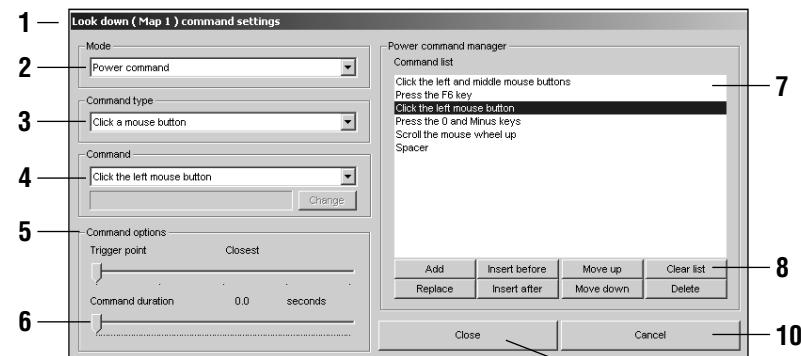


Figure 6-2. Cyprofiler Command Settings Dialog Box

(1) Title Bar

Indicates the direction and map to which you are currently making changes. In the example, changes are being made to the Look Down direction, Map 1.

(2) Mode

Determines the method Cyprofiler will use to generate commands for the direction.

(3) Command Type

Determines the type of command to be performed.

(4) Command	Determines the actual command to be performed. A description of the command will appear in the field just below the Command pull-down menu. The Change button enables you to change the command after it has been set.
(5) Command Options	Contains slider controls used to set options for the selected command. The available sliders change dynamically depending on the mode you have selected.
(6) Command Duration Slider	The bottom slider in the Command Options frame is used to adjust two settings. The settings depend on the Mode selected: a) When in Rapid-Fire mode, the setting of the lower slider will determine the interval between firing. The slider will have a caption that reads "slowdown"; b) When in Pattern Fire or Power Command mode, the setting of the lower slider is used to set the duration of each individual command in the list.
(7) Power Command Manager	Displays the individual commands set for a Power Command or Pattern Fire mode.
(8) Power Command Edit Buttons	Enable you to set up and modify the list of commands for Power Command or Pattern Fire commands.
(9) Close	Saves changes made in the Command Settings window and returns you to the main screen.
(10) Cancel	Erases any changes made to the command since it was saved.

2. Select a Mode

From the pull-down Mode menu (shown in figure 6-3), select the method Cyprofiler will use to generate commands for the direction. Each menu option is described in the table 6-1. After you select a mode, the options for the selected mode will become active.

Note: The Power Command Manager box on the right side of the screen becomes active only if Power Command or Pattern Fire is selected. These modes are described in detail the next chapter.

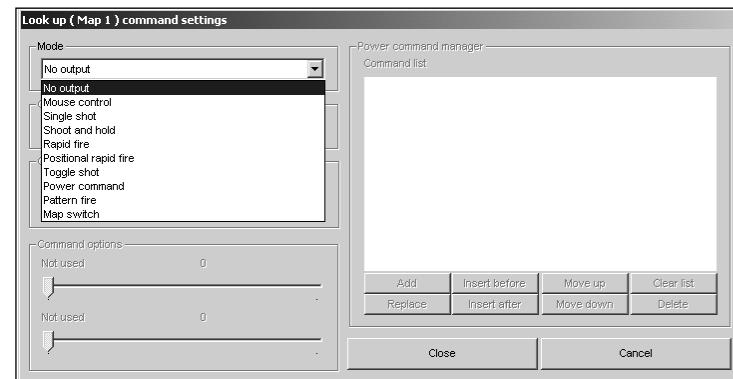


Figure 6-3. Mode Pull-Down Menu

Table 6-1. Descriptions of Modes

Mode	Description
No output (Default)	Tells Cymouse to ignore everything pertaining to this direction. This mode should be used to eliminate directions that you don't want to use, as nothing will happen when this direction passes the trigger point.
Mouse control	This mode allows you to set any directional output to any of four directions of cursor motion (look up, look down, look left, or look right). Your existing mouse will continue to function while in this mode.

