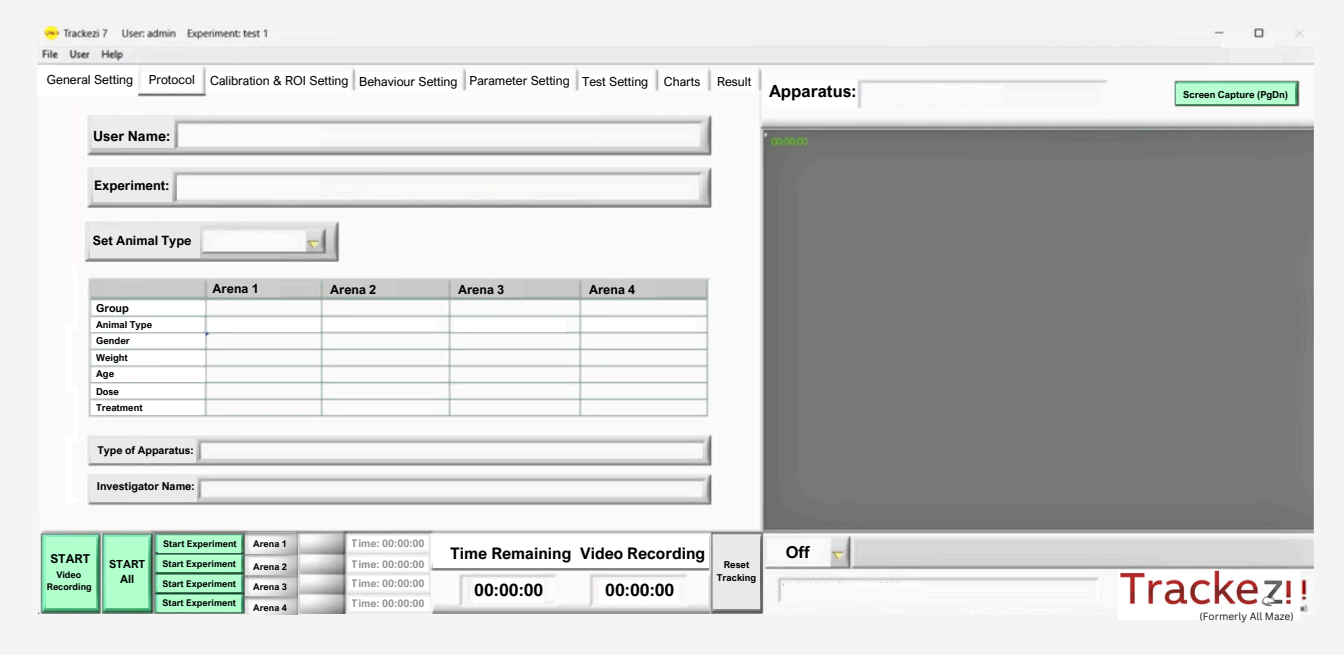
Trackezi Video Tracking Software

(Formerly All Maze Video Tracking Software)

For The Automated Tracking And Analysis Of Laboratory Rodent Activities And Behaviors

Trackezi 7, formerly known as All Maze Video Tracking Software is the most flexible and easy-to-learn software for the automated evaluation of behaviors in the pre-clinical and neuroscience applications. Trackezi software is a state-of-the-art video tracking software that has an easy-to-use design, allowing researchers to automatically record animal activities and movements. Apart from tracking animal, Trackezi offers many more features like grooming, rearing, freezing, curled up and stretch out. In addition to the existing parameters, Trackezi offers freedom for user to set customized parameters as per the experimental requirements. Trackezi has been developed with the daily experimental process in mind, easy-to-use interface, flexible structure fitting the most applications at the same time ensuring data reliability and productivity saving time and resources.



