Системы исследования обучения, памяти и внимания

Описание

По вопросам продаж и поддержки обращайтесь:

Алматы (727)345-47-04
Ангарск (3955)60-70-56
Архангельск (8182)63-90-72
Астрахань (8512)99-46-04
Барнаул (3852)73-04-60
Белгород (4722)40-23-64
Благовещенск (4162)22-76-07
Брянск (4832)59-03-52
Владивосток (423)249-28-31
Владикавказ (8672)28-90-48
Владимир (4922)49-43-18
Волгоград (844)278-03-48
Вологда (8172)26-41-59
Воронеж (473)204-51-73
Екатеринбург (343)384-55-89
Иваново (4932)77-34-06
Ижевск (3412)26-03-58
Иркутск (395)279-98-46
Казань (843)206-01-48
Калининград (4012)72-03-81
Калуга (4842)92-23-67
Кемерово (3842)65-04-62
Киров (8332)68-02-04
Коломна (4966)23-41-49
Кострома (4942)77-07-48
Краснодар (861)203-40-90
Красноярск (391)204-63-61
Курск (4712)77-13-04
Курган (3522)50-90-47
Липецк (4742)52-20-81
Магнитогорск (3519)55-03-13
Москва (495)268-04-70
Мурманск (8152)59-64-93
Набережные Челны (8552)20-53-41
Нижний Новгород (831)429-08-12
Новокузнецк (3843)20-46-81
Ноябрьск (3496)41-32-12
Новосибирск (383)227-86-73
Омск (3812)21-46-40
Орел (4862)44-53-42
Оренбург (3532)37-68-04
Пенза (8412)22-31-16
Петрозаводск (8142)55-98-37
Псков (8112)59-10-37
Пермь (342)205-81-47
Ростов-на-Дону (863)308-18-15
Рязань (4912)46-61-64
Самара (846)206-03-16
Санкт-Петербург (812)309-46-40
Саратов (845)249-38-78
Севастополь (8692)22-31-93
Саранск (8342)22-96-24
Симферополь (3652)67-13-56
Смоленск (4812)29-41-54
Сочи (862)225-72-31
Ставрополь (8652)20-65-13
Сургут (3462)77-98-35
Сыктывкар (8212)25-95-17
Тамбов (4752)50-40-97
Тверь (4822)63-31-35
Тольятти (8482)63-91-07
Томск (3822)98-41-53
Тула (4872)33-79-87
Тюмень (3452)66-21-18
Ульяновск (8422)24-23-59
Улан-Удэ (3012)59-97-51
Уфа (347)229-48-12
Хабаровск (4212)92-98-04
Чебоксары (8352)28-53-07
Челябинск (351)202-03-61
Череповец (8202)49-02-64
Чита (3022)38-34-83
Якутск (4112)23-90-97
Ярославль (4852)69-52-93

Россия +7(495)268-04-70
Казахстан +7(727)345-47-04
Беларусь +(375)257-127-884
Узбекистан +998(71)205-18-59
Киргизия +996(312)96-26-47

эл.почта: hsw@nt-rt.ru || сайт: https://harvardapparatus.nt-rt.ru/

PACKWIN Software (Panlab)

Handy software for standard operant conditioning and behavioral procedures en small laboratory animals.

- Even more user-friendly interface!
- Aperture assistant and experimental tool bar
- Modular structure (targeted to specific experiments or fully customizable)
- Straigthforward â€œState-Editorâ€ tool for protocol configurations (no need of specific programming skills
- Assistant panels and specific reports for 5/9 holes procedures, Vogel test, fear conditioning and startle reflex studies
- Operant chamber simulator tool (unique feature in the market!)
- Test boxes function for hardware checking purpose
- Built-in Yoked procedure settings
- Optimal data traceability
- Integrated potent analysis module and plot makers
- Batch analysis and direct exportation to Excel (1 session per row)

Item No.	Description
76-0002	(PACKWIN V2.0) Software Platform for behavior/operant boxes - Needs Experimental Modules
76-0592	(PACKWINCS) Customized Experimental Module (Fully Customizable Protocol and Data Report Edition)
76-0593	5/9 Holes Experimental module (5-Choices Serial Reaction Time task)
76-0594	(PACKWINVT) PACKWIN Vogel Test Experimental Module (Standard Asistants and Data Reports for Pre-test y Test Protocols).

Item No.	Description
76-0701	Fear conditioning Experimental module
76-0702	Startle reflex Experimental module

DETAILS

PACKWIN is a user-friendly and versatile Software platform developed with the aim to offer a powerful tool for conducting a wide range of experiments in different types of behaviour chambers. It typically controls the Panlab standard chambers for operant conditioning, self-administration, 5/9 hole and Vogel test, but its range of compatibility allows working with other behavioural chambers for Active/Passive avoidance and fear conditioning experiments...

Due to his new modular structure, PACKWIN 2.0. can be used in a highly flexible structure (Customised module â€“ CS) allowing the experimenter to build a wide variety of different protocols for the configuration of basic programs for operant procedure (fixed and variable ratio, fixed or variable interval, fixed or variable DRL, positive and negative reinforcement, extinction, probability to obtain a reinforcement, etc.) with or without discriminative stimuli (light, sound) as well as more specific and

complex user-defined protocols (conflict, DMTS, 5 choice serial reaction task etc.). Give the PACKWIN state-editor tool the oportunity to surprise yourself by its straightforwardness (no need of specific programming skills)!! A great number of editable raw data table and outpout numeric data&graph reports are provided integrated in the all-in-one structure of the software.

PACKWIN 2.0. also offers new specific experimental modules providing convenient protocol editor templates and ready-to-use run panels and data reports directly targeted to specific standard experiments such as the 5-choice Serial Reaction Time Task (5/9 hole module â€“ HO) and the Vogel test.

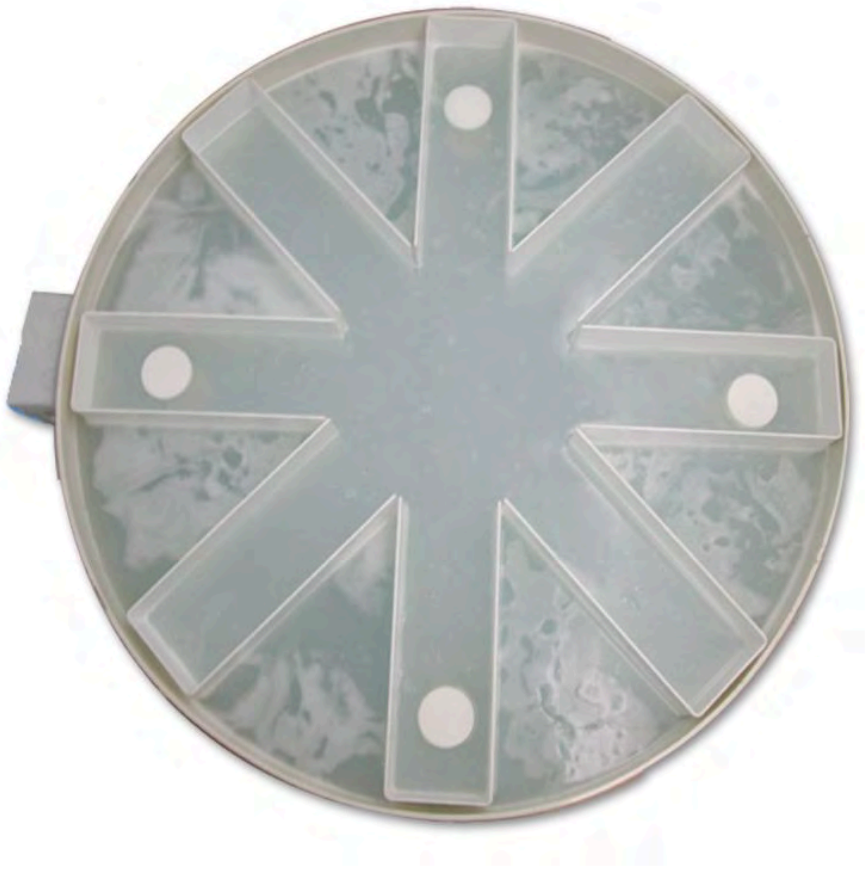
In PACKWIN 2.0 version, a step ahead has been made in terms of user-interface and features that no other software available in the market can offer right now: new aperture assistant and experimental tool bar for guiding the user along the experimental process, new chamber simulator for checking your protocols without interrupting the data acquired from the real chambers, new batch analysis features for increasing the productivity of your experiment, integrated numerical and graph reports, direct exportation to Excel... and many other essential functions!!!!!! Who told you that performing operant conditioning studies was only reserved to experts?