(continued on following page)

Mode	Description
Single shot	Presses and immediately releases the specified mouse button or key each time Cymouse passes the trigger point. In the case of mouse wheel output, Cyprofiler will tick the wheel in the specified direction for mouse wheel output.
Shoot and hold	Presses and holds the specified mouse button or key when Cymouse makes an outward pass of the trigger point. When Cymouse makes an inward pass of the trigger point, Cyprofiler releases the mouse button or key.
Rapid fire	Repeatedly sends the specified command at a rate determined by the Slowdown slider when Cymouse makes an outward pass of the trigger point. When Cymouse makes an inward pass of the trigger point, the command stops.
Positional rapid fire	When Cymouse makes an outward pass of the trigger point, repeatedly sends the specified command at a rate determined by the distance between Cymouse and the center point. The farther away Cymouse is from the center point, the faster Cyprofiler will repeat the command. The command stops when Cymouse makes an inward pass of the trigger point.
Toggle shot	Presses and holds the specified mouse button or key when Cymouse makes an outward pass of the trigger point. Cyprofiler releases the mouse button or key when Cymouse makes another outward pass of the trigger point.
Power command	Sends up to 50 individual commands in sequence when Cymouse makes an outward pass of the trigger point. Each command in the Power Command list has its own timing setting. (This mode is described in detail in Chapter 7, Advanced Settings.)

Mode	Description
Pattern fire	When Cymouse makes an outward pass of the trigger point, repeatedly sends up to 50 individual commands in sequence until Cymouse makes an inward pass of the trigger point. Each command in the Pattern Fire list has its own timing setting, allowing you to adjust the timing. (This mode is similar to Power Command, except that it repeats while your direction is past the trigger point. This mode is described in detail in Chapter 7, Advanced Settings.)
Map switch	Switches to the next map for the profile in the order indicated for that direction. (This mode is described in detail in the Chapter 7, Advanced Settings.)
	After you have selected a mode all related menus, sliders, and buttons will become active. All unrelated items remain disabled.

Note: Changing the mode will erase all other settings made for this direction. For instance, if you change the mode from Power Command mode to Rapid Fire mode, the list of commands that you have set up for the Power Command mode will be erased and cannot be retrieved. (See Appendix A for more Mode and Command Type details.)

3. Select a Command Type

From the pull-down Command Type menu select the type of output. The options available will be determined by the mode you have selected. The complete list of options for the Command Type include:

Click a mouse button – Clicks the selected mouse button. After choosing this Command Type you must select the mouse button from the Command pull-down menu.

Press a key – Presses the selected key. As soon as you select this Command Type option, the on-screen keyboard shown in figure 6-4 will appear to enable you to select the key. Click a key, then click **OK** to close the keyboard.

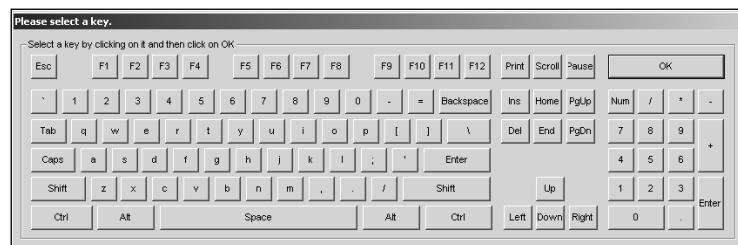


Figure 6-4. On-Screen Keyboard

Click multiple mouse buttons – Simultaneously clicks the selected mouse button. When you select this Command Type option, the Select Mouse Buttons dialog box (shown in figure 6-5) will appear. Select the buttons that are to be clicked and click **OK**.

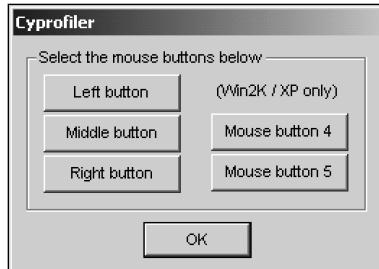


Figure 6-5. Select Mouse Buttons Dialog Box

Press multiple keys – Simultaneously presses the selected keys. As soon as you select this Command Type option, the on-screen keyboard will appear to enable you to select the keys to be pressed. A dialog box will appear to ask if you would like to set another key after you have selected two keys. If so, click **Yes**. When you are finished, click **No**.

Scroll the mouse wheel – Scrolls the mouse wheel. After choosing this Command Type you must select a direction (up or down) from the Command pull-down menu.

Spacer – Inserts a delay between Power Commands. (This Command Type is available only for Power Command and Pattern Fire modes, which are described in Chapter 7, Advanced Settings.)

Use 2 maps, Use 3 maps, Use 4 maps – Switches to the next map. (Maps are described in the Chapter 7, Advanced Settings.)

The Command Types available for each mode are shown in the table 6-2 and described in detail in Appendix A.