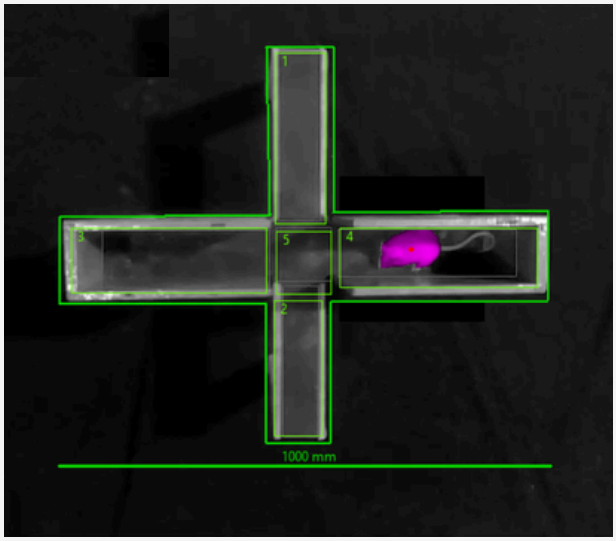
EXPERIMENT SETUP IN 5 EASY STEP

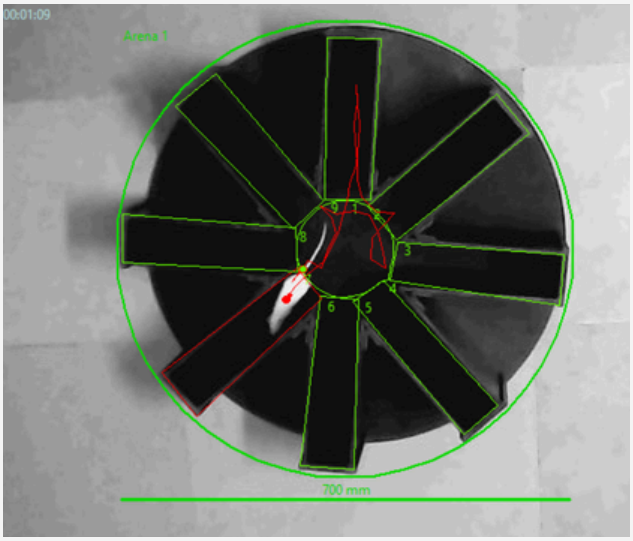
- Enter Protocol Information
- Draw Arena, Regions of Interest & Calibrate
- Set up Behaviour Logics & Select Parameters
- Define Basic Setting and Animal Settings
- Place Subject in the Arena

WHY CHOOSE TRACKEZI

Track effortlessly with accuracy:

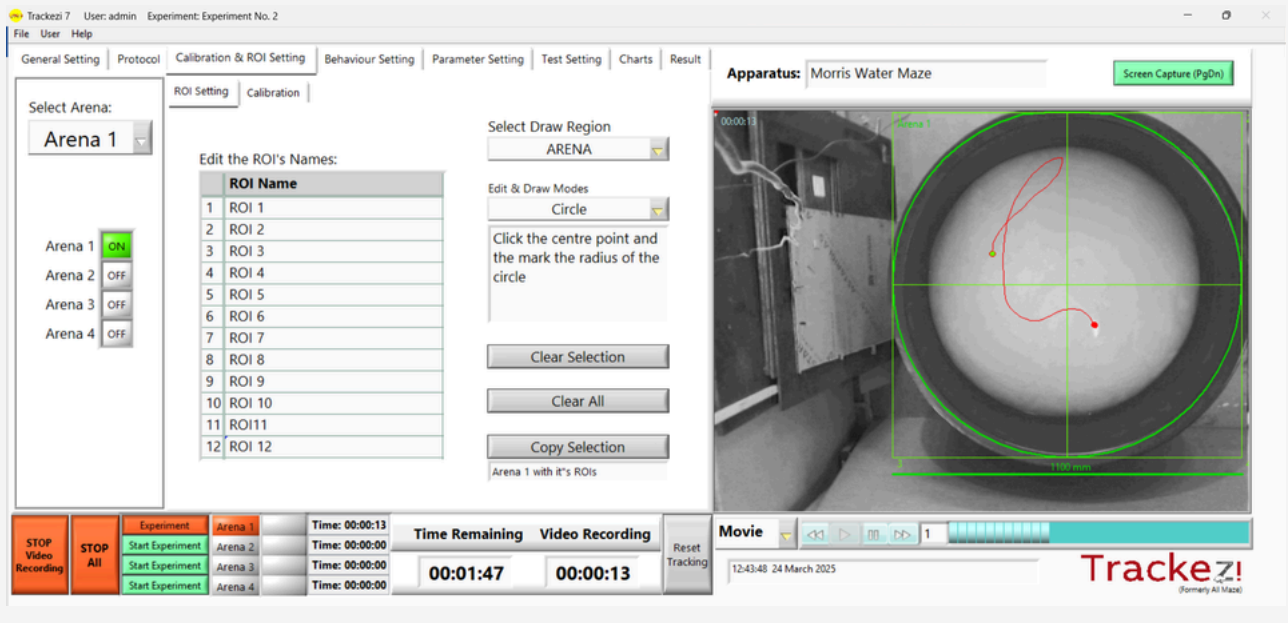
- User friendly interface
- Easy selection of parameters for measurements from the ready list
- Simplified Controls
- Efficient Workflow
- Intuitive Design
- Minimizes need of additional motion detection sensors in the mazes
- Suitable for pre-recorded video or online experiment





