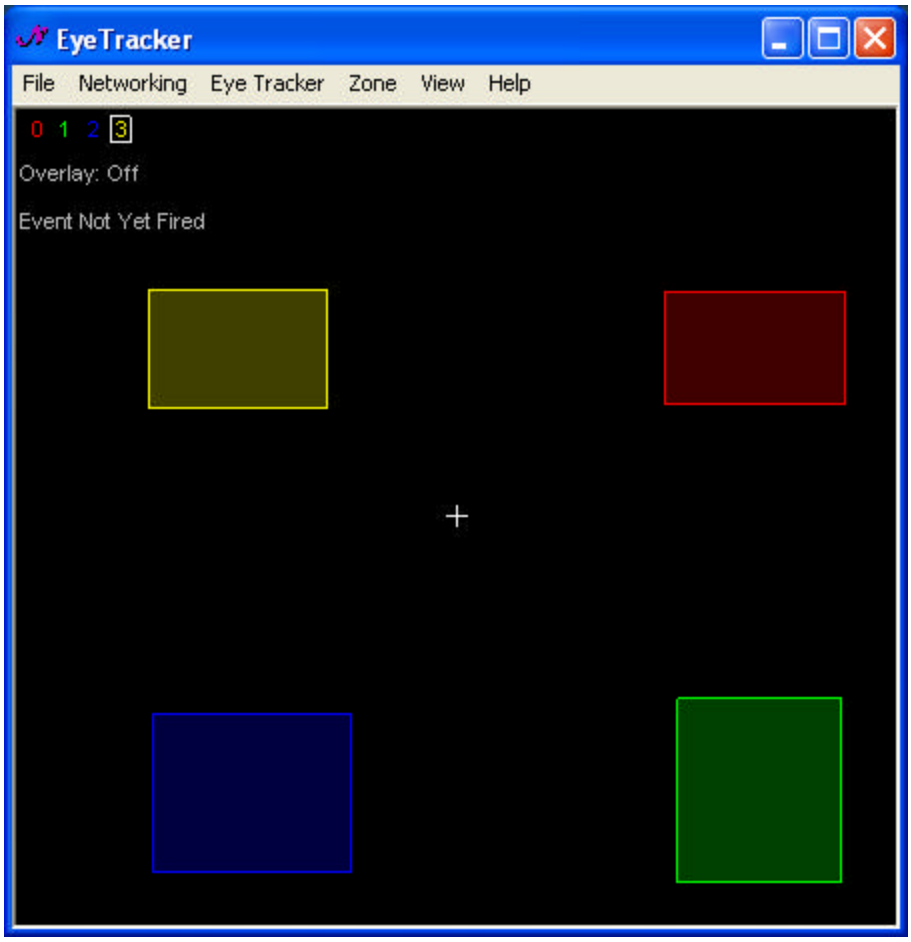
Neuralynx
High Density Electrophysiology Recording Systems



Eye Tracker Users Manual

Eye Tracker Users Manual

Document Revision 1.0
Last Revised 3/16/05

© Neuralynx, Inc.
2434 N. Pantano Rd. Tucson, AZ
Ph: 520.722.8144 Fax:520.722.8163
www.Neuralynx.com
support@Neuralynx.co

INTRODUCTION

General Overview

The Eye Tracker in an online data analysis program. The program connects to the Cheetah Acquisition System and receives online data from two CSC channels. The two CSC channels act as the x and y coordinate values for a crosshairs display. The crosshairs represents the focal position of the research animal. Rectangular zones may be created, positioned and resized anywhere in the display. The crosshairs is then tracked through out the display posting an event to the Cheetah Acquisition System every time a zone in entered or exited.

CHAPTER 1 – Program Window

Menu

The Eye Tracker menu consists of six choices as follows:

- File – Exit the program
- Networking – Manage the NetCom connection with the server.
- Eye Tracker – Data Source Selection
- Zone – Creation of Rectangular Zones.
- View – Manage the viewing window for the display.
- Help – View information about the program

Display Window

This is the main and only viewing area for the application. The crosshairs focal point and rectangular zones are displayed and interacted in this window. There are also three text displays that appear in the window.

1. Box Count List – A list showing the number of boxes created and the color associated with each box.
2. Overlay Display – denotes weather overlay mode is on or off.
3. Last Event Fired – This will show the event that was last fired based on zone entry or exit. This will display "Event Not Yet Fired" if an event has not yet been posted.

Chapter 2 – Zones

Zone Manipulation

Zone Creation

To create a zone, click *Insert Zone* under the *Zone* sub menu or press the *Insert* key on the keyboard. This will insert a zone in the middle of the display window.

Zone Positioning

To reposition a zone, move the mouse cursor over the desired zone. The mouse icon will change from an arrow to a compass like cursor. The zone can then be dragged by pressing the left mouse button and holding it down to reposition the zone anywhere within the display window. Release the mouse button to set the new position of the zone.

Zone Resizing

Zones may be resized by dragging the borders of the zone. All for sides and corners can be dragged using the mouse. Under no circumstances should one side of the zone be crossed over another side of the zone. This will cause the zone to become unuable.

Chapter 3 – Miscellaneous

Networking

To receive online data for our crosshairs display, a network connection must be established between the Eye Tracker and the Cheetah Data Acquisition Application. This may be a direct connection to Cheetah or an indirect connection via the Neuralynx Data Router. To make a connection to a server such as the Router or Cheetah, select *Connect to Server* from the *Networking* menu. This will bring up a small dialog box in which a computer name or IP address must be entered. This will then connect the Histogram Program to the server. To disconnect from the server, select *Disconnect from Server* from the *Networking* menu. In the event that the objects within Cheetah change or do not exist at the time a connection is made, select *Update Cheetah Real Time Objects* from the *Networking* menu. This will get the latest set of objects from Cheetah and update those objects within the Histogram program.

Selecting Data Sources

To configure the data sources for the crosshairs display, make a network connection to a server (see above). Then select *Select Data Sources* from the *Eye Tracker* sub menu. This will bring up a small dialog box in which a *Cheetah Object* may be selected from a drop down list. Once two objects have been selected, click the *OK* button and the sources will be set.

View Settings

To set the view settings select *Set View Parameters* under the *View* sub menu. This will bring up a dialog box and which the left, right, top and bottom view values may be modified.

Overlay Mode

Overlay mode may be turned on and off from the *View* sub menu. If overlay is turned on, overlay shows a history of the last 10000 coordinates.