Table 6-2. Command Types for Each Mode

	Mouse Control	Single Shot	Shoot & Hold	Rapid Fire	Positional Rapid Fire	Toggle Shot	Power Command	Pattern Fire	Map Switch
Click a mouse button		X	X	X	X	X	X	X	
Press a key		X	X	X	X	X	X	X	
Click multiple buttons		X	X	X	X	X	X	X	
Press multiple keys		X	X	X	X	X	X	X	
Scroll mouse wheel		X		X	X		X	X	
Use 2 maps									X
Use 3 maps									X
Use 4 maps									X
Spacer							X	X	

4. Select a Command

If you selected Click a Mouse Button or Scroll Mouse Wheel in the Command Type menu, select the command for the direction from the pull-down Command menu. For all other Command Types, the command is automatically entered for you during the Command Type selection or is not available as an option. In these cases, the Command field will be gray.

5. Set the Command Options

The Command Options sliders change dynamically depending on the mode you have selected. Following is a description of each Command Option slider:

Trigger Point – If you selected any mode but Mouse Control, move the Trigger Point slider to adjust the trigger point for that direction (from Closest to Farthest). The Trigger Point is the point along the axis that determines the distance in which you must move your head to trigger a command. This slider (shown in figure 6-6) determines how far you must move your head in a certain direction to perform a command.

You should always adjust the Trigger Point so that it is comfortable and natural to perform the gestures needed to use Cymouse.

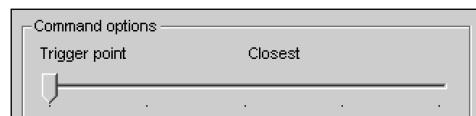


Figure 6-6. Trigger Point Slider

Each command available has a *Trigger Point* setting. The way in which each available Mode uses a *Trigger Point* is described in table 6-3. An outward pass occurs when you move away from the center point and pass a *Trigger Point*. An inward pass occurs when you move toward the center point and pass a *Trigger Point*.

Table 6-3. Command Types for Each Mode

Mode	Passing outward...	Passing inward...
No output	Not used in this mode.	Not used in this mode.
Mouse control	Not used in this mode.	Not used in this mode.
Single shot	Triggers a command.	Does nothing.
Shoot and hold	Toggles the command to its down or pressed state.	Toggles the command to its up or released state.
Rapid fire	Triggers repeating commands.	Stops repeating commands.
Positional rapid fire	Triggers repeating commands.	Stops repeating commands.
Toggle shot	Toggles the command to either down or up alternatively.	Does nothing.
Power command	Triggers the commands in the Power Command list from top to bottom once for each pass.	Does nothing.
Pattern fire	Triggers and repeats the commands in the Power Command list from top to bottom.	Stops the commands after the last command in the list has been performed.
Map switch	Triggers Cyprofiler to switch to the next available <i>Submap</i> .	Does nothing.

Command Duration – If you selected Power Command or Pattern Fire mode (described in Chapter 7, Advanced Settings), move the Command Duration slider (shown in figure 6-7) to set the duration of each individual command in the list.

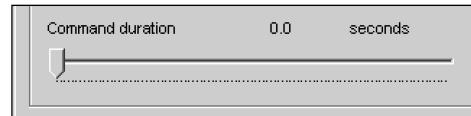


Figure 6-7. Command Duration Slider

Sensitivity – If you selected Mouse Control mode, move the Sensitivity slider (shown in figure 6-8) to adjust the response speed (or sensitivity of the mouse), from slowest to fastest. The sensitivity of Cymouse works in the same way as the sensitivity of a desktop mouse.



Figure 6-8. Sensitivity Slider

Slowdown – If you selected Rapid Fire mode, move the Slowdown slider (shown in figure 6-9) to determine the interval (in milliseconds) between each command.

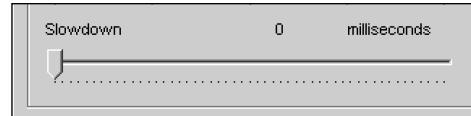


Figure 6-9. Slowdown Slider

6. Save Your Settings

Click **Close** to exit the Command Settings dialog box, then click **Save** from the main screen to save the settings in the current game profile. If you do not click **Save** the command settings will not be saved in the current profile.

Advanced Settings



Cyprofiler lets you make advanced settings to provide even more control over Cymouse. These settings include:

Power Commands – Send up to 50 commands that will be executed in sequence, once or in rapid fire mode, when Cymouse moves in the assigned direction.

Submaps – Assign up to four maps for each game profile that you can switch to, on the fly, during a game.

Power Commands

A Power Command or pattern fire command is a user-defined sequence of commands that you can perform with a single head movement. In Power Command mode Cyprofiler generates the commands ONCE for each outward pass of the trigger point. In Pattern Fire mode, the sequence of commands set up for that direction will REPEAT continuously as long as Cymouse remains to the outside of the trigger point. Returning to center discontinues Pattern Fire.

