Video Tracking Stimulator

model: **VTS-4**
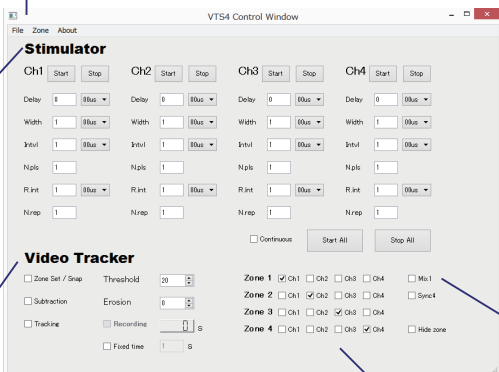

VTS-4 Video Tracking Stimulator is literaly a USB stimulator equipped with a video tracking function, developed for optogenetics experiment. By defining Zones on the video image from a general USB camera, it tracks an animal and outputs pulse trains defined by a dedicated software. Pluse trains can be easily designed by manipulating the stimulation parameters (Delay, Width, Interval, Number of Pulses, etc.) This also can be used as a PC controlled universal 4 channel stimulator. You can establish closed-loop optogenetic stimlation system by combining Teleopto or wired optogenetics system from any third parties.
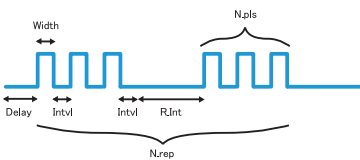

● Software

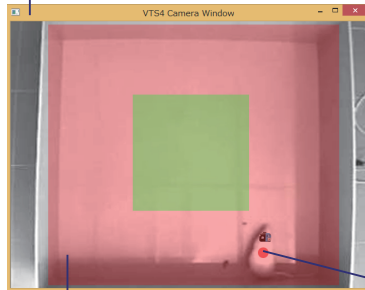Control Window: Controls for stimulation and video tracking
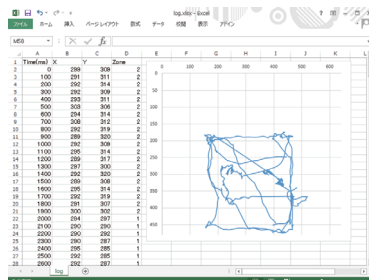

Camera Window: Display for camera images and Zones

Zones: Up to 4 zones can be defined as polygon by clicking the Camera Window.

Stimulator Panel: Defines stimulation parameters.

Stimulation Assignment: Assign stimulation for each Zone.

Track Mark: A red dot is put on the center of the animal detected by background subtraction.

Video Tracker Panel: Zone, snapshot, detection threshold and erosion settings, tracking on/off etc.

Mix Mode: Uses only one output port for stimulation, and stimulation will be swiched in each zone by refering the stimulation parameteres from the same number of channel.

Elapsed time, X & Y axis, Zone data can be recorded by ASCII. Tracks can be visualized by XY plot in Excel etc.