PACKWIN 2.0 is not exclusive to Panlab chambers! Contact us for more information about how to use PACKWIN with your existing set of operant chambers (compatibility with Coulbourn and Med Associates chambers...)

Aquatic Radial Maze (Panlab)

The aquatic radial maze are used for conducting radial maze experiment in a circular pool (water maze).

Item No.	Description
76-0642	6-Arm Aquatic Radial Maze for 90 cm (35.4 in) diameter pool
76-0643	8-Arm Aquatic Radial Maze for 90 cm (35.4 in) diameter pool
76-0638	6-Arm Aquatic Radial Maze for 120 cm (47 in) diameter pool
76-0639	8-Arm Aquatic Radial Maze for 120 cm (47 in) diameter pool
76-0715	6-Arm Aquatic Radial Maze for 140 cm (55 in) diameter pool
76-0640	6-Arm Aquatic Radial Maze for 170 cm (67 in) diameter pool
76-0550	Target Island Platform for Aquatic Radial Maze (110 and 80 mm diameter platforms, 17 mm height min, 25 mm max)



DETAILS

The aquatic radial maze are used for conducting radial maze experiment in a circular pool (water maze). This context is used to avoid any animal deprivation during the experiment.

The pools (water maze) are provided separately. The dimensions of the radial maze have been chosen to fits the dimension of the Panlab thermoregulated circipar pool (should be purchased separately) but they can be used in any pool with compatible dimentions.

MAZESOFT-8 Sofware (Panlab)

MAZESOFT-8 is complete and easy-to-use software for monitoring radial maze experiments.

- Protocol assistant for standard experiment
- Use of photoelectrical cell technology for animal position detection
- Manual or automatic control of the doors
- Provides calready calculated data (number of working memory errors, , number of reference memory errors, number of distinct arms visited...)
- Data reports can be re-organised according to factors entered in the trial header (animal, groups...)
- Data exportation to Excel
- RS232/USB communications (no PCI needed)

Item No.	Description
76-0144	(MAZESOFT8 V2.0) MAZESOFT-8 Software

DETAILS

MAZESOFT-8 is complete and easy-to-use software for monitoring radial maze experiments. It has been specially designed to work with the Panlab radial maze apparatus equipped with rows of infrared photocells for the automated detection of animal position.

The software allows for the full control of the arm doors either manually (by means of a button panel in the computer screen) or automatically, when a trained subject is being tested.

MAZESOFT-8 allows the user setting any of the standard protocols for the study of working and reference memory in laboratory animals. The protocols are easy to configure, the user only have to enter some important parameters: designation of the baited arms, conditions to stop the experiments, time-interval between each trial, doors monitoring mode, criterion for considering the arm visitedâ€¦ Each protocol configuration can be saved and opened for use when necessary. A â€œtrial headerâ€ can be used for recording all the necessary information associated with the current experiment (code of trial, experimenter, challenge, dose, subject identification, comments).

In MAZESOFT-8, the maze is virtually divided into 17 sections: 8 equally sized arms (each one divided into proximal and distal section) and a central area. One experiment can be composed of several trials, depending on the number of experimental groups and animals per group used in the study.

The system considers an arm being visited when the subject has been detected in the distal part of the arm. During each trial, the elapsed time, permanence time in each area and current position of the animal can be visualized in real-time. Real-time information about the animal position and the number of visits made are also graphically shown on the screen. A Runtime data panel shows the cumulated number of working and reference memory errors together with other important data (response latency, number and list of visits and entries into the arms etcâ€¦)

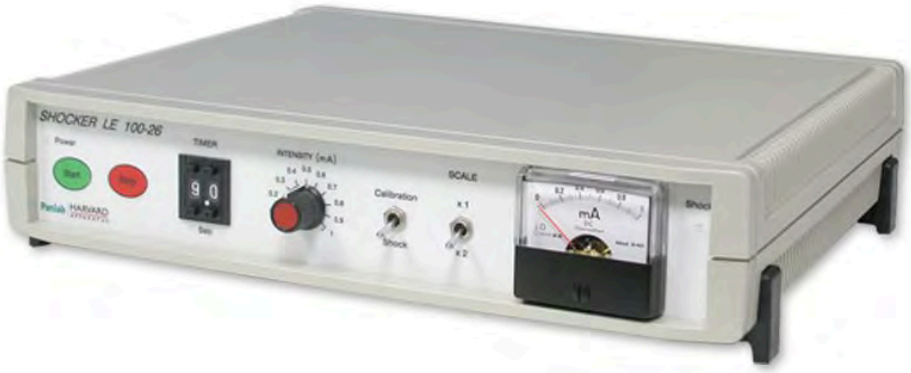
MAZESOFT-8 provides a summary data table containing the complete information about each session (subject name, group, date) together with all the integrated data of interest. The tables of session can be re-organised before exportation according to parameters previously entered in the trial header (by subjects, by groups, by experimenter, etc.). Data from the summary data base as well as the detailed chronological listing of the animal positions for each session can be easily exported to Excel.

Shocker (Panlab)

The LE 100-26 is an electric shock generator used in a wide variety of Panlab apparatus for assessing behavior in laboratory animal.

- Highly controlled shock intensity
- Adjustable shock intensity and duration
- Electronic Scrambler 6 channels (or grid bars)

Item No.	Description
76-0159	(LE10026) Shock Generator with Scrambler



DETAILS

The LE 100-26 is an electric shock generator used in a wide variety of Panlab apparatus for assessing behavior in laboratory animal.

The shock is generally applied to the bars of the floor grid of the Experimentation Cages. The electric shock is made of rectangular current pulses switching consecutively over 6 bars (scrambler). Current is isolated with respect to ground, as a basic safety precaution to avoid electrical interference with other equipment. The output current depends entirely on the value selected by the user and not the resistance of the animal or the number of bars it is touching when it receives the electric shock, thereby ensuring that the repeatability of the electric shock is maximized. The time duration of the electric shock is also adjustable.

SMART Video Tracking System (Panlab)

SMART is a complete and user-friendly video tracking system for evaluating behavior in experimental animals.

- Standard solutions in Neuroscience
- Tracking, Activity & integrated behavior
- The most user-friendly in the market!
- Flexibility, Productivity, Traceability
- Customized solutions for any application and budget
- Optimal cost/performance ratio!
- Built-in Digital Video Recorder
- Remote START/STOP control included

Item No.	Description
76-0696	Smart V3.0 Super Pack
76-0697	Smart V3.0 Premium Pack
76-0681	SMART platform (needs experimental module)
76-0682	Customizable Experimental Module
76-0688	Open Field Preconfigured Module
76-0690	Water Maze Preconfigured Module
76-0689	Plus Maze Preconfigured Module

Item No.	Description
76-0691	T/Y Maze Preconfigured Module
76-0692	Place Preference Preconfigured Module
76-0693	FST And TST Preconfigured Module
76-0687	Social Interaction Preconfigured Module
76-0695	Smart V3.0 Basic Pack

DETAILS

Smart 3.0, the latest release of Panlab SMART video tracking system features the most flexible and easy-to-learn software for the automated evaluation of behavior in the widest range of pre-clinical and neuroscience applications.

SMART provides data relevant to problems in basic and clinical psychopharmacology. Applications include phenotype characterization (differences between strains, effect of a genetic modification, etc.) and studying the behavioral effects of pharmacologic substances.

Utilizing our advanced image analysis, SMART 3.0 allows the recording of activity, trajectories, events, social interactions, and global activity. SMART 3.0 provides users the versatility of a modular system with the capabilities of a broadband package.

SMART 3.0 was developed with the daily experimental process in mind with an easy-to-use interface and an highly flexible structure to fit well with most applications and budgets. Advanced features ensure reliable data and increased productivity, saving valuable time and resources.

SMART 3.0 emphasizes flexibility, productivity and simplicity - just add your desired settings, SMART 3.0 will do the rest. Simply SMART, simply powerful.

