Team eyeCU

User Manual

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**Introduction**

Congratulations! You are now a proud owner of the eyeCU vision based cursor control system.

The eyeCU provides a human-computer interface which allows its user to control the computer cursor with eye movements. This technology has many applications; however, the focus of this system is to enable individuals with limited mobility to easily interact with technology. The system design employs a pair of glasses with an infrared video camera to capture the position as well as the motion of the user’s gaze. To increase the spectral contrast between the salient features of the eye, a near-infrared light array will illuminate the eye. The device processes the images collected by the camera in real-time to generate the corresponding cursor movement which is transmitted wirelessly to the computer.

The eyeCU offers two modes of operation. Mode one consists of using ‘eye gestures’ to control the cursor movement on a computer. In this configuration, when the eye looks left for example, the cursor will move to the left and stop when the eye moves back to the center. Mode two provides an intuitive set of commands in which the cursor follows the position of the user’s gaze on the computer display.

**What’s in the box**

* Glasses with camera module
* Battery
* Computer module
* CD
  + Proprietary software and drivers
  + Digital copy of this user manual
* USB cable

**Instructions for use**

1. Using a PC running Windows XP/Vista/7, plug one end of the USB cable into the computer module and the other end into an available USB port on the PC.
2. Insert the CD and follow the step-by-step instructions to install drivers.
3. Insert the provided battery into the glasses module.
4. To open the cursor control computer software, click on Start>Programs>eyeCU>Cursor Control.
5. Select tracking mode.
6. Click on connect and verify that the status bar indicates that the device is working properly.
7. Follow the on-screen calibration instructions.
8. After calibration, the software will minimize to the task bar. The device is now ready for use.