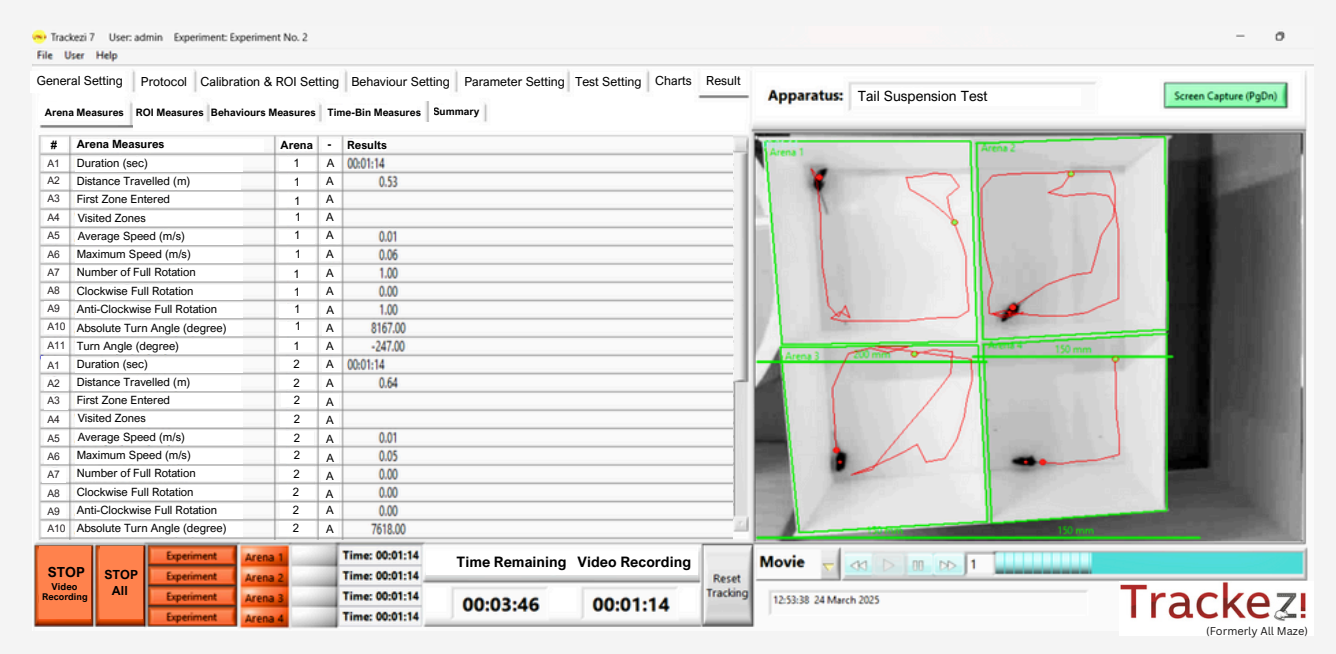
Track accurately even in poor light or low contrast:

- Accurate with Low Contrast: Tracks with minimal visual differences.
- Adapts to Low Light: Consistent tracking in dim settings.
- Reduces Noise: Minimizes errors from visual interference using sharpness, brightness & contrast functions.



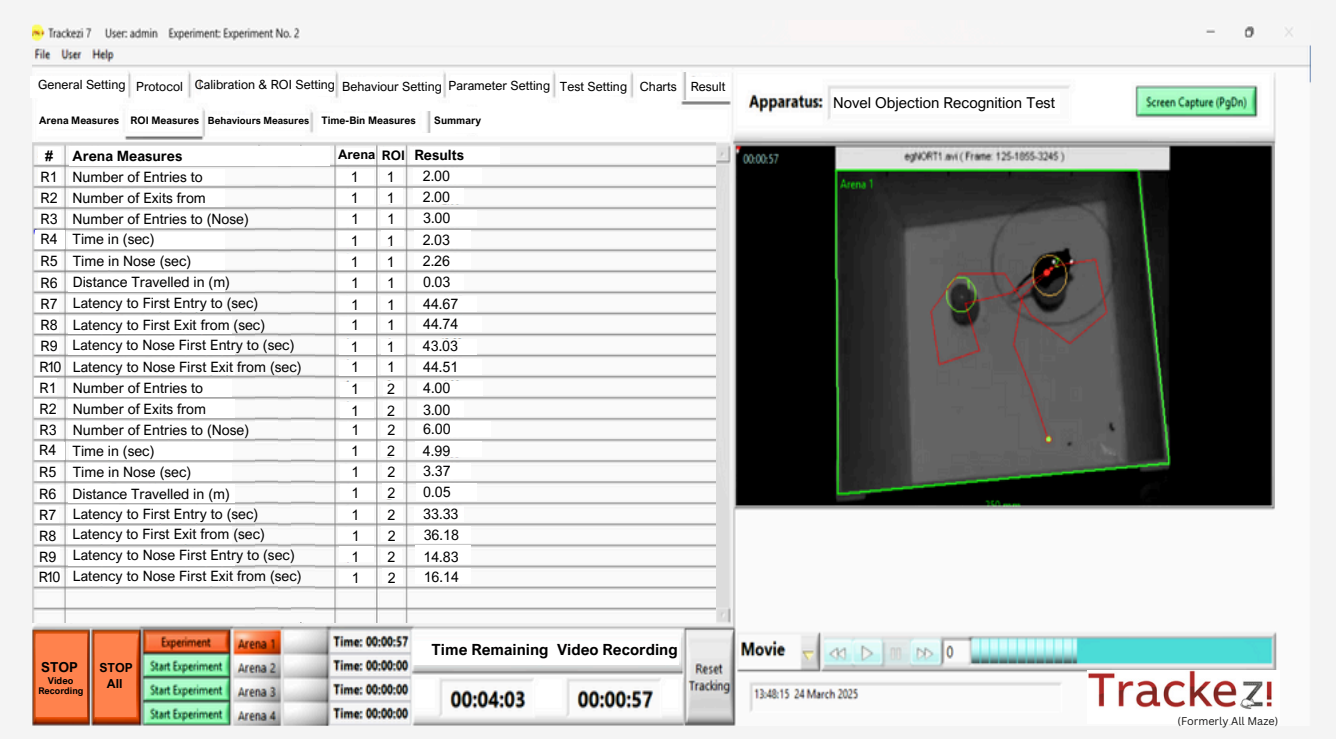
Useful for Complex Arenas and ROI's:

- Focuses on Specific Areas: Provides detailed analysis of selected regions.
- Arena: Customize size, shape and features for the study.
- Key Zones: Areas where animals spend time, interact with objects or show behaviors
- Simultaneous tracking (upto 4 rodents)



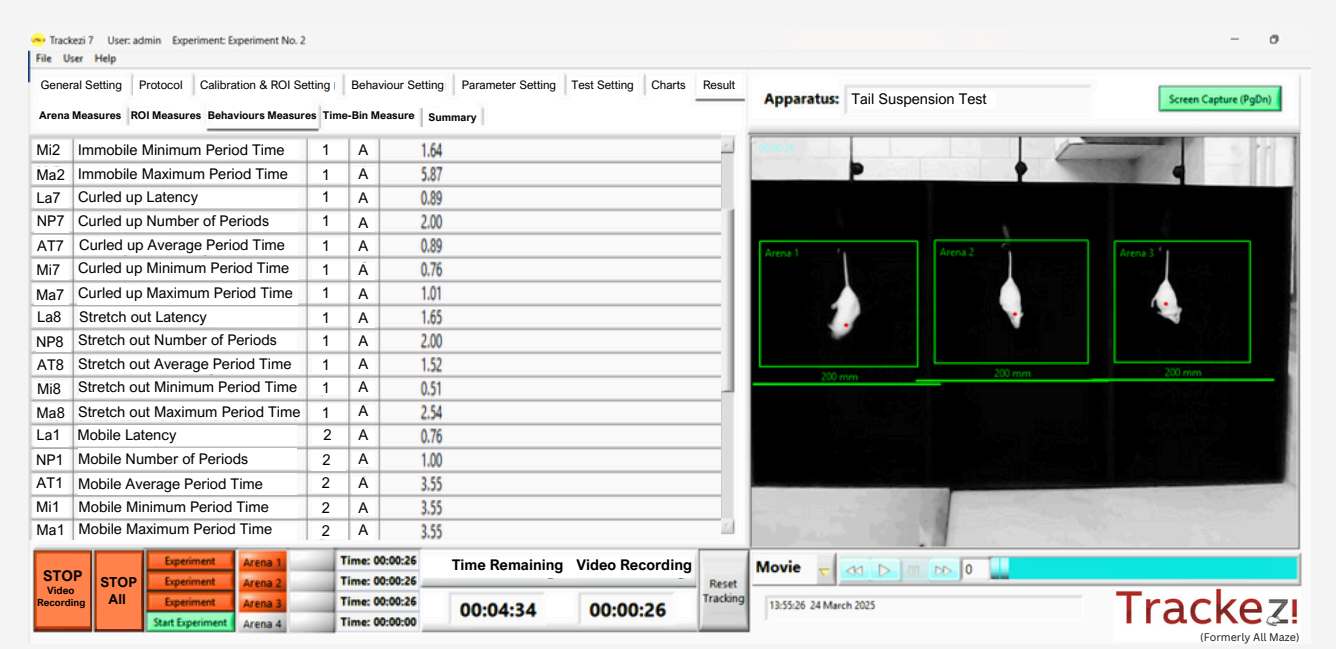
Track whole animal parameters or only nose related parameters:

- Tracks full-body movement for behaviour analysis.
- Select nose related parameters like No. of entries of nose, Time-in nose, Latency to nose first entry, Latency to nose first exit in Novel object recognition or nose poke activity.