Provided data

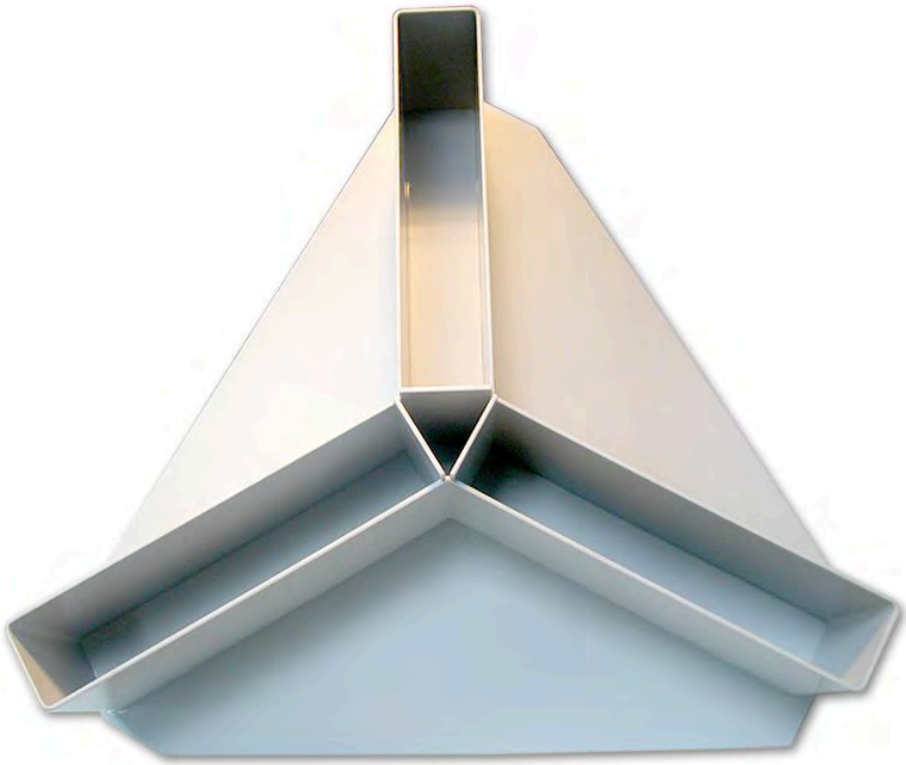
- Summary tables directly exportable to Excel and providing calculation for each user-defined zones and/or time intervals
- Wide variety of standard calculations related to tracking: time/distance/entries in zones, average speed, etc. Advanced calculations also available: alternation triplet, Whishaw's error, mean directionality, parallel index, turning tendency, rotations, rearings, etc.
- Zone transition, global activity and events list reporting the time evolution of specific calculations and distribution of their occurrence
- Track coordinates reports (X,Y,Z)
- Group evolution graphs and Track image exportation

Compact Y Maze (Panlab)

Compact Y maze adapted for the use of video-tracking for assessing spatial working memory in rats and mice, especially for spontaneous alternation tasks.

- Optimized material for best results using video tracking systems
- Non-reflective color to eliminate glare
- Material will not retain odors

Item No.	Description
76-0440	(LE849) Y Maze, Rat
76-0079	(LE847) Y Maze, Mouse



DETAILS

The Y maze is commonly used for assessing spatial working memory in rats and mice, especially for spontaneous alternation tasks.

The tasks using a Y maze are simple tasks that can be run in both rats and mice. The mazes are made of non-reflective and odor resistant material well suited for any video-tracking system. The mazes are provided in a grey color floor, walls and manual sliding doors.

The Panlab Y mazes can be associated with the SMART Video-Tracking Systems for detection and analysis of animal displacements and behavior throughout the test.

SPECIFICATIONS

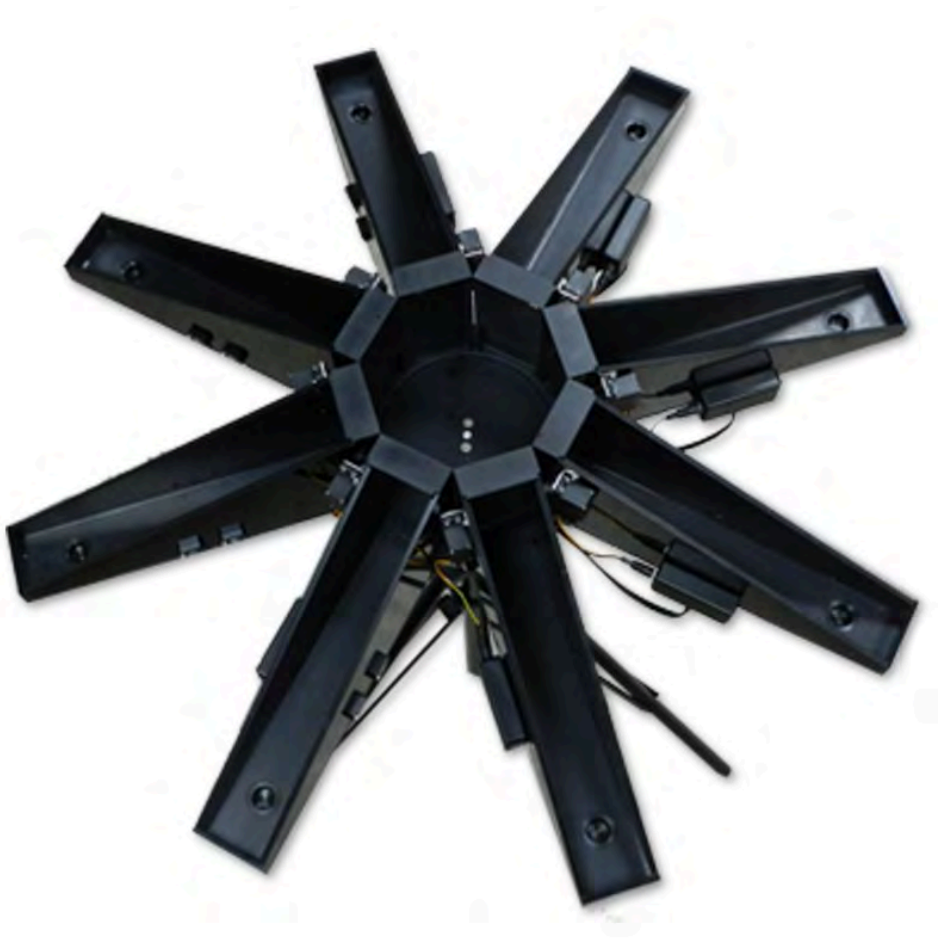
	76-0430	**76-0078**
Species	Rat	Mouse
Color	Black floor with grey walls	Black floor with grey walls
Arm Dimensions (L x W x H)	50 x 10 x 25 cm (20 x 4 x 10 in)	30 x 6 x 15 cm (12 x 2.5 x 6 in)

Compact Manual & Automated Radial Mazes (Panlab)

Compact radial maze solutions for evaluating spatial memory and non-spatial memory in rodents.

- Allows automated standard experiment
- Different possibilities of control for opening and closing the doors (manual or automated)
- Animal detection using photoelectrical beams or video-tracking system
- Mounted on a tripod with adjustable height
- Automated options uses RS232/USB communications (no PCI needed)

Item No.	Description
76-0227	Standard Radial Maze, Rat
76-0228	Standard Radial Maze, Mouse
76-0229	Semi-automated Radial Maze, Rat - for SMART Video Tracking System
76-0230	Semi-automated Radial Maze, Mouse - for SMART Video Tracking System
76-0231	Automated Radial Maze, Rat - for MAZESOFT-8
76-0232	Automated Radial Maze, Mouse - for MAZESOFT-8
76-0695	Smart V3.0 Basic Pack
76-0277	(CAMROOF) Roof Camera Support
76-0144	(MAZESOFT8 V2.0) MAZESOFT-8 Software



DETAILS

The â€œEight Arms Radial Maze" is extensively used in behavioural laboratories for evaluating spatial memory but also non-spatial memory associated with motivational cues (classically food).

Panlab propose 3 solutions for radial maze experiments:

- Manual radial maze (76-0227/LE760 and 76-0228/LE762) that can be used optionally with the SMART video tracking software
- Semi-automated radial maze (76-0229/LE767 and 76-0230/LE769) that can be used optionally with the SMART video tracking software
- Automated radial maze with photobeams (76-0231/LE766 and 76-0232/LE768), needs the 76-0144/MAZESOFT8 software

All radial mazes consist in a central area with eight sliding doors giving access to eight equally-sized arms. The maze, made of black Plexiglas, is mounted on a tripod with adjustable height high (until 1m). Each arm has lateral walls with a height higher in the proximal side of the arm than in the distal side. The arms are easily detachable by unscrewing an underneath fixing knob. In the distal extreme of each arm, a detachable recessed cup can be installed or replaced by cover (all included).

The sliding doors can be opened and closed automatically or manually:

- Automated doors operation can be controlled by the animal position throughout the test using the Mazesoft-8 software associated with photoelectrical cell mounted on the radial maze and the corresponding control unit. See the application sheet available in the Download section.
- Manual doors operation can be made remotely by the user by using the switches available on the control unit.
- Manual doors operation can be made in situ by the user by using the threads provided for opening of closing each door.

A water version of the radial maze is also available (see related aquatic radial maze and circular pool products).