To set up Power Commands, you will use the Power Command Manager on the right of the Command Settings dialog box (shown in figure 7-1).

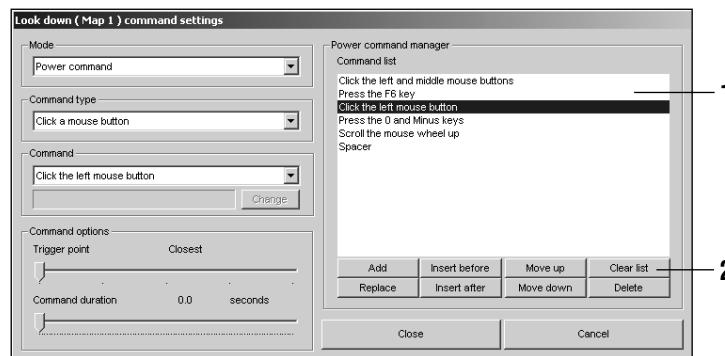


Figure 7-1. Power Command Manager

The Power Command Manager consists of:

(1) Command List	Contains the list of commands set for the Power Command or Pattern Fire commands.
(2) Edit Buttons	Consists of eight buttons that enable you to set up and modify the list of commands for Power Command or Pattern Fire commands.

Setting Up Power Commands or Pattern Fire

1. Double-click the direction icon to open the Command Settings screen.
2. From the Mode pull-down menu, select Power Command (to perform the sequence of commands once) or Pattern Fire (to repeat the sequence of commands).
3. From the Mode pull-down menu, select Power Command (to perform the sequence of commands once) or Pattern Fire (to repeat the sequence of commands).
4. Move the Trigger Point slider to set the trigger point for the command.
5. Select a Command Type from the Command Type pull-down menu. If you select Spacer, proceed to step 7.
6. Select a command if required.
7. Move the Command Duration slider to set the duration of the command.

8. Click **Add** to insert the command to the bottom of the Power Command list.
9. Repeat steps 4 through 8 until you have added all the desired commands to the Power Command list.
10. When you have finished adding commands to the list click **Close** to save your changes and exit to the main screen. Figure 7-2 provides an example of a completed Power Command list.
11. Click **Save** to save the Power Command settings in the current profile.

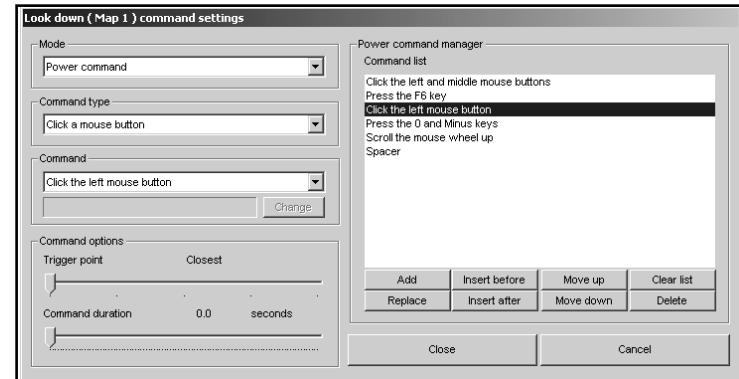


Figure 7-2. Sample Power Command List

To perform the Power Command, simply move your head in the direction you have set for the Power Command, far enough to pass the trigger point. Note that the Pause key will have no effect on Cyprofiler while it is performing a Power Command or Pattern Fire command.

Editing the Power Command List

Left-click on a command in the list to edit the Power Command list. The available buttons at the bottom of the list will become active. Following is a description of each button in the Power Command Manager area:

Button	Click to...
Add	Add the current command to the end of the list.
Replace	Replace the selected command with the current command.
Insert Before	Insert the current command before the selected command.
Insert After	Insert the current command after the selected command.
Move Up	Move the selected command up one line.
Move Down	Move the selected command down one line.
Clear List	Clear the entire list of commands.
Delete	Remove the selected command from the list and shifts up all commands below.

Submaps

A Submap contains one set of commands for each available direction. The active Submap can be switched during use (or cycled through in cases where more than two Submaps are used). The active submap is determined by the selection in the Submap field (indicated in figure 7-3) on the Cyprofiler main screen.