Give user benefit of flexibility to set experimental procedure:

- Customizable Setup
- Modify protocols according to changing conditions or objectives
- Customize parameter thresholds for precise data collection
- Flexible Adjustments
- Provision for specialized settings as per experiment requirement like individual recording option for tail suspension test
- Provision to set any special measurement parameter out of the standard list
- Save and reuse configurations minimizing experiment time



Extensive list of parameter measures – Arena, ROI, Behavior, Time bin:

- Arena Parameters: Measure overall activity and movement within the arena.
- ROI Parameters: Track activity and movement in specific zones of the arena.
- Behavior Parameters: Measure movement and behaviors like immobility, freezing, rearing, grooming, inactivity, stretch out, curled up etc.
- Time Bins Parameters: Set intervals for accurate behavior measurement.
- Select more than 80 parameters for measurement

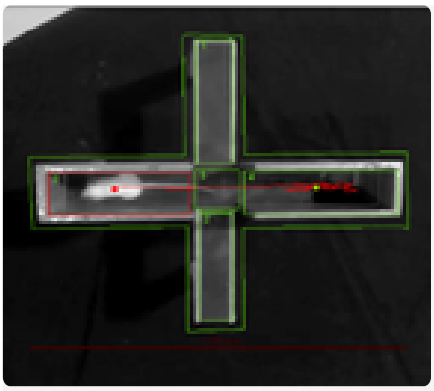
ARENA MEASURES	
A1	Duration (sec)
A2	Distance Travelled (m)
A3	First Zone Entered
A4	Visited Zones
A5	Average Speed (m/s)
A6	Maximum Speed (m/s)
A7	Number of Full Rotation
A8	Clockwise Full Rotation
A9	Anti-Clockwise Full Rotation
A10	Absolute Turn Angle (degree)
A11	Turn Angle (degree)
	No Animal in Arena (sec)

TIME-BIN MEASURES	
T1	Time (s:m:h)
T2	Total Distance Travelled (m)
T3	Average Speed (m/sec)
T4	Number of Clockwise Rotation
T5	Number of Anti-Clockwise Rotation
T6	Absolute Turn Angle (degree)
T7	Turn Angle (degree)

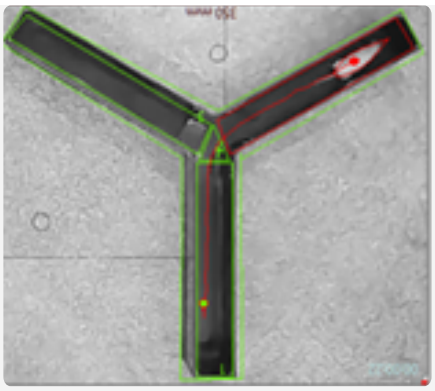
BEHAVIORS MEASURES	
La 1	Mobile Latency
NP 1	Mobile Number of Periods
AT 1	Mobile Average Period Time
Mi 1	Mobile Minimum Period Time
Ma 1	Mobile Maximum Period Time
AD 1	Mobile Average Distance Travelled
La 2	Immobile Latency
NP 2	Immobile Number of Periods
AT 2	Immobile Average Period Time
Mi 2	Immobile Minimum Period Time
Ma 2	Immobile Maximum Period Time
La 3	Inactive Latency
NP 3	Inactive Number of Periods
AT 3	Inactive Average Period Time
Mi 3	Inactive Minimum Period Time
Ma 3	Inactive Maximum Period Time
La 4	Freezing Latency
NP 4	Freezing Number of Periods
AT 4	Freezing Average Period Time
Mi 4	Freezing Minimum Period Time
Ma 4	Freezing Maximum Period Time
La 5	Rearing Latency
NP 5	Rearing Number of Periods
AT 5	Rearing Average Period Time
Mi 5	Rearing Minimum Period Time
Ma 5	Rearing Maximum Period Time
AD 5	Rearing Average Distance Travelled
La 6	Grooming Latency
NP 6	Grooming Number of Periods
AT 6	Grooming Average Period Time
Mi 6	Grooming Minimum Period Time
Ma 6	Grooming Maximum Period Time
La 7	Curled up Latency
NP 7	Curled up Number of Periods
AT 7	Curled up Average Period Time
Mi 7	Curled up Minimum Period Time
Ma 7	Curled up Maximum Period Time
La 8	Stretch out Latency
NP 8	Stretch out Number of Periods
AT 8	Stretch out Average Period Time
Mi 8	Stretch out Minimum Period Time
Ma 8	Stretch out Maximum Period Time.