Compact Passive Avoidance (Panlab)

Compact passive avoidance, a fear-motivated tests classically used to assess short-term or long-term memory on small laboratory animals (rat, mice).

- Weight transducer technology for accurate animal detection
- Very precise and stable intensity of shock delivered into the black compartment
- No PC card is required (USB coms.)
- Safety System which guarantees that the shock intensity received by the animal is always the same value independently of the grid bars treaded

Item No.	Description
76-0199	(LE870) Passive Avoidance Cage, Rat
76-0200	(LE872) Passive Avoidance Cage, Mice
76-0159	(LE10026) Shock Generator with Scrambler
76-0202	ShutAvoid Software, up to 8 boxes

DETAILS

Passive avoidance is fear-motivated tests classically used to assess short-term or long-term memory on small laboratory animals (rat, mice).

Basically, passive avoidance working protocols involve timing of transitions, i.e. time that the animal takes to move from the white compartment to the black one after a conditioning session -in which the entry into the black compartment is punished with a mild inescapable electrical shock- is carried out.

The Panlab passive avoidance box (LE870/872) is defined by a large white illuminated compartment and a small black dark compartment separated by a guillotine gate. The animal position is detected by using high sensitivity weight transducers providing higher effective and reliable detection of animal responses (zones entries) than systems based on photocells beams or on grid floor displacements.

Panlab Passive Avoidance boxes is controlled by the ShutAvoid software, allowing to run passive

avoidance experiments in several boxes simultaneously. It is not necessary the use of PCI board installed into the PC. The link is carried out by one only cable from one Box to the other. The first Box is connected to PC or Laptop through a RS232/USB communcation.

The passive avoidance test can also be conducted in a shuttle box for both the active and passive avoidance tests.

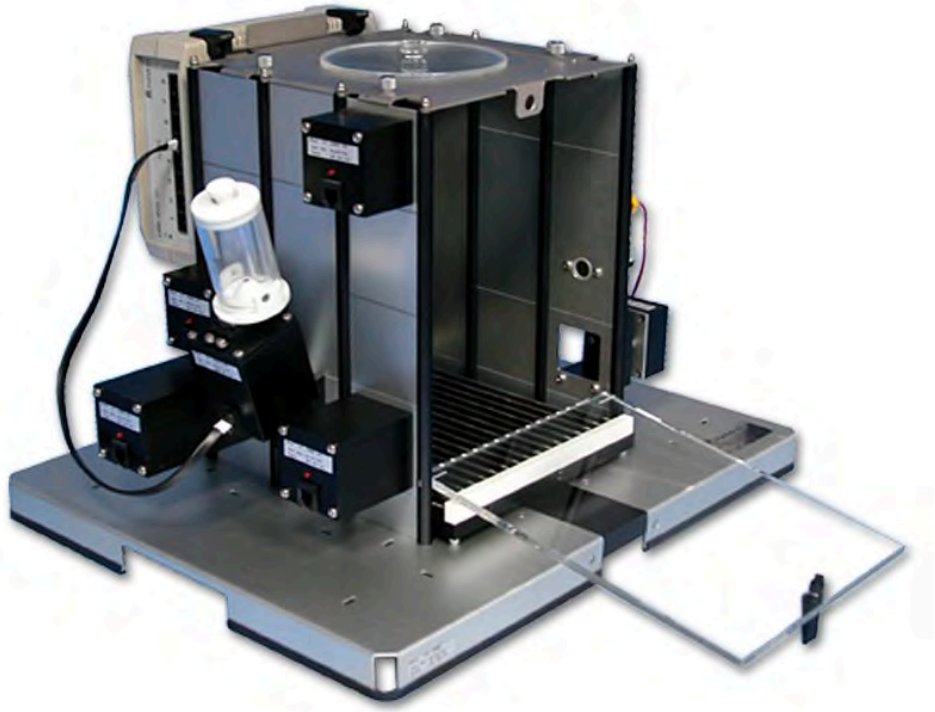
Modular Operant / Behavior Box (Panlab)

Modular operant boxes for standard operant conditioning procedures.

- Entirely modular system
- Reduced number of cables
- Possibility of customization
- Up to 8 stations (or more!) can be connected at once to PC through a single cable

Item No.	Description
76-0147	(LE1002CL) Compact Operant Box, Mouse (including Liquid Dispenser, Lever, Light Stimuli, Shock Grid and link box)
76-0146	(LE1002CP) Compact Operant Box, Mouse (including Pellets Dispenser, Lever, Light Stimuli, Shock Grid and link box)
76-0148	(LE1005CP) Compact Operant Box, Rat (including Pellet Dispenser, Lever, Light Stimuli, Shock Grid and link box)
76-0149	(LE1005CL) Compact Operant Box, Rat (including liquid Dispenser, Lever, Light Stimuli, Shock Grid and link box)
76-0152	(LE1005) Modular Operant Chamber, Rat (needs accessories, ask for the list of available accessories)
76-0151	(LE1002) Modular Operant Chamber, Mouse (needs accessories, ask for the list of available accessories)
76-0154	(LE100501) Shockable Grid, Rat

Item No.	Description
76-0153	(LE100201) Shockable Grid, Mouse
76-0652	Standard Grid Floor, Rat
76-0706	Standard grid floor, Mouse
76-0002	(PACKWIN V2.0) Software Platform for behavior/operant boxes - Needs Experimental Modules
76-0592	(PACKWINCS) Customized Experimental Module (Fully Customizable Protocol and Data Report Edition)
76-0593	5/9 Holes Experimental module (5-Choices Serial Reaction Time task)
76-0661	Y connector for LinkBox01 duplication to 1 input and 1 output
76-0594	(PACKWINVT) PACKWIN Vogel Test Experimental Module (Standard Asistants and Data Reports for Pre-test y Test Protocols).
76-0660	Y connector for LinkBox01 duplication to 2 outputs



DETAILS

For standard operant conditioning and behavioral procedures en small laboratory animals.

The Panlab Operant Chamber is an entirely modular experimental enclosure designed to conduct operant conditioning procedures (e.g. food reinforcement, DMTS, conflict tests, self-administrationâ€¦).

The operant chamber is made in an entirely modular structure which allows complete disassembling or rearrangement to build a new space of different dimensions/components or to enable storage in the minimum space. It can be easily transformed from rat chamber to mice chamber (or vice versa) with a reduced cost.

A frontal door offers a total accessibility inside the chamber. Walls and cover can be of different material or colour, since they are totally removable.

Each chamber is associated with a Link Box which provides power to up to 8 (expandable depending of the customer configuration) Operant Modules (levers, lights, sound, dispensers, electrical shock...) conferring to the chambers a full autonomy.

Only one cable connects the Link Box to the PC (PackWin Software), this last for standard and advanced protocol configuration and running.

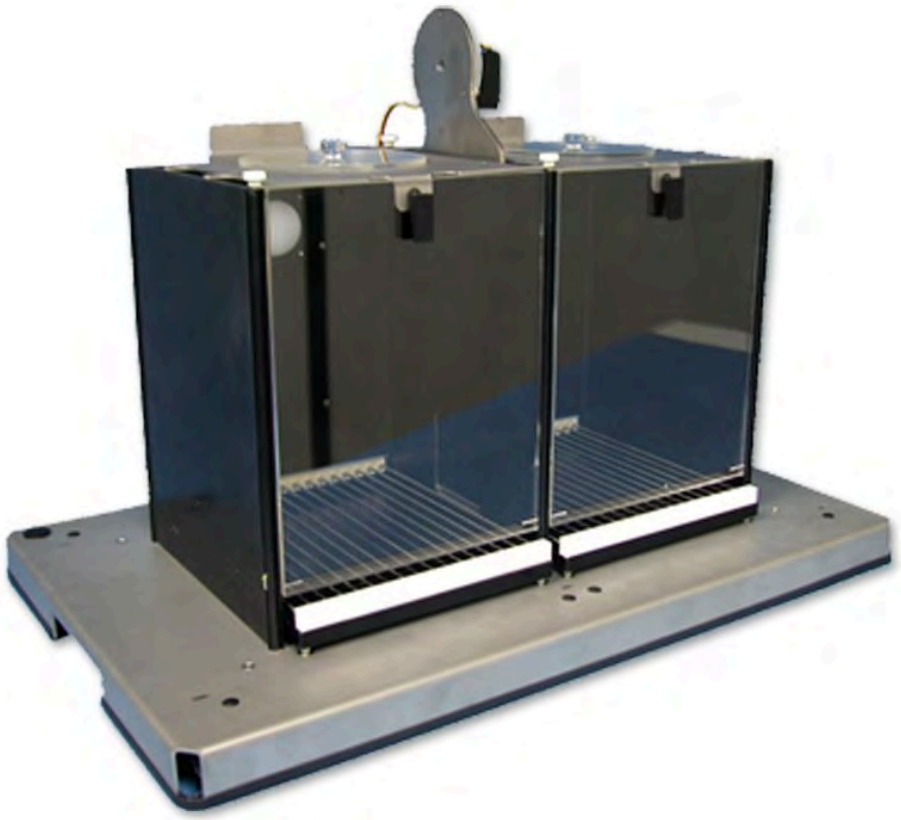
Please contact us for a complete list of the accessories available for the boxes.

