

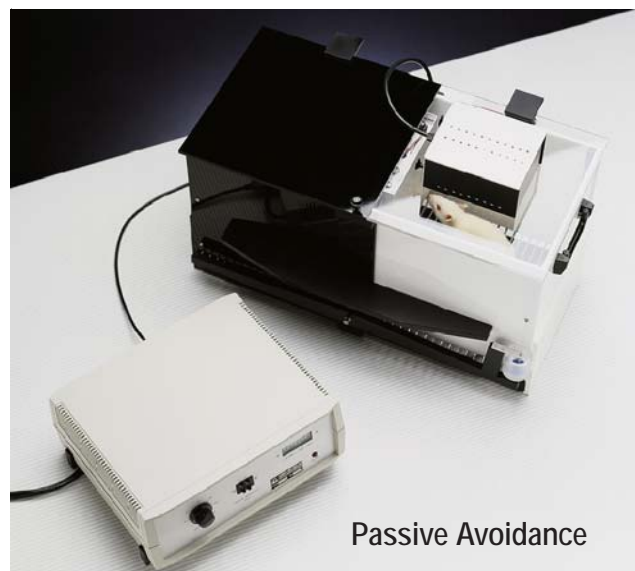


Ugo Basile S.r.l.

Plantar Test / Hargreaves Apparatus



PAM Joint Pain Instrument



Passive Avoidance



Anesthesia & Ventilation

New Mouse Rota-Rod



INDEX:

* Pain & Inflammation	pages 2-5
* Motor Coordination	5
* Ventilation & Anesthesia	6-7
* Organ Baths & Recording	8-9
* Feeding & Activity	10-11
* Memory & Neuroscience	12-13
* Biological Function	14
* Behavior	15



New!

Pain and Hyperalgesia Assessment

Plantar Test / Hargreaves Test

**For Mice or Rats*

**Infrared stimulus*

**Hyperalgesia Assessment*



The updated classic Hargreaves test. The new Plantar Test Instrument measures response to infrared heat stimulus. Focus the infrared source below the Plantar surface, press start button, and objectively record latency to paw withdrawal, and infrared intensity. Data appear on the front panel, and may be exported to a memory stick, or to computer via integral USB. Perfect for SPF facilities or core lab facilities! **Simply remove the memory stick, put it in your pocket, and upload results to the PC back in the office. *Memory Stick & Software included!*** New multiple configuration animal enclosure has 3 - 12 compartments. **37370 Plantar Test Apparatus**

NEW! Tail Flick Analgesy Meter

**For Mice or Rats *Infrared stimulus *Rapid, Precise, Repeatable Screening*

New style and innovation have also been incorporated into the Tail Flick Analgesy Meter. Accurately measure nociceptive threshold to infrared heat stimulus. Vary Infrared intensity on the front panel **Latency time & Intensity are automatically exported to a memory stick, integral USB, or serial port.** Perfect for SPF facilities or core lab facilities! Simply remove the memory stick, put it in your pocket, and upload results to the PC back in the office. Functions with Mice & Rats. ***Memory Stick & Software included!***

37360 Tail Flick Analgesy Meter

37360-325 Mouse Restraainer for Tail Flick

New!



Heat Flux Radiometer

**For calibrating the Plantar Test and Tail Flick Analgesia Meter*

The Heat-Flux I.R. Radiometer has been designed to calibrate I.R. sources of the classic Tail-Flick Analgesy Meter and the Plantar Test Instrument.

Measures *actual power flux* (expressed in mW per square cm) and hence a nociceptive stimulus of the same intensity.

This extremely useful accessory is complete with I.R. Probe, Digital Meter, Adaptors for Tail-Flick and Plantar Test (pictured.) Comes in a custom protective case.

37300 Heat Flux Radiometer



Have an idea?

"Have you created an instrument for your laboratory, which you think other researchers would use?"

"Do you have an idea for improving an instrument, or a new metric which would enhance your research?"

Contact Ugo Basile North America to discuss your ideas or inventions. We would like to talk to you.

Ugo Basile makes custom instruments to meet the needs of researchers everywhere.

We transform ideas into instruments!



Pain, Touch Sensitivity, Inflammation

NEW! Hot and Cold Plate Instrument

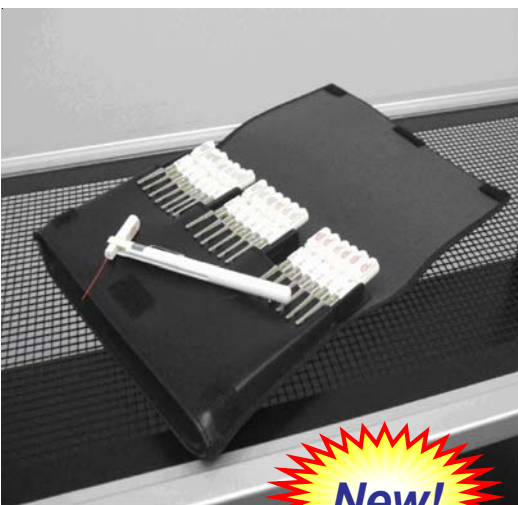
*Run two plates at once *Thermal stimulus *High Throughput Screening

New!

With an operating range 2 – 66°C, the improved temperature control provides 0.1°C resolution, and reaction times can be measured to one tenth of a second. *An optional auxiliary Hot Plate permits running two tests simultaneously.* Or use the auxiliary plate for acclimating the animal before testing. An integral USB port, Memory Stick technology, and software facilitate data portability. Simply remove the memory stick, put it in your pocket, and upload results to the PC back in the office. A taller animal chamber for rats, is also available. **Memory Stick & Software included! Second plate available as an option.**

35100 Hot and Cold Plate

35100-002 Auxiliary Hot Plate



New!