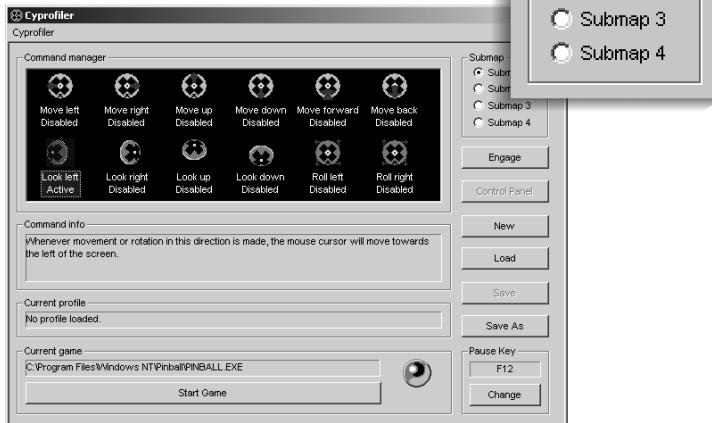


Figure 7-3. Submap Buttons

Setting Up Submaps

When using the Submap feature, you need to set one of the directions to perform the switch. When you pass the trigger point to perform a map switch, the commands mapped to each direction (except the one you switch with) are changed immediately to the commands in the next Submap.

To set up Submaps in your profile:

1. From the main screen, select a submap (as shown in figure 7-3).
2. Double-click the direction icon you want to use for switching submaps.
3. From the Mode pull-down menu, select **Map Switch**.
4. From the Command Type pull-down menu, select the number of maps (two, three or four) you wish to use. The Map Ordering dialog box shown in figure 7-4 will appear.

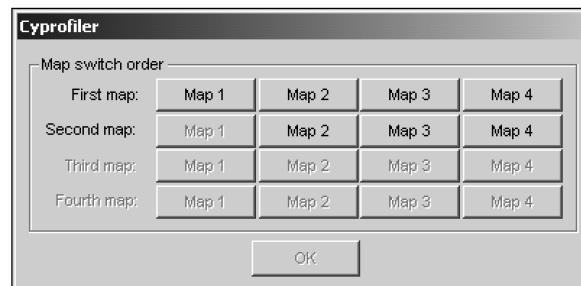


Figure 7-4. Map Ordering Dialog Box

5. Select the submaps you wish to cycle through in order from top to bottom. The selection in the "First Map" row will be the map you start on after engaging Cymouse.
6. Click **OK**.
7. Adjust the Trigger Point setting as desired.
8. Click **Close** to save your changes.

Chapter 8

Troubleshooting



Changing the Submap Order

At any time, you may change the order in which the *Submaps* are switched or cycled through by doing the following:

1. Select the submap you wish to change in the upper right corner of the main interface.
2. Double-click on the direction icon currently set to Map Switch mode.
3. To change the number of *submaps* you are using, open the Command Type pull-down menu and select the choice that reflects the number of *submaps* you want to use.

or

To change the order in which the *submaps* are switched or cycled through, click **Change**.

4. From the Map Ordering dialog box, select the *submaps* you wish to switch or cycle through in order from top to bottom. As you select a map, the buttons directly below each selection will become unavailable.
5. Click **OK**.
6. Click **Close** to save your changes.

This section will attempt to help you resolve issues with Cymouse and Cyprofiler. If you are unable to resolve the problem after reading through this section, please do not hesitate to call our Customer Support department at 1-808-875-0555.

Cymouse

Problem	Cause(s)	Solution(s)
You've successfully installed the software and plugged in the hardware. When you try to play a game, Cymouse does nothing.	The most likely cause is that the game may not natively support Cymouse.	Use Cyprofiler.
You're game may not be set to use Cymouse.		Go through the control options for your game and use Cymouse to set the commands you want it to perform by moving or turning your head in the desired direction.
You've successfully installed Cymouse; however, it is difficult to control.	The game's settings for Cymouse may be set improperly.	In the control options for your game, adjust basic settings such as <i>sensitivity</i> and <i>dead zone</i> to accommodate Cymouse. These settings usually are available in most games that support game controllers.
While trying to play a game using Cymouse, neither it nor your regular joystick works.	If you are not using Cyprofiler, the game may be trying to use Cymouse as the game controller that provides input.	Use Cyprofiler, as it will not let games use Cymouse as the primary joystick when running.
Cymouse may be set to Controller ID 1.		Open the Control Panel through Cyprofiler and re-arrange the Controller IDs so that Cymouse is not set to ID-1.

