# EyeLinkServer

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## 1 How it works

Coordinates: (0,0) is the center of the screen. Positive values going to the right and up respectively. The auto reset event named EyeServerDone is signaled after server startup and when a "stop" command finishes (this may take some time when an .edf file is transferred).

#### 2 Commands

Commands are sent through the named kernel32 pipe EyeServerPipe.

#### 2.1 General Commands

- [00 0 0] stop recording. If a fie was specified in the start command, a file selection dialog will open. You may spefify a destination for the .edf or abort the dialog (then the .edf will not be copied).
- [00 0 0 filename] stop recording (and copy .edf to the specified file).
- [00 0 1 width height] set screen size. This command is not needed if the EyeLink . INI files contain valid entries.
- [00 0 2] start recording without .edf
- [00 0 2 filename] start recording. The filename has to be specified with the extension (.edf) included. Note that this specifies the name of the file on the remote EyeLink computer. The filename is resticted to 8 characters (plus extension). Consider to always use the same filename. This will prevent the remote disk from filling up over time.
- [00 0 3] remove transformation
- [00 0 3 x0 y0 x1 y1] set coefficients (single precision floating point) for a linear transformation
- $[00\ 0\ 3\ x0\ y0\ x1\ y1\ x2\ y2]$  set coefficients (single precision floating point) for a quadratic transformation

# 2.2 Target Creation

Each target creates two named manual reset kernel32 event objects: nameIn and nameOut. These events are set when the eye position enters or leaves the target region. You have to read the key of the newly created target as a 16 bit unsigned integer after issuing these commands.

[00 1 x y r name] create circular target with radius r at position (x,y). x, y, r are single precision floating point values.

### 2.3 Target Commands

[kk 0] remove target.

[kk 1] force target to generate Out events on blinks.