

# Paramecium Keyboard Controls:

Use these keyboard shortcuts to fine tune the Paramecium Symphony's audio and visual display on the computer screen.



**m** = Less sensitive: the more you push this, the more movement it takes to trigger a sound



**p** = More sensitive: the more you push this the less movement it takes to trigger a sound



**q** = Makes the outline around each paramecium thicker by 1 pixel each time you push it



**a** = Makes the outline around each paramecium thinner by 1 pixel each time you push it



**z** = Will change the paramecium outline from blue to pink ~ pink to blue



**y** = Each time you press "y" it increases the size that an object must be to be recognized by the computer vision. This could be useful if your sample has a lot of bacteria in it and they are triggering the sounds. By using the 'y' and 'h' keys to increase and decrease the minimum size of the objects the computer vision sees you can tune it to see only larger organisms.



**h** = Each time you press "h" it decreases the size that an object must be to be recognized by the computer vision. The default is that the computer vision only detects moving objects with an area of 100 pixels or more. Pressing the "y" and "h" buttons will increase or decrease this number by a factor of 10 each time it is pressed.



**f** = increase the delay between notes by 5 milliseconds : if the sound is choppy the program might be trying to play more notes at once than the computer can handle. Press F to increase the delay between notes by 5 milliseconds. Press it as many times as needed until the issue is fixed.



**c** = decrease the delay between notes by 5 milliseconds : pressing c will decrease the delay between sounds being played by 5 milliseconds each time pressed.