

CinePlex Change Log (Last updated 8/6/10)

Version 3.1.0

CinePlex Studio

New Features:

Integrated operation with OmniPlex in a similar manner to Rasputin.

The CPS license enabling Standalone operation (without Rasputin or OmniPlex) has been implemented. A small Remote Control Unit is required.

Pike cameras are enabled and will operate at up to 100 frames per second.

MJPEG files recorded by other systems can now be played, tracked, analyzed for behavior and re-recorded as MPEG files.

System can read and write files with 320x240 resolution in addition to 640x480 resolution.

Minor Changes:

The real time DVT file option has been restored.

Performance enhancements.

Tools have been added to reset all cameras connected to the system or to close all source files in use.

File naming has been simplified to handle remote and local recording and renaming more consistently.

Version 3.0.1

CinePlex Studio

New Features:

Angles are now definable as wedges around the target angle – whether an absolute or a relative defined direction. All angles are now computed within a range +/- 180 degrees

An option to change an object's track color to the color of the static zone

Minor Changes:

Many sliders and other adjust mechanisms for cameras have been changed to make them more user friendly

An option has been added to File Mode allowing the playback of recorded data from the file itself

Bug Fixes:

Approximately 90 minor changes have been made to correct small errors, typos, usability issues, and other items resulting from internal testing

CinePlex Editor

New Features:

None

Version 3.0.0

CinePlex Studio

New Features:

Is a normal Windows application and can run on a standard Windows PC with or without a network

Can run on a regular PC in offline mode

Has video capture capability, which can be synchronized with neural recording from the Plexon Multichannel Acquisition Processor (MAP), or Plexon Recorder

Produces standard video AVI files in MPEG format

Allows user-specified prefixes for filenames

Has essentially unlimited AVI file size (Microsoft extension to NTFS format eliminates the 4 GB file size limit)

Has selectable image quality settings by changing nominal bit rate

Records directly to internal hard drive

Has all-digital imaging with one or two Stingray cameras (640x480 resolution, up to 80 frames per second)

Can perform near IR (infrared) tracking

Features Smart Tracking that uses robust algorithms for LED tracking, object contour tracking, and reflective color tracking

Uses strobed words to deliver tracking coordinates directly to the digital input (DI) or a Plexon MAP system

Records position and time data in text files

Analyzes contour motion across adjacent video frames to detect freezing behavior in fear-conditioning experiments

Monitors animal speeds to create digital events when over/under threshold

Monitors vectors between objects to create digital events when within/outside of an angle and tolerance

Allows user to define static and dynamic zones of interest and zone sequences

Monitors objects traversing zones and sequences to generate logical and digital events

Allows user to define combinations of events from one or two cameras to generate digital events

CinePlex Editor

New Features:

Allows integrated viewing of neural data files (Plexon PLX, NEX) and AVI files

Displays tracking position data overlaid on video

Can seek and search based on event markers

Has full digital video recorder (DVR) playback capabilities

Has video-aided insertion of event markers and intervals

Allows removal of temporal segments of neural data during artifact-generating behaviors (chewing, grooming, etc.)

Has the ability to enter and edit position coordinate data from CinePlex Studio

Has the ability to play a sound (standard or user-selected) when event markers or neural spikes occur during playback

Supports Microsoft's extension to NTFS file format to be able to utilize AVI files larger than 4GB

Saves neural data to Plexon (PLX) and NeuroExplorer (NEX) files, or exports to Excel, MATLAB, or text files

CinePlex Extractor

New Features:

Provides offline extraction of selected static and dynamic data from CinePlex video files

Reads any MPEG file created by CinePlex Version 3 or later

Allows selection of a time range or all of the file to be extracted

Allows selection of tab or comma delimited output files with or without header row

Allows selection of desired static data columns

Allows selection of dynamic data columns

Writes text file with selections implemented

Version 2.0.0

CinePlex Capture

New Features:

Capture is now normal Windows application and can run on a standard Windows PC.

Plexon User Interface implemented.

Output file naming convention now complies with the one used by RASPUTIN SortClient (user-specified prefixes (up to three characters) and date in the filename)

User-selectable frame rate decimation for recording AVI files. This is also known as Nth frame recording

Near IR (infra-red) recording and tracking is now an option with suitable cameras and lenses

Many more warning and explanation messages added to help the user with operational knowledge, current status and in making decisions

Message logging files are created and kept for the three latest times Capture has been started.

CinePlex Markup

New Features:

The latest 7.4.0 Sentinel Drivers are included.

Improvements:

Corrected export of trodal data to PLX and NEX files

Version 1.4.0

CinePlex Capture

New Features:

Worked out procedure to eliminate video freezing and tearing on the shuttle by switching display to 70 Hz.

Added capability to delete arena and clear track by right clicking on the video image and selecting an option.

Changed interface with remote control device so that recording cannot be started when certain error conditions, such as "Objects too large", are present.

Bug Fixes:

Settings file fixes for arena transparency, image quality, points to show, filter details.

Minor cosmetic fixes to the GUI.

Corrected several errors that resulted in an object's track being erased, obscured, or left around incorrectly.

Fixed error causing the first timestamp in a DVT file recorded remotely to have a very large positive number.

Fixed error causing an object leaving the arena under certain conditions to be tracked.

Fixed frame count discrepancy - AVI file showed one more frame than DVT file.

Improved contour tracking algorithm to be more sensitive to color contrasts.