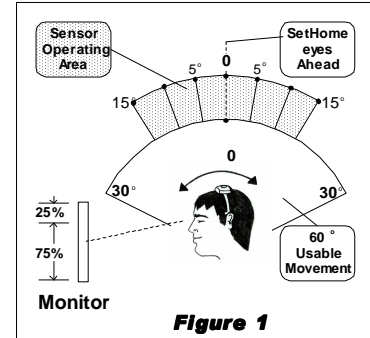


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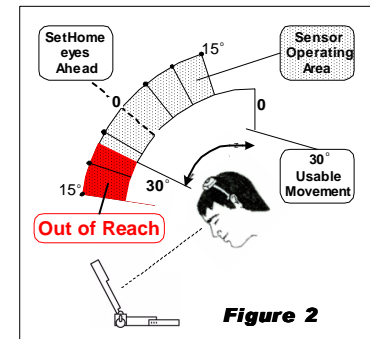
Notebook Mechanics

This Operational Note discusses the “mechanics” (geometry) of using a sensor* positioned on the head, with a computer display not directly in front of the user’s face. For best performance, LaZee Tek recommends its products to be used within standard ergonomic guidelines if at all possible. In situations where it is not, the following may provide insight into operational characteristics. (* Sensor is located inside the LaZee Mouse & in eeZee Mouse Body sensors)

Notebook users working with the notebook on their lap, or others with monitors not directly in front of their face can have unusual positioning issues that need understanding. The standard ergonomic guideline shown in **Figure 1**, typically allows the user a +/- 30° flexion in each direction, with the screen in view over the entire range. This configuration provides ample space for sensors with a large Range of Motion (ROM), possibly +/- 15°. Home is often set at the 0 center position as shown.



Unless stated otherwise, this example will discuss a notebook positioned on the user’s lap, as shown in **Figure 2**. The mechanics of this example can also apply to other situations, where monitors are positioned low or high. When the user sets Home while looking straight on at the monitor, they are nearly at the end of their forward movement. Upward cursor movements will operate as usual; however, tilting forward for downward control finds most of the necessary travel **out of reach**. When monitors are positioned high, the opposite will occur. An alternate method of setting Home is all that is needed to remedy these situations.



Moving the head up and down, the user should find a comfortable range of movements that allow seeing the screen adequately. The center of this travel is where they should set “Home”, as shown in **Figure 3**. This will provide the user the best performance of up/down movements. Drawbacks to this method are an increased angle looking at the display during upward movements, and the possibility of not reaching maximum speeds in sensors with very large ROM settings. Neither prevents operation, although performance may be affected.

While the best answer to this situation is to bring the display closer eye level, there are alternatives if that is not possible. Using a sensor with a smaller ROM setting can alleviate both issues. LaZee Mouse units can be programmed/reprogrammed at the factory for a smaller ROM. eeZee Mouse units have a user adjustable ROM control.

Customers having problems of this nature with any of our units should contact us for support. We will be happy to reprogram any unit under warranty at no cost. If unit is out of warranty, we can reprogram it for a reasonable fee.