Cyprofiler

Problem	Cause(s)	Solution(s)
You receive a DirectX error when you start Cyprofiler.	DirectX 8 may not be installed properly.	Reinstall DirectX 8.0 or later, either from the Cymouse Installation CD or from the Microsoft website.
You've opened Cyprofiler and dragged your game icon over the interface. When you press Start Game , the mouse cursor becomes difficult to control.	Cymouse might be out of the <i>dead zone</i> when you press Start Game .	Use the Pause key (if set) to temporarily pause Cymouse. Adjust the headset on your head until it doesn't move when you un-pause Cymouse.
You've set up some commands in Cyprofiler, but none of them work in a game.	Your <i>sensitivity</i> settings may be set too high.	Double-click on each of the direction icons set to Mouse Control mode and slide the <i>sensitivity</i> slider slightly to the left. Repeat until you find the desired <i>sensitivity</i> setting.
	Cymouse may not be <i>calibrated</i> .	<i>Calibrate</i> Cymouse. Refer to the instructions in Chapter 2, Installing Cymouse.
	The commands you've set are not consistent with those set in the game.	Check that the commands set in Cyprofiler match those set in the game. If they don't match, change one of them so that they do match.
When you press the assigned Pause Key, it seems to have no effect.	The <i>Trigger Point</i> setting could be either too far or too close.	Adjust the <i>Trigger Point</i> settings for each command that encounters this problem. Start by setting the trigger point in the middle of the slider control and work your way inward from there.
	Cyprofiler is in the middle of performing a Power Command or Pattern Fire command.	Wait until the Power Command or Pattern Fire command has finished and try again.
You want to change the commands for a direction after you've started the game.		If the game can be safely minimized, you can change the commands for a direction. Simply minimize the game and double-click on the direction icon that you wish to change.

Problem	Cause(s)	Solution(s)
You've never used anything like Cymouse before. Where can you go for help?		You can go to the Cymouse Underground website for help. There are help forums available at the site. For additional information, see Appendix C.
You can't make your cursor move.		Simply restart Cyprofiler. The default startup settings set Cyprofiler to move the mouse cursor. Press Engage to see exactly how it moves.
Your Cymouse headset does not fit comfortably.	The headset may need to be stretched to accommodate the size of your head.	Stretch the headset to fit. Refer to the instructions in Appendix B.
You don't have a free USB port on your PC.	Your computer has no USB port.	Install an add-in card that provides additional USB ports.
	All of the USB ports on your computer are in use.	Install a USB hub that provides additional USB ports.
How do you turn off Cymouse?		Press Disengage in the main interface of Cyprofiler.
Do you have to make a new profile every time I use Cymouse?		No. You can save and retrieve profiles to and from your hard drive.

Mode and Command Type Reference



Following is a detailed reference that provides the list of Command Types available for each mode in the Command Settings screen.

Mouse Control Mode

There are no Command Types associated with this mode. After selecting Mouse Control mode, you choose the direction in which Cyprofiler should move the mouse cursor from the Command pull-down menu. The four directions available are: left, right, up and down.

Single Shot Mode

The following Command Types are available with Single Shot mode:

- **Click a mouse button** – simulates a single click of a mouse button.
- **Press a key** – simulates a single press of a key.
- **Click multiple mouse buttons** – simulates clicks of up to five different mouse buttons simultaneously.
- **Press multiple keys** – simulates up to four keys being pressed simultaneously.
- **Scroll the mouse wheel** – simulates a single tick of the mouse wheel, either up or down.

Whenever Cyprofiler simulates keystrokes or mouse button clicks in Single Shot mode, the key or button is pressed and then released immediately. In the case of mouse wheel scrolling, the wheel is simply ticked once, as it is a *stateless* feature of the mouse.

Cyprofiler simulates a Single Shot command only when your position passes the *Trigger Point* set in the command.

Shoot and Hold Mode

The following Command Types are available with Shoot and Hold mode:

- **Click a mouse button** – simulates a single click of a mouse button.
- **Press a key** – simulates a single press of a key.
- **Click multiple mouse buttons** – simulates clicks of up to five different mouse buttons simultaneously.
- **Press multiple keys** – simulates up to four keys being pressed simultaneously.

Whenever Cyprofiler sets the state of a mouse button or key in Shoot and Hold mode, it does so in the following manner:

- If your position is beyond the direction's *Trigger Point*, the state is set to resemble the key or button being held down.
- If your position is not beyond the *Trigger Point*, the state is set to resemble the key or button being up in its un-pressed state.

Rapid Fire Mode

The following Command Types are available with Rapid Fire mode:

- **Click a mouse button** – simulates a repeated clicks of a mouse button.
- **Press a key** – simulates repeated presses of a key.
- **Click multiple mouse buttons** – simulates repeated clicks of up to five different mouse buttons simultaneously.
- **Press multiple keys** – simulates repeated presses of up to four different keys.
- **Scroll the mouse wheel** – simulates constant scrolling of the mouse wheel in either direction.