Compact Shuttle Box (Panlab)

Compact shuttle box for carrying out conditioned reflexes (Active and Passive Avoidance tests) in learning and memory studies.

- Highly sensitive weight transducer system for accurate animal detection
- Easy to set up different wall shapes and colours
- Optional guillotine door
- Compartments with independent grid floor
- Frontal and top doors for an easy access inside the box
- Up to 8 Active Boxes can be controlled at once from a PC
- No PC card is required (USB coms)
- Safety System which guarantees that the shock intensity received by the animal is always the same value independently of the grid bars treaded

Item No.	Description
76-0251	(LE918) Shuttle Box, Mouse
76-0252	(LE916D) Guillotine Door, Rat
76-0202	ShutAvoid Software, up to 8 boxes
76-0159	(LE10026) Shock Generator with Scrambler
76-0250	(LE916) Shuttle Box, Rat
76-0253	(LE918D) Guillotine Door, mouse
76-0607	White contextual kit, Rat (includes 3 white walls, a smooth floor and 1 white under-grid floor)
76-0606	White contextual kit, Mouse (includes 3 white walls, a smooth floor and 1 white under-grid floor)



DETAILS

Panlab Compact Shuttle Boxes LE916 (Rats) and LE918 (Mice) provide the ideal environment to carry out conditioned reflexes (Active and Passive Avoidance) in learning and memory studies.

Basically, the Panlab Shuttle box (LE916-918) consists of two equally sized compartments with two independent grid floors. A frontal door, in addition to the top ones, allows an easy access inside the box. The cage contains a general sound generator and a visual stimulus (light) for each compartment.

The Animal is detected by two Weight Transducers located above the static grids, avoiding the problems inherent to photoelectrical or grid tilting systems (high speeds of displacements in mice, tail detection in rats).

Reconverting them to traditional Passive Box is quite straightforward by adding a sliding door (LE916D for mice or LE918D for rats). Furthermore, it is possible to set up different wall shapes or colours in order to further condition the subject of study either visually or spatially.

The shuttle boxes are controlled by the (ShutAvoid) software allowing to run active avoidance and passive avoidance experiments in several boxes simultaneously. It is not necessary the interface

neither the use of board installed into the PC. The link is carried out by one only cable from one Box to the other. The first Box is connected to PC or Laptop by the port RS 232 or USB.

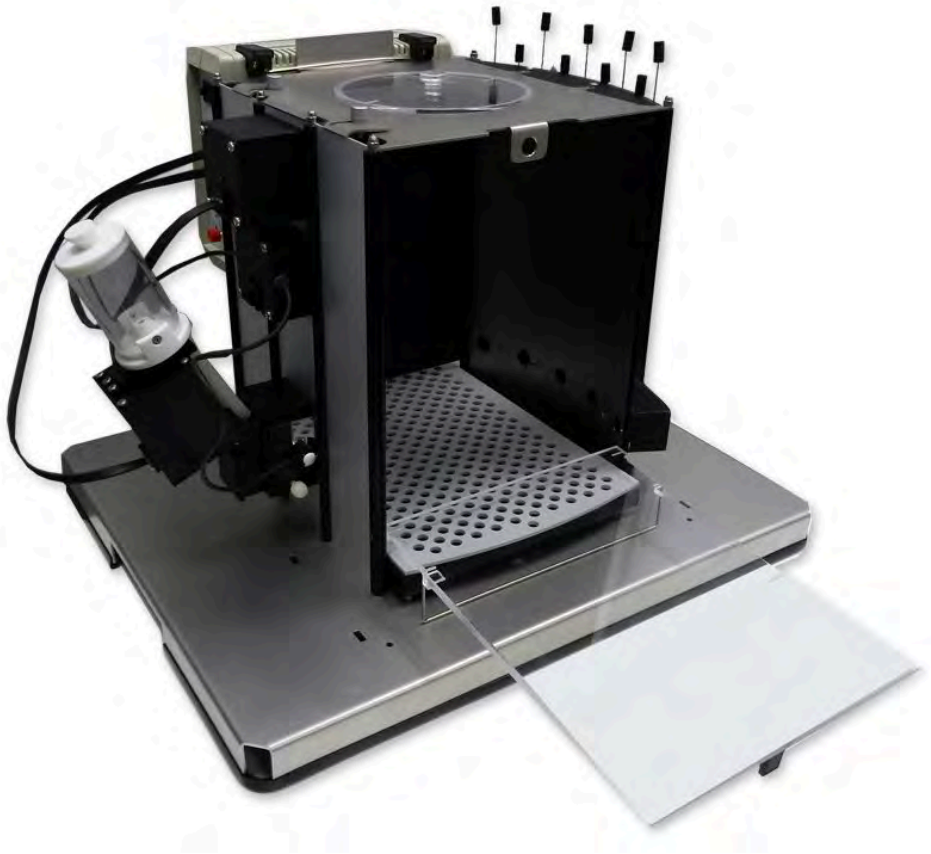
Compact 5/9 Holes Box (Panlab)

The compact 5/9-hole box is commonly used to evaluate attention performance using a visual discrimination task in laboratory animals.

- New frontal easily removable tray
- New modular panel for the house light and reward
- New additional choice of food/liquid dispensers
- New accesory for running mouse test in a rat box
- Up to 9 available holes: allows protocols with different hole position and learning difficulties
- Hole LEDS with adjustable intensity
- Associated with the very complete and flexible software PackWin
- Protocol assistant for configuring a complex 5-CSRT in less than 5 min
- Up to 8 stations can be connected at once to PC through a single cable
- RS232/USB comunication

Item No.	Description
76-0940	Mice 5/9 Hole Wall for Rat Cage
76-0651	Mice Pellet dispenser without magazine
76-0592	(PACKWINCS) Customized Experimental Module (Fully Customizable Protocol and Data Report Edition)
76-0353	(LE100550) Pellets Dispenser with Feeder, Rat
76-0573	0,02 ml spoon for LE100261 and LE100561
76-0356	Liquid dispenser (drops) with magazine - Rat
76-0574	0,05 ml spoon for LE100261 and LE100561

Item No.	Description
76-0357	Liquid dispenser (spoon) - Rat
76-0928	5-9 Holes Cage, Rat
76-0593	5/9 Holes Experimental module (5-Choices Serial Reaction Time task)
76-0591	0,1 ml spoon for LE100261 and LE100561
76-0338	Liquid dispenser (drops) with magazine - Mouse
76-0002	(PACKWIN V2.0) Software Platform for behavior/operant boxes - Needs Experimental Modules
76-0335	(LE100250) Pellets Dispenser with Feeder, Mouse
76-0929	5-9 Holes Cage, Mice
76-0339	Liquid dispenser (spoon) - Mouse



DETAILS

The 5/9 holes box is commonly used to evaluate attention performance using a visual discrimination task in laboratory animals.

The Panlab 5/9 holes box is composed by a test chamber, food or drink dispenser, a Link Box to connect it to the PC and the PackWin software. The particularity of the Panlab box is that 9 holes positions are available for the test providing an higher protocol flexibility: different number of holes used, different degrees of test difficulty.

The five holes box is assembled with black aluminium walls and a transparent front door. The box is equipped with an arc of 9 contiguous apertures set into the rear wall, a house light, a food pellet dispenser and a pusher to detect the nose-pokes into the food holder. The holes not used in the experiment may be blocked up using a metal insert. Each hole is equipped with photocell beams and internal LED providing visual cues specific to each hole. The intensity of the LED can be adjusted in Link Box using the digital selector. The box is placed on a stainless-steel platform and the associated tray is easily removable to clean animal excrements.

The box has been recently improved providing the following new features:

- New frontal easily removable tray

- New modular panel for the house light and reward
- New additional choice of food/liquid dispensers
- New accesory for running mouse test in a rat box

All Panlab 5/9 hole boxes are associated with the potent and versatile PackWin software in order to control the experiment (protocol configuration, experiment running) and obtain relevant data such as correct responses, incorrect responses, omissions, premature responses, perseverance responses, time out responses, total receptacle head entries, etc.

