

### Introduction

Muromachi DV-Track is a color video-based animal activity analyzing system included in a personal computer and the software with tracking function is pre-installed. Therefore, an additional PC for data analysis is not required. Further, an image monitor is not needed, either since the images coming from a video camera are displayed in the window of the software. It can be a powerful tool for the assessment of learning and memory using mazes as well as ambulation in an open-field test. Two operation modes are available: (1) Color Extraction (2) Background Subtraction. User can select either operation mode depending upon his experimental environment.

### Features

- Special lighting is no longer required.  
Color tracking eliminates special lighting needed for the conventional black & white tracking. User can perform a test in the ordinary laboratory.
- Remote switch can be used.  
Remote Switch is available for easy START-STOP or entering events. User can enter events nearby the test field away from a PC.
- Preinstalled Events
  - Defecation   ● Urination   ● Grooming   ● Preening   ● Rearing
 On top of the above five events user-defined events can be freely installed.
- The data obtained can be stored as a CSV file.  
The data obtained can be exported to a commercially available statistical software such as Excel or Lotus 1-2-3 and stored as a CSV file.
- User-friendly software  
"Compact VAS/W" is so user-friendly that personnel not experienced in this type of experiments can use without difficulty. Necessary explanations are shown in the window at the lower part of the display.
- A variety of software is available.  
Compact VAS/W" series software is available as below. Test field (maze or water pool etc.) is not Included.

1. Circular Open Field with 25 Divisions
2. Square Open Field
3. Biel Maze (5- T Water Maze)
4. Radial Maze
5. "Morris" Water Maze
6. Elevated Plus Maze
7. Hole Board

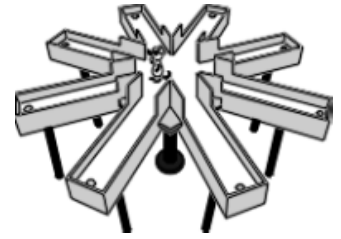
### Square Open Field

Time Traveled, Distance Traveled, Average Travel Speed, Number of Left/Right Turns, Number of Clockwise/Counter Clockwise Revolutions  
Number of Entries into Zones, Latency, Dwell Time in Each Zone  
Defecation, Urination, Grooming, Preening, Rearing, User-defined Additional Events



### Radial Maze

Time Traveled, Distance Traveled, Average Travel Speed, Latency, Number of Correct/Incorrect Entries, Food getting Order, Number of Entries into Each Arm, Dwell Time in Each Zone  
Defecation, Urination, Grooming, Preening, Rearing, User-defined Additional Events



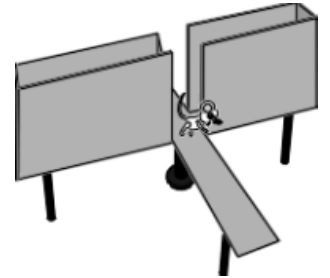
### "Morris" Water Maze

Swim Time, Swim Distance, Average Swim Speed, Number of Entries into Goal Area  
Ratio of Swim Time in Each Zone, Ratio of Swim Distance in Each Zone  
Time Required to Reach Goal, Number of Entries into G1-G3 Areas ( Goal Area and Two Different Radial Concentric Circles ), Search Error



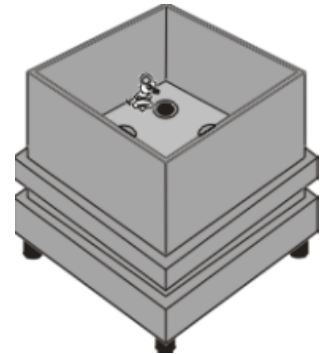
### Elevated Plus Maze

Time Traveled, Distance Traveled, Average Travel Speed, Latency  
Number of Entries into Walled and Un walled Areas, Time from Start to Each Entry into Walled and Un walled Areas  
Defecation, Urination, Grooming, Preening, Rearing, User-defined Additional Events



### Hole Board

Latency, Frequency of Head Dips, Duration of Head Dips  
Time Traveled, Distance Traveled, Average Travel Speed  
Number of Clockwise/Counter Clockwise Revolutions, Number of Right/Left Turns, Number of Entries into Zones, Dwell Time in Each Zone, Number of Rearing, Duration of Rearing Defecation, Urination, Grooming, Preening, Rearing, User-defined Additional Events



### Specification

Model	DV TRACK
Interface	IEEE-1394
Sampling Interval	0.1 sec
Video Format	NTSC
CPU	Pentium4
RAM	512 MB
Operating System	Windows 2000
Camera	3CCD Digital Video Camera