In Rapid Fire mode, Cyprofiler repeats a Single Shot mode command over and over. The rate at which it repeats the command is adjustable using the Slowdown slider (which becomes available when this mode is selected). The Slowdown setting determines the interval of time in milliseconds between each repetition.

Positional Rapid Fire Mode

Positional Rapid Fire mode differs in only one way from Rapid Fire mode: in this mode the interval between repetitions is derived from the distance between your *position* and the *Trigger Point*. Your *position* must be beyond the *Trigger Point* for Cyprofiler to begin commands.

Toggle Shot Mode

The following Command Types are available with Toggle Shot Mode:

- **Click a mouse button** – toggles the state of a single mouse button.
- **Press a key** – toggles the state of a single key.
- **Click multiple mouse buttons** – toggles the states of up to five mouse buttons simultaneously.
- **Press multiple keys** – toggles the states of up to four keys.

In Toggle Shot mode, the state(s) of the key(s) or mouse button(s) are toggled whenever your *position* passes the *Trigger Point* setting in the command.

Power Command Mode

The following Command Types are available with Power Command mode:

- **Click a mouse button** – simulates a single click of a mouse button.
- **Press a key** – simulates a single press of a key.
- **Click multiple mouse buttons** – simulates the clicks of up to five different mouse buttons simultaneously.
- **Press multiple keys** – simulates the presses of up to four different keys simultaneously.
- **Scroll the mouse wheel** – simulates scrolling of the mouse in either direction. When used, the mouse wheel is ticked once.
- **Spacer** – creates a delay in the playback of the Power Command. The length of the delay is adjustable via the Duration slider (which becomes available in this mode). There are no Command Types associated with the Spacer Command Type.

Pattern Fire Mode

Pattern Fire mode has the same Command Types as Power Command mode. The only difference between the two modes is in how the commands are performed. A Power Command is performed once while a Pattern Fire command is repeated as long as your position is beyond the *Trigger Point*.

Map Switch Mode

The following Command Types are available with Map Switch mode:

- **Use 2 Submaps** – switches between two of the four *Submaps*.
- **Use 3 Submaps** – cycles through three of the four *Submaps*.
- **Use 4 Submaps** – cycles through all four *Submaps*.

Map Switch mode is different from all other modes. When used, it changes the *active Submap* whenever your *position* passes the *Trigger Point* set in the command. Each *Submap* can hold a set of commands (one for each direction). The *active Submap* determines the set of commands that are currently being performed by Cyprofiler at any point in time. Changing this causes Cyprofiler to start using the commands stored in the new *active Submap*.

Note that whenever you use Map Switch mode, the direction you choose will not be available to perform commands and can only be accessed when *Submap 1* is selected on the main interface.

Adjusting the Headset

Appendix B

The Cymouse headset can be adjusted for a more comfortable fit. To increase the size of the headset, simply stretch the headset comb over the Cymouse retail box (front side forward as shown in figure 4-1), or other apparatus of similar size and shape, but not larger than 9" in width, length or height. First stretch the headset overnight to a maximum of 9" and try for comfort. Repeat this process as needed, without exceeding the 9" maximum increase in size.

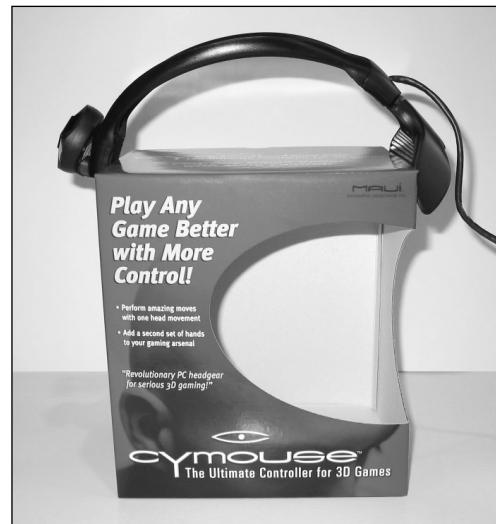
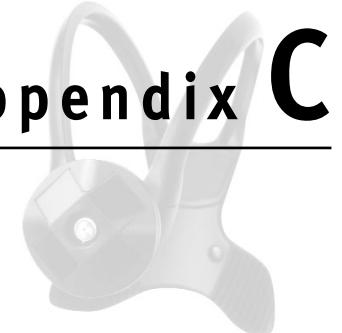


Figure 4-1. Stretching the Cymouse Headset

Additional Product Information



About Us

Maui Innovative Peripherals develops and markets revolutionary 3D navigational controllers used for precision movement in PC computer gaming, assistive technologies, CAD, and other innovative applications.