Different experimental paradigms for sustained attention, animal models of impulsive behaviour and lateralized-discrimination task can be conducted using the nine-hole box.

The 5-choice serial reaction time task (5CSRT task) is a task currently used in this kind of boxes. A specific Packwin software module is available for ready-to-use configurations, Run panel and Data reports directly targeted to 5-choice serial reaction tasks.

SPECIFICATIONS

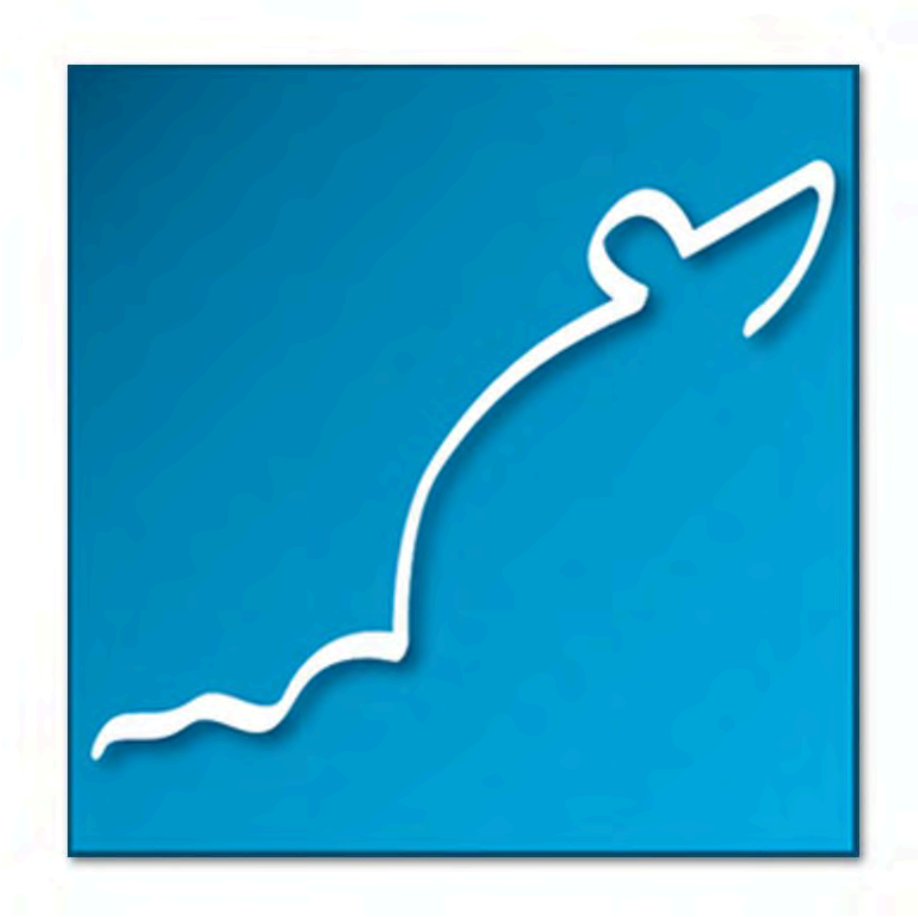
Specifications	76-0940	76-0928	76-0929
Subject	Mouse	Rat	Mouse
Cage dimensions (int.)	25 (W) x 28 (D) x 24 (H) cm	25 (W) x 28 (D) x 24 (H) cm	19 (W) x 22 (D) x 24 (H) cm
Cage dimensions (ext.), including the base	44 (W) x 37 (D) x 35 (H) cm	44 (W) x 37 (D) x 35 (H) cm	44 (W) x 37 (D) x 35 (H) cm
Holes dimensions	13 mm diameter; 14 mm deep, (IR beam at 5 mm from entry)	23 mm diameter; 14 mm deep, (IR beam at 10 mm from entry)	13 mm diameter; 10 mm deep, (IR beam at 5 mm from entry)
Material Composition	Plexiglas, aluminium, stainless steel	Plexiglas, aluminium, stainless steel	Plexiglas, aluminium, stainless steel
Power Supply	110V/220V, 50/60Hz	110V/220V, 50/60Hz	110V/220V, 50/60Hz

ShutAvoid Software (Panlab)

SHUTAVOID software is an implemented version of the Panlab/Harvard Apparatus SHUTTLE-8 software offering a user-friendly interface to conduct active and passive avoidance procedures in an automated manner.

- Allows editing protocols for both active and passive avoidance
- Experimental chambers can be controlled independently
- A Test mode enables immediate and reliable box checking
- New configuration panel for Yoked procedures
- The program runs automatically when the animal is detected in the cage
- Animal position and current data can be visualized on-line
- Provides integrated data
- Re-analyses data in user-defined intervals of time

Item No.	Description
76-0202	ShutAvoid Software, up to 8 boxes



DETAILS

SHUTAVOID software is an implemented version of the Panlab SHUTTLE-8 software offering a user-friendly interface to conduct active and passive avoidance procedures in an automated manner.

The Software SHUTAVOID controls independently up to 8 Shuttle Boxes or Passive Cages. The software detects how many cages are physically present and activates the corresponding windows. The system includes a test mode to enables immediate and reliable checking of the functioning of all the elements of the experimental chamber.

The program controls the presentation of visual and acoustic stimuli and shock duration, at the same time that it records the position of the experimental animal in each compartment of the experimental cage, deciding about stimuli presentation accordingly.

Unlimited number of schedules can be defined and used either by common or different experimental cages. The protocol editor allows the configuration of all the basic parameters necessary to set an active and passive avoidance experiment: habituation period, duration of the inter-trial interval (fixed or randomized), activation and duration of the conditioned stimulus (light, sound or both), activation, latency and duration of the unconditioned stimulus (electrical shock), latency for considering the response as â€œnullâ€, door status (open/closed), number of trials, cut-off time for response etcâ€¦

The chambers can be defined as Independent (for classical active avoidance procedures), Master or Slaves (for yoked procedures in which the paired-yoked animals receive the same number and temporal pattern of stimuli as their master mates, but only the master animal controls the outcome of the response).

The program runs automatically when the animal is detected in the cage (independently for each cage). During the acquisition of data, information about the protocol state, animal position and current data can be visualized for each cage on the corresponding control window.

Data related to each of the observed animal responses are stored into result files that pick up the information acquired during the working session. The data files can be open and re-analyzed to generate ASCII-coded reports in which the information is summarized for each trial or groups of trials (user-defined).

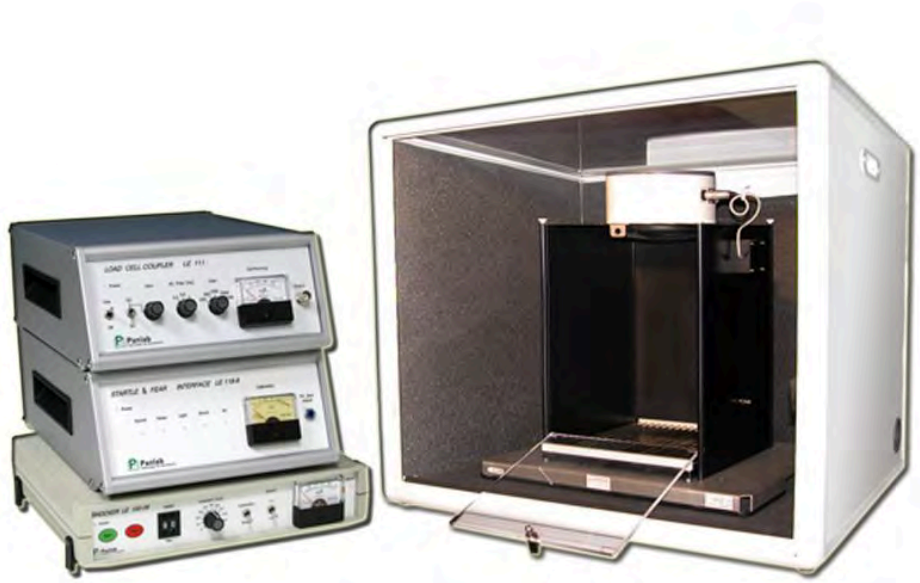
Startle and Fear Combined System (Panlab)

The StartFear Combined system is a polyvalent system for conducting both fear conditioning and startle reflex experiments in rodents.