ROI MEASURES	
1	Number of Entries to
2	Number of Exits from
3	Number of Entries to (Nose)
4	Time in (sec)
5	Time in Nose (sec)
6	Distance Travelled in (m)
7	Latency to First Entry to (sec)
8	Latency to First Exit from (sec)
9	Latency to Nose First Entry to (sec)
10	Latency to Nose First Exit from (sec)
11	Average Speed (m/s)
12	Maximum Speed (m/s)
13	Longest Visit to (sec)
14	Shortest Visit to (sec)
15	Average Duration of Visit to (sec)
16	List of Duration of Visits to (sec)
17	Time Mobility (sec)
18	Time Immobility (sec)
19	Time Inactive (sec)
20	Time Freezing (sec)
21	Number of Immobile Episodes
22	Number of Inactive Episodes
23	Number of Freezing Episodes
24	Initial Distance from ROI (m)
25	Path Efficiency
26	Absolute Turn Angle in (degree)

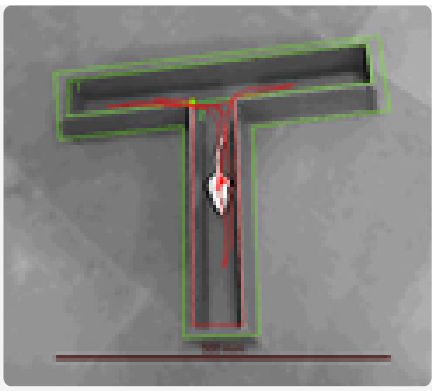
Useful for variety of mazes:



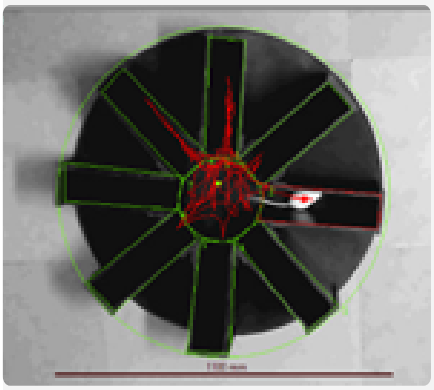
Elevated Plus Maze



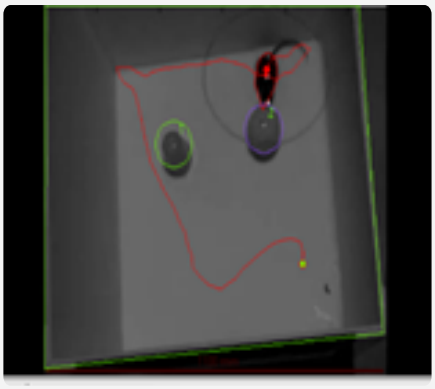
Y - Maze



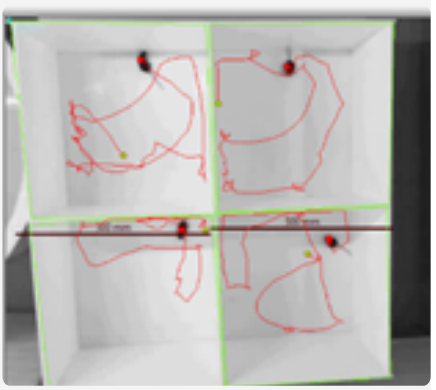
T - Maze



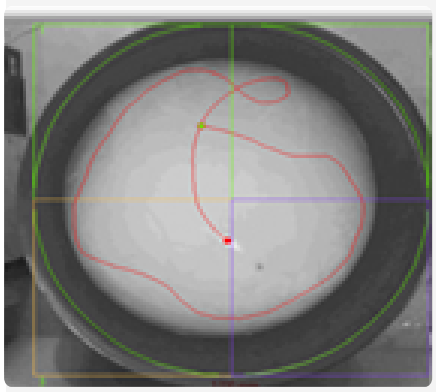
Radial Maze



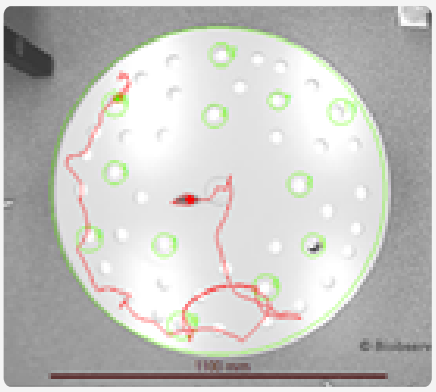
Novel Object Recognition



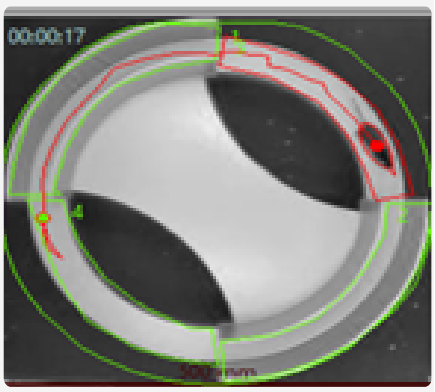
Open Field Maze



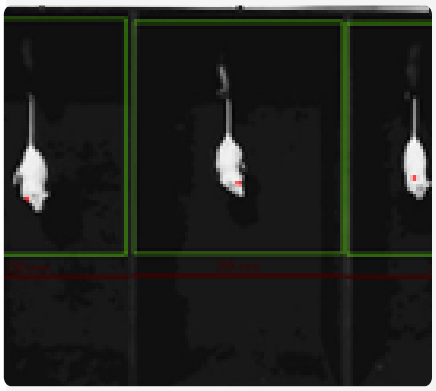
Morris Water Maze



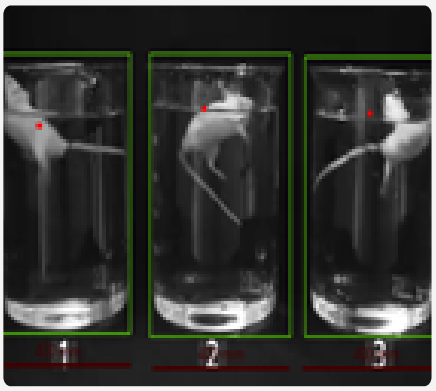
Barnes Maze



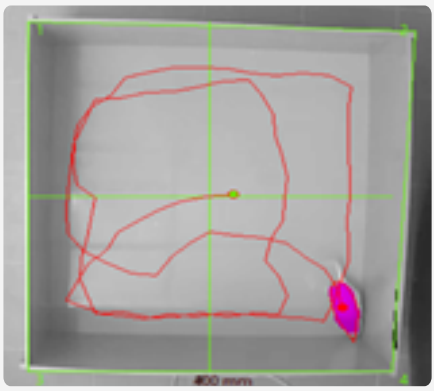
Zero Maze



Tail Suspension Test



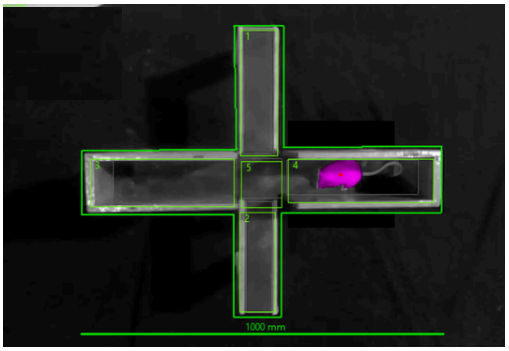
Forced Swim Test



Open Field Maze

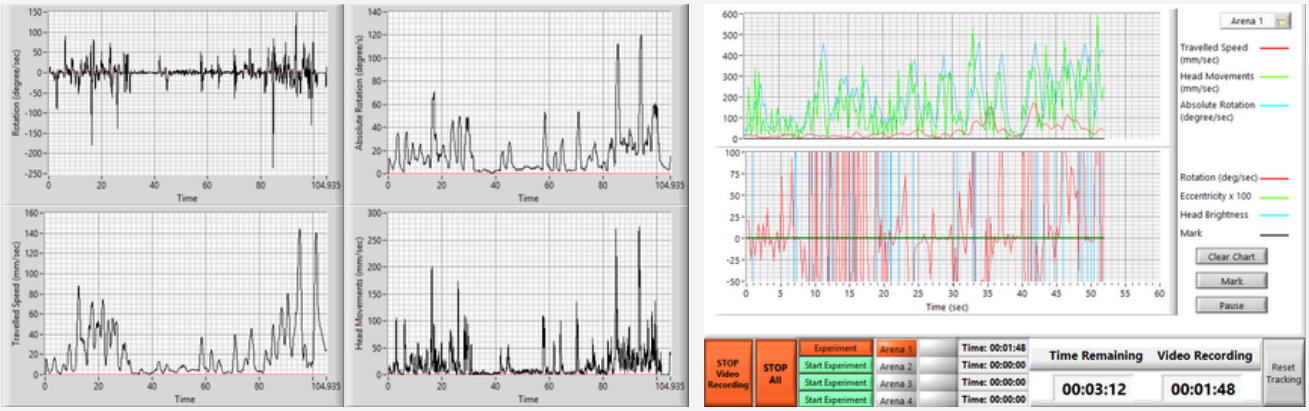
Visualize, Analyse and Export results:

- Facility to capture any image just by a click.
- Facility to save image of overall tracking line.
- Display data in clear, understandable formats.
- Easily transfer results in excel for further processing or reporting.
- Entry and exist-indicator.