Based on the Hawaiian island of Maui, Maui Innovative Peripherals has taken advantage of the island's thriving high tech community to put together a talented group of professionals to design and perfect navigational products that will change the way people use computers. Founded in 1999, Maui Innovative Peripherals is a privately-held company.

Cymouse Underground

www.cymouse.com/CymouseUnderground.htm

Cymouse Underground, home of Team Cymouse, is a premiere on-line community for gamers of all ages. Whether you are casual player searching for a good tip, or an enthusiastic cyber athlete looking for a useful move to perfect, Cymouse Underground is for you.

On Cymouse Underground, you can post in the forums, review the Power Command archives, download new game profiles, and find command cheat sheets for many popular games. In the Cymouse Underground chat room, you'll have the chance to meet and bond with people who have similar interests. We encourage everyone to showcase their cool new Power Commands and get the latest information about how they work.

With a chat room and news group related specifically to Cymouse, the Cymouse Underground lets you:

- Meet other Cymouse users and compare profiles
- Share gaming secrets and strategies
- View new profiles as they become available
- Engage in live chat
- Download the latest drivers
- And much, much more

30-Day Money-Back Guarantee

Cymouse includes a thirty-day (30) money back guarantee. If your Cymouse does not perform as advertised or expressed by Maui Innovative Peripherals, Inc., contact Maui Innovative Peripherals within thirty-days for a full refund of the purchase price.

In order to return or exchange Cymouse, you must contact us toll free at 1-808-875-0555 or send email to return@maui-innovative.com within 30-days of your original purchase to obtain a Return Merchandise Authorization (RMA) number from Maui Innovative Peripherals, Inc.

Cymouse must be returned in the original packaging with all of the original parts, including the user guide. Proof of purchase is required. A copy of the original dated receipt must be included with the unit. The RMA number must be printed clearly on the outside of the package. Please note: Any shipping and/or handling charges on the original order cannot be refunded.

Maui Innovative, Inc. is not responsible for shipping costs or damage on returned items. Units to be returned should be packed carefully. Maui Innovative cannot provide credit for a return if receipt cannot be confirmed. We recommend that you use a delivery service that can be tracked and or insured.

Customer Support will provide you with all necessary shipping information for return of the product.

FCC Statement

15.21 Information to user.

Modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device was tested and found to be fully compliant with BS EN55024 (1998), EN61000-3-2 (1995 w/A1 & A2 1998), EN61000-3-3 (1995 w/A1 1998), BS EN55022 (1998) Class B, VCCI (April 2000) Class B, FCC Part 15 Subpart B Class B, CISPR 22 (1997) Class B, ICES-003 Class B (ANSI C63.4 1992) & AS/NZS 3548 (w/A1 & A2 1997) Class B.



Glossary

Axis	The plane, in 3-D space, that defines position. In 3-D space there are three planes: X, Y, and Z. Each of these forms an axis.
Binding	The action of specifying the key you want to use to perform a function or command within a game.
Center Point	See Dead Zone .
Command	A signal, movement or gesture that sends a control function to the computer.
Cymouse Power Command	A sequence of keystrokes, mouse clicks and mouse wheel scrolls used to perform a "move" or specific event with a single head gesture.
Dead Zone	The point in 3-D space where each of the axes intercepts each other. This is also called the Center Point .
Direction	The term used in Cyprofiler to describe either side of each axis in relation to the Center Point .
Infrared	A narrow frequency band of light that is invisible to the human eye. Commonly used in remote control wands.
Mouse Look	A method of controlling your in-game perspective using your mouse.
Pitch	The rotation along the RY-axis, accomplished by looking up or down.
Roll	The rotation along the RZ-axis, accomplished by tilting your head towards your shoulders.

Sensitivity	The amount of time it takes for Cymouse to respond to your head motions.
Submap	An object that holds the commands settings for each direction. Cyprofiler provides four of these with every profile and even allows you to switch through them in-game.
Trigger Point	A Cyprofiler setting which controls the location of the point in space that you must pass to trigger a command. Each axis has two of these.
Yaw	The rotation along the RX-axis, accomplished by turning your head left or right.

A	Click a mouse button Press a key Click multiple mouse buttons Press multiple keys Scroll the mouse wheel Use 2 maps Use 3 maps Use 4 maps Spacer Commands Assigning commands to Cymouse Directions Control panel Cyhub Cymouse headset Adjusting the headset Cymouse Underground Cyprofiler
B	Binding
C	Calibration CD-ROM Center Point Command Command Duration Command Info Command Manager Command Options Sensitivity Trigger point Rapid fire speed Command duration Command Profile Command Settings Command Type
D	Dead Zone Disengage



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