- Combined system for startle/freezing
- Combined system for rats/mice
- Weight transducer sensitivity optimized for mice
- Easily removable tray
- Different spacial context configurations available for fear conditioning paradigms
- Accurate and traceable data
- One same enclosure for both rat and mouse
- No PCI cards required (USB connection)

Item No.	Description
76-0280	(LE116) FREEZING AND STARTLE box with sensors, stimuli including Sound Attenuating Box
76-0240	Shock Grid for Very Small Animals (6 mm bar-spaced)
76-0281	(LE111) Control unit - Load Cell Amplifier (1/box)
76-1074	Stimuli Interface Unit (up to 4 chambers)
76-0283	(LE1188) Control Unit - Stimuli Interface Unit (for up to 8 boxes)
76-0002	(PACKWIN V2.0) Software Platform for behavior/operant boxes - Needs Experimental Modules
76-0702	Startle reflex Experimental module

Item No.	Description
76-0701	Fear conditioning Experimental module
76-0159	(LE10026) Shock Generator with Scrambler
76-0328	(LE115) Accessory - Contextual Kit for Fear Conditioning
76-0675	Holder for Startle Reflex, Mouse up to 25 g, 90 x 30 mm (L x D)
76-0235	(LE117M) Holder for Startle Reflex, Mouse up to 35 g, 100 x 34 mm (L x D)
76-1056	Holder for Startle Reflex, Mouse/Rat up to 50 to 100 g, 150 x 44 mm (L x D)
76-0236	Holder for Startle Reflex, Rat up to 200 g, 200 x 64 mm (L x D)
76-0676	Holder for Startle Reflex, Rat up to 250 to 300 g, 255 x 74 mm (L x D)
76-0917	Large Rat Ceiling Height Reductor for Startle Refl ex (>300 g)
76-0286	(LE119) Air Puff Unit for Startle Experiments (no air source provided)
76-1131	Sound Meter for Sound Calibration



DETAILS

The Startle and Fear Combined system (StarFear system) is a polyvalent system for conducting both fear conditioning and startle reflex experiments in one same enclosure, regardless the animal is a rat or a mouse.

Basically, the Startle and Fear Combined system allows recording and analysis of the signal generated by the animal movement through a high sensitivity Weight Transducer system.

The analogical signal is transmitted to the FREEZING and STARTLE software modules through the load cell unit for recording purposes and posterior analysis in terms of activity/immobility (FREEZING) or startle response characterization (STARTLE).

An additional interface associated with corresponding hardware allows controlling the stimuli (light, sounds, shock, air puff) from the STARTLE and FREEZING modules of the PACKWIN software (PACKWINCSST and PACKWINCSFR, respectively).

The StartFear cage is made with black methacrylate walls and a transparent front door. In fear conditioning experiment, the walls, cover and floor can be of different materials or colours. Moreover,

a transparent cylinder can be placed into the experimental chamber in order to modify the contextual spatial perception of the subject during the test phase.

SPECIFICATIONS

Specifications **76-0280**

Dimensions	Chamber: 250 (W) x 250 (D) x 250 (H) mm
Soundproof Box Dimensions	670 (W) x 530 (D) x 550 (H) mm
Floor grid	Included grid : 10 mm spaced bars, LE100501/760240 grid: 6 mm spaced bars
Material Composition	Methacrylate, aluminium, stainless steel
Maximum number of stations	8 stations connected to a PC
Sounds Frequency and Amplitude	PrePulse/Pulse: adjustable from 200 to 10000 Hz - max 120 dB; White noise: from 60 to 120 dB
Computer requirement	For sound card and performance requirements, a specific model of HP computer is recommended (ask for more information)
Power Supply	110/220 V, 50/60 Hz

Water Maze Automated Atlantis Platform (Panlab)

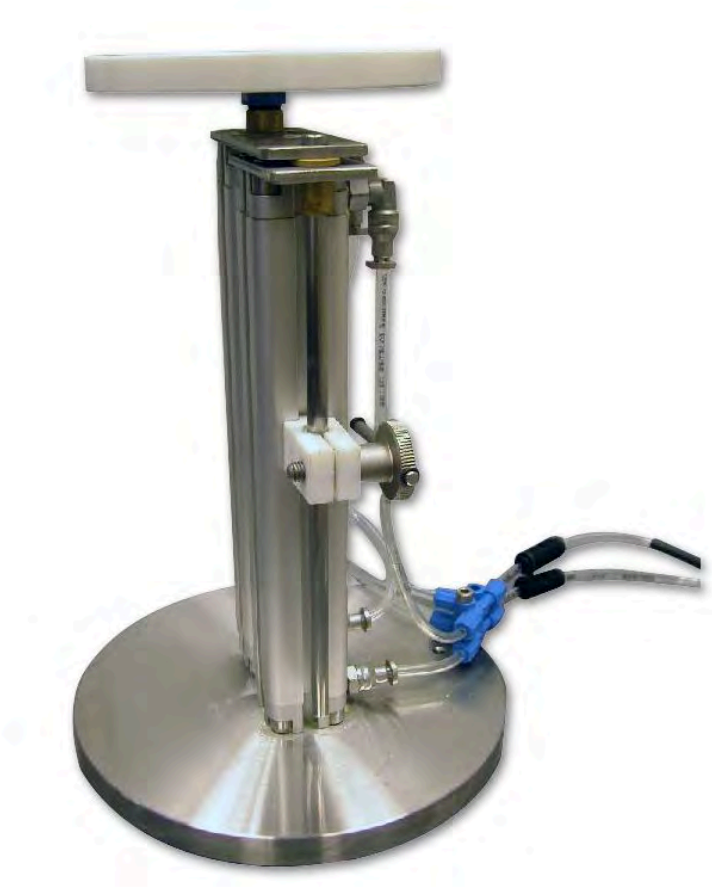
The Atlantis platform allows a remote control of the availability of the Island/platform in Morris water maze (MWM) studies.

The platform is activated pneumatically through a compressor supplied with the platform; the air flow of this compressor determines the rising speed of the platform.

The associated water maze pool need to be set up with 2 specific holes for the installation of the air tubes coming from the compressor without creating a visual cue for the animal. When purchased together with the Panlab water maze, the maze comes already prepared for the use of the platform.

The control of the Atlantis can be achieved manually or through the SMART video tracking software.

Item No.	Description
76-0026	(LE820300) Automatic Island Atlantis (11 cm diam., platforms, height 24-54 cm controlled by Smart Video Tracking Software, Provided with an Air Compressor, 230 VAC (41 x 17.5 x 24h cm)
76-0755	Automatic Island Atlantis (11 cm diam., platforms, height 24-54 cm controlled by Smart Video Tracking Software, Provided with an Air Compressor, 115 VAC (41 x 17.5 x 24h cm)



DETAILS

The Atlantis platform allows a remote control of the availability of the Island/platform in Morris water maze (MWM) studies.

The platform is activated pneumatically through a compressor supplied with the platform; the air flow of this compressor determines the rising speed of the platform.

The associated water maze pool need to be set up with 2 specific holes for the installation of the air tubes coming from the compressor without creating a visual cue for the animal. When purchased together with the Panlab water maze, the maze comes already prepared for the use of the platform.

The control of the Atlantis can be achieved manually or through the SMART video tracking software.

SPECIFICATIONS

Platform Diameter Metric|11cm^ Platform Diameter English|4.3 in^Platform Height Metric|from 24 to 54 cm^^Platform Height English|from 9.5 to 21.3 in^Compressor dimensions H x W x D Metric| 24 x 41 x 17.5 cm)^Compressor dimensions H x W x D English| 9.5 x 16 x 7 in)

Heated Circular Pool/Water Maze (Panlab)

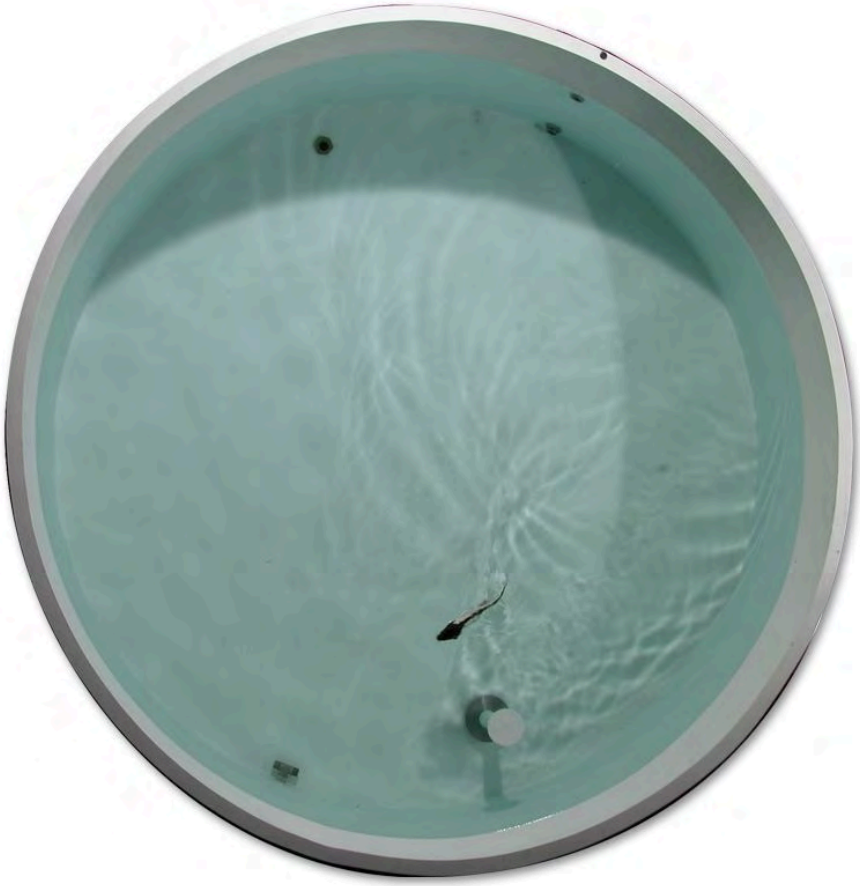
The heated circular pool is classically used for conducting spatial memory studies in rodents (Morris water maze - MWM - test).