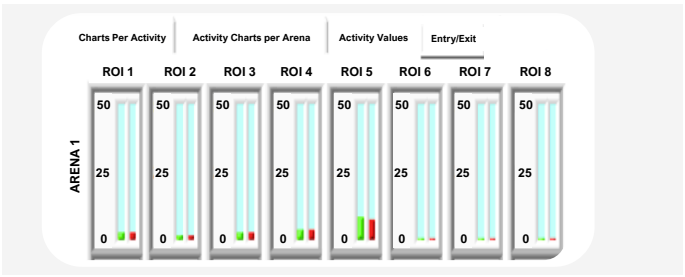


Multiple Graphs or Charts options

Activity graph for Travelled Speed, Head Movements, Absolute Rotation, Rotation, Eccentricity & Head brightness relative to body

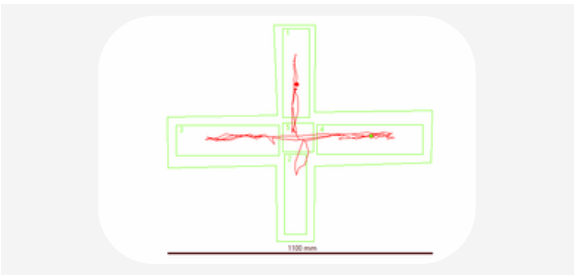


Entry and exist:



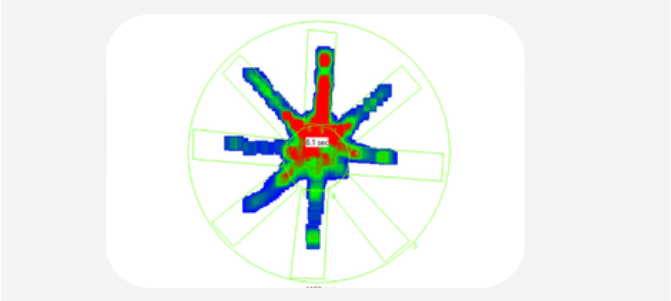
Bar graph shows visual indication of highest to lowest entry & exit in particular ROI with its Arena in different color code

Start and end point indicator:



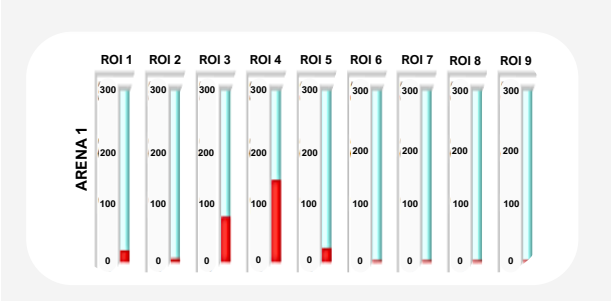
Shows start point in green & end point in red color

Heat Map:



Shows visual interpretation of highest to lowest activity with exact time spent at each point.

Time Spent:



Bar graph shows time spent in particular ROI with respective its Arena

Gives reliable and reproducible results:

- Consistent Outcomes
- Minimizes Errors
- Data Integrity

Reasonably priced:

- Cost-Effective: Offers a competitive price for the quality and functionality.

APPLICATIONS:

Behavioural Study	Types of Mazes Used
Anxiety and exploration in anxiolytic or anxiogenic drug studies.	Elevated Plus Maze, Zero Maze
Working memory and cognition in neurodegenerative or cognitive drug studies.	Y-Maze, Morris Water Maze, Radial Arm Maze, Barnes Maze
Decision-making and spatial memory in reward or impulsivity drug studies.	T-Maze, Y-Maze
Locomotion, anxiety, and exploration in anxiolytic or anxiogenic drug studies.	Open Field Maze, Elevated Plus Maze
Working memory, reference memory, and decision-making in cognitive drug studies.	Radial Arm Maze, T-Maze
Spatial memory and cognition in neurodegenerative disease studies.	Barnes Maze, Morris Water Maze
Exploration and memory in cognitive drug studies.	Novel Object Test, Y-Maze
Depression (immobility) in antidepressant drug studies.	Forced Swimming Test, Tail Suspension Test

ORDERING INFORMATION:

Model	Subscription Duration	Optional Accessories
Trackezi CL	• Complete license without any due date • Free access to software updates for 2 years • Free access to online technical support for 2 years • 1 CD- Single installation software useful for single computer	• Camera for video recording • Stand for holding camera • Computer/ Laptop • Mazes
Trackezi LL	• Complete license without any due date • Lifetime access to software updates • Life-time access to online technical support • 1 CD- Single installation software useful for single computer	

REQUIREMENTS:

- Any PC/ laptop for data storage of i3 or higher processor (Arm processor are not suitable) with good screen resolution
- USB video grabbing device- Camera with good resolution
- Non-reflective mazes with proper lighting conditions
- Stand for fixing camera

Note:

- One licence of Trackezi software is meant for single computer installation only.
- Mazes used must be non-reflective and the light arrangement in the experimental area must be proper avoiding any reflections.

Note: Orchid's continuing product development makes specifications subject to change without prior notification.

ORCHID® SCIENTIFIC
Only Science, No Fiction

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