



Adaptive Computing Lab

Overview of the QuadJoy™ Input Device

The QuadJoy is an alternative mouse input device. It uses a USB port and should be recognized by the computer immediately. It requires no software installation for it to function as a mouse. A quadriplegic user will probably have to have an on-screen keyboard to enable keyboard input with the QuadJoy. This may be the Windows on-screen keyboard or any number of after market programs.

Information on the QuadJoy™ device is available at:
www.quadjoy.com.

Downloadable PDF documents are available in the Support section. There are documents dealing with Hardware Setup, Operating Instructions, and Cleaning Instructions.

Navigation

The QuadJoy uses a “straw” or “stick” that is manipulated by the user as a navigational tool.

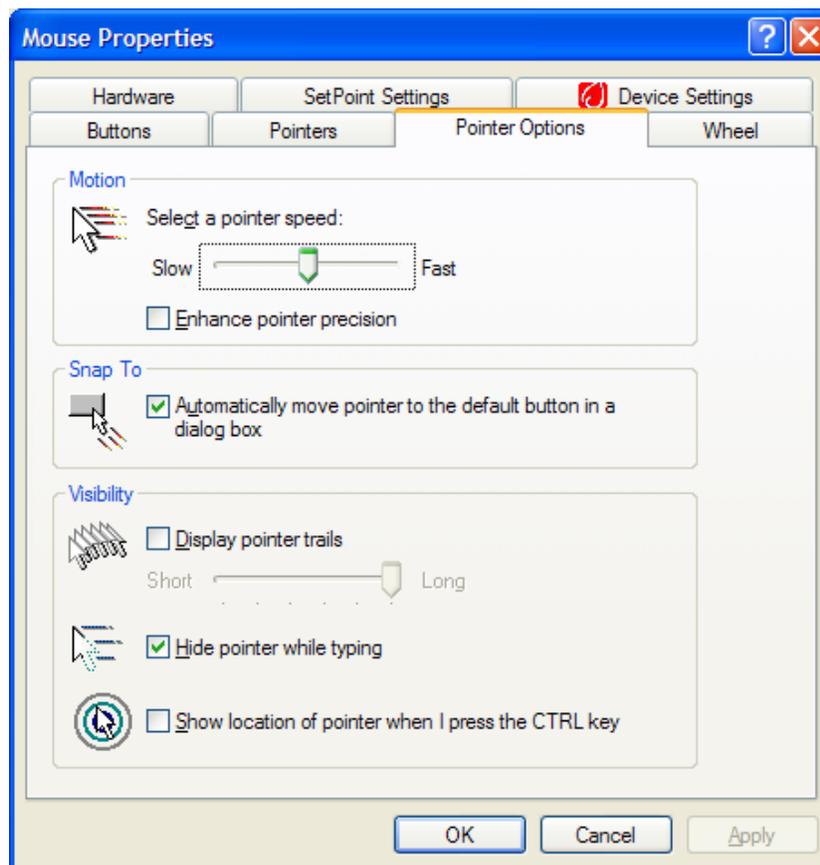


Movement of the stick up, down, left and right will move the cursor on the computer screen. The user may manipulate the stick with the tongue, lips, chin, etc. The stick may be moved in any direction in a 360° pattern, it is not limited to the four

“compass” direction points. It is designed to function with very little movement of the stick; a small movement to the left will make the cursor go to the left and it will continue in that direction until the stick is returned to its original, neutral position. If the stick is pushed further from its neutral position the speed of the movement is increased.

When first learning to use the QuadJoy, you should probably slow down the cursor speed. In a Windows operating system you should go to the Control Panel and changing the speed setting under the Mouse Properties panel: Pointer Options tab.

An example of the setting in Windows XP is shown below. The slide bar allows the speed to be changed. While you are there you should make sure that the Snap To box is checked as this is a beneficial function for QuadJoy users.



As the user develops their personal style of navigation and is more adept, the speed can be readjusted.

Mouse Click Emulation

Left click: the stick which controls navigation also functions as a “sip and puff” switch. To perform a left mouse click you quickly sip on the straw for about ½ second. You will notice that a green light shows the switch activation.

Double left click: this requires a double sip. This action should begin abruptly and be done quickly but if it is done too quickly it will register as a single click. If the user has problems the Double Click Speed setting may be altered in the Mouse Properties panel: Buttons tab.

Right click: to perform a right mouse click you abruptly puff on the straw for about ½ second. The right light shows switch activation.

Scrolling: rather than an abrupt, short puff...the scrolling puff should start slowly and be prolonged. When performed properly, the yellow light will go out and no lights should turn on. A prolonged sipping will cause an upward scrolling and a prolonged puffing will cause a downward scrolling.

If the user struggles with the sip and puff action there are a number of mouse emulation adaptive software programs that might be beneficial.