This complete solution provides a heater, a water circulation pump, a level controller and an electro valve for filling the pool.

- Complete system, all in one station (water pump, thermostat and tubing all included)
- Control box controlling the water temperature (thermostated between 22-32 degrees Celcius depending of the environmental conditions)
- Easily adaptable platform size depending of the animal size
- Support with 4 wheels for better displacement
- Ideal environment to carry out Morris water maze, swimming test and/or Radial maze studies
- Altantis platform accessory available

Item No.	Description
76-0864	Circular Pool 90 cm, 110V
76-0644	Circular Pool 120 cm, 110V
76-0866	Circular Pool 140 cm, 110V
76-0645	Circular Pool 170 cm, 110V
76-0868	Circular Pool 200 cm, 110V
76-0020	(LE82090) Circular Pool 90 cm, 220V
76-0021	(LE820120) Circular Pool 120 cm, 220V
76-0022	(LE820140) Circular Pool 140 cm, 220V
76-0023	(LE820170) Circular Pool 170 cm, 220V
76-0024	(LE820200) Circular Pool 200 cm, 220V

Item No.	Description
76-0025	(LE820500) Spare Island Set (11 and 8 cm diam. platforms, height 40-50 cm)
76-0026	(LE820300) Automatic Island Atlantis (11 cm diam., platforms, height 24-54 cm controlled by Smart Video Tracking Software, Provided with an Air Compressor, 230 VAC (41 x 17.5 x 24h cm)
76-0755	Automatic Island Atlantis (11 cm diam., platforms, height 24-54 cm controlled by Smart Video Tracking Software, Provided with an Air Compressor, 115 VAC (41 x 17.5 x 24h cm)
76-0409	Water pump for circular pool



DETAILS

The heated circular pool is classically used for conducting spatial memory studies in rodents (Morris water maze - MWM - test).

The water maze tank is manufactured in polypropylene and stands on a support with 4 wheels for easier displacement. This complete solution provides a heater, a water circulation pump, a level controller and an electro valve for filling the pool. Panlab circular pool provides the ideal environment to carry out the Morris water maze test (MWM test) and aquatic radial maze tests for the study of memory in rodents. The level controller acts directly on the Electro Valve, turning it off when the liquid arrives to the corresponding height. The water temperature is thermostated between 22 and 32 degrees Celcius depending on the environmental room temperature.

A platform support is included for Morris water maze (MWM) test with two easily interchangeable platforms (80 and 110 mm). The platform is loaded and can be located anywhere in the water maze.

Aquatic radial maze accesories are available for aquatic radial maze experiments. In that last case, a removable-radial-arm maze structure (6 or 8 arms) and associated platform can be provided upon request.

The Atlantis platform is also available for a remote control of the availability of the platform (needs the SMART video-tracking software)

Both Morris water maze and aquatic radial mazes can be associated with the SMART Video-Tracking software for the automated detection and analysis of animal displacements and behavior throughout the test.

SPECIFICATIONS

Specifications	76-0864	76-0644	76-0866	76-0645	76-0868	76-0020	76-0021	76-0022	76-0023	76-0024
Heater Intensity	3000 W	3000 W	3000 W	3000 W	3000 W	3000 W	3000 W	3000 W	3000 W	3000 W
Heating Speed	max 3 Â°C / hour	max 3 Â°C / hour	max 3 Â°C / hour	max 3 Â°C / hour	max 3 Â°C / hour	max 3 Â°C / hour	max 3 Â°C / hour	max 3 Â°C / hour	max 3 Â°C / hour	max 3 Â°C / hour
Pool Diam.	90 cm	120 cm	140 cm	170 cm	200 cm	90 cm	120 cm	140 cm	170 cm	200 cm
Pool Height	60 cm	60 cm	60 cm	60 cm	60 cm	60 cm	60 cm	60 cm	60 cm	60 cm
Temperatre Range	22-30 Â°C(depending on environment)	22-30 Â°C(depending on environment)	22-30 Â°C(depending on environment)	22-30 Â°C(depending on environment)	22-30 Â°C(depending on environment)	22-30 Â°C(depending on environment)	22-30 Â°C(depending on environment)	22-30 Â°C(depending on environment)	22-30 Â°C(depending on environment)	22-30 Â°C(depending on environment)
Power Requirements	110V, 50Hz	110V, 50Hz	110V, 50Hz	110V, 50Hz	110V, 50Hz	220V, 60Hz	220V, 60Hz	220V, 60Hz	220V, 60Hz	220V, 60Hz

По вопросам продаж и поддержки обращайтесь:

Алматы (727)345-47-04
Ангарск (3955)60-70-56
Архангельск (8182)63-90-72
Астрахань (8512)99-46-04
Барнаул (3852)73-04-60
Белгород (4722)40-23-64
Благовещенск (4162)22-76-07
Брянск (4832)59-03-52
Владивосток (423)249-28-31
Владикавказ (8672)28-90-48
Владимир (4922)49-43-18
Волгоград (844)278-03-48
Вологда (8172)26-41-59
Воронеж (473)204-51-73
Екатеринбург (343)384-55-89
Иваново (4932)77-34-06
Ижевск (3412)26-03-58
Иркутск (395)279-98-46
Казань (843)206-01-48
Калининград (4012)72-03-81
Калуга (4842)92-23-67
Кемерово (3842)65-04-62
Киров (8332)68-02-04
Коломна (4966)23-41-49
Кострома (4942)77-07-48
Краснодар (861)203-40-90
Красноярск (391)204-63-61
Курск (4712)77-13-04
Курган (3522)50-90-47
Липецк (4742)52-20-81
Магнитогорск (3519)55-03-13
Москва (495)268-04-70
Мурманск (8152)59-64-93
Набережные Челны (8552)20-53-41
Нижний Новгород (831)429-08-12
Новокузнецк (3843)20-46-81
Ноябрьск (3496)41-32-12
Новосибирск (383)227-86-73
Омск (3812)21-46-40
Орел (4862)44-53-42
Оренбург (3532)37-68-04
Пенза (8412)22-31-16
Петрозаводск (8142)55-98-37
Псков (8112)59-10-37
Пермь (342)205-81-47
Ростов-на-Дону (863)308-18-15
Рязань (4912)46-61-64
Самара (846)206-03-16
Санкт-Петербург (812)309-46-40
Саратов (845)249-38-78
Севастополь (8692)22-31-93
Саранск (8342)22-96-24
Симферополь (3652)67-13-56
Смоленск (4812)29-41-54
Сочи (862)225-72-31
Ставрополь (8652)20-65-13
Сургут (3462)77-98-35
Сыктывкар (8212)25-95-17
Тамбов (4752)50-40-97
Тверь (4822)63-31-35
Тольятти (8482)63-91-07
Томск (3822)98-41-53
Тула (4872)33-79-87
Тюмень (3452)66-21-18
Ульяновск (8422)24-23-59
Улан-Удэ (3012)59-97-51
Уфа (347)229-48-12
Хабаровск (4212)92-98-04
Чебоксары (8352)28-53-07
Челябинск (351)202-03-61
Череповец (8202)49-02-64
Чита (3022)38-34-83
Якутск (4112)23-90-97
Ярославль (4852)69-52-93

Россия +7(495)268-04-70
Казахстан +7(727)345-47-04
Беларусь +(375)257-127-884
Узбекистан +998(71)205-18-59
Киргизия +996(312)96-26-47

эл.почта: hsw@nt-rt.ru || сайт: https://harvardapparatus.nt-rt.ru/