Von Frey Filaments, 20 Filament Kit

*For Mice, Rats, and Humans *Accurately Measure asses touch sensitivity

A kit of 20 nylon monofilaments, widely known as Von Frey filaments or Semmes-Weinstein monofilaments. Used for evaluating cutaneous sensation levels. One of the most popular non-invasive techniques used. Individually calibrated to deliver a target force, from 0.008 grams to 300 grams. **Also Available: Perforated metal platform**, a 34 x 14 inch shelf for testing with von frey filaments. Laser-cut perforations form a mesh-like open grid of square holes ~5X5 mm. Intervening metal grid is approximately 1mm wide, comfortable to the animal and easy to view the target area of the paw. The platform is coated with a polymer resin that is easy to clean and which will not be spoiled by fluids or waste materials Set the platform on any shelf support system, or contact us for metal base and columns.

1277 Von Frey filaments, 20 filament kit

1278 Perforated Metal Shelf for Von Frey tests

Dynamic Plantar Aesthesiometer

*For Mice or Rats *New Large platform & enclosures *Response to light touch

This Electronic Von Frey instrument measures sensitivity to touch. A moveable force actuator is positioned below the plantar surface of the paw. A Von Frey – type 0.5 mm filament exerts increasing force, until the animal twitches its paw. **Latency time, and Actual Force at the time of paw withdrawal reflex are recorded.** Data may be easily ported to a memory stick or directly to computer. Variable force and ramping speed capability! **NEW Perforated Metal Platform** and multi-configuration animal enclosure, from 3 - 12 chambers, are included. For both Mice and Rats.

37450 Dynamic Plantar Aesthesiometer



Grip Strength and Behavior

NEW! Grip Strength Meter

**For Rats and Mice! *Measure Forelimb Grip Strength*

The Grip Strength Meter measures forelimb grip-strength in rats and mice. Quantify the effects of drugs, muscle relaxants, toxins, disease, aging, or neural damage on muscle strength. The animal grasps the T-bar or triangle bar and is drawn backward on a Perspex plate. The rodent instinctively grips, to stop this backward movement. When backward force overcomes the grip strength, the animal releases and the peak amplifier automatically records peak force, and displays it on an LCD panel. Wave form data may be captured using the Data Capsule.

47105 Rat Grip Strength Meter

47106 Mouse Grip Strength Meter



NEW! Rotometer

**Animal remains unrestrained! *Measure Free - Moving Rotational Behavior*

The Rotometer is a new instrument from Ugo Basile, specially designed for recording rotational behavior. No tether is required. Simply attach a tiny magnet, the size of a grain of rice, and leave the room. The Rotometer automatically tallies clockwise and counterclockwise rotations. The tiny, reusable magnets may be implanted, or carried within a jacket. The Rotometer consists of a clear Perspex column and platform on the control unit. Digital read-out shows accrued rotations and time. **The Rotometer features Portable Memory Stick technology, USB interface, & software for connection to PC.**

43000 Rotometer

Plethysmometer

**For Mice and Rats *Accurately Measure Inflammatory Response / Edema *Software Included!*

The Plethysmometer is designed for accurate measurement of rat or mouse paw edema. It consists of a fluid-filled tube into which the paw is dipped. A transducer of original design records small differences in fluid level due to displacement when the paw is immersed. The digital read-out shows the exact volume of the paw. Direct connection to PC via the included software! Optional Mini-Printer is available for receipt - style printout of data. **The plethysmometer comes standard for testing rats (up to ~300g) and mice.** Larger water cells for larger animals available. Stand & clamp not included and available separately.

7140 Plethysmometer

7157 Large Water Cell (includes transducer and 2.5 cm paw tube)

57145 Mini Printer for Plethysmometer





PAM

Inflammation & Motor Coordination

**Measure Joint Pain*

**For Mice and Rats*

**Inflammatory Response / Edema*

The new PAM Apparatus is the first commercial instrument designed for pressure application measurement, a novel method for measuring hypersensitivity in the joint. Developed as *a correlate to the clinical tests of joint pain*, PAM uses rat or mouse as a model. An electronic unit and a transducer of original design measures small differences in the force applied to the joint. When the animal flinches or vocalizes, the PAM automatically detects and displays the exact force at the peak of application. **For rodent and other models of Arthritis!**



38500 PAM Pressure Application Measurement System

38500-812 PAM Pincer Pressure Applicator

Mouse Rota-Rod

**High throughput screening*

**Automatic Data Acquisition, Direct to PC*

The "Rota-Rod" technique is essential in screening drugs which have side effects on motor coordination. Ugo Basile Rota-Rods, the original Rota-Rods, have been updated after years of consulting leading researchers in behavior and pharmacology. The new Rota-Rod for Mice has five lanes, and operates in constant speed, accelerating, and reverse / rocking modes! The tiltable digital panel shows accrued rotations and time on the rod. **The Rota-Rod includes software for connection to PC, and parameters can be controlled via your PC!** Contact Ugo Basile North America for details.

47600 Rota-Rod for Mice



Rota-Rod for Rats

**High throughput screening*

** Automatic Data Acquisition*

**External Control!*

The Rota-Rod for Rat has all of the advanced features on the Rota-Rod for Mice shown above, but of course its size is scaled up to be large enough for adult rats. Ugo Basile Rota-Rod for Rat has four lanes with large dividers, and also functions in constant speed, accelerating, and reverse / rocking modes! The tiltable face plate makes the digital panel easy to read, and is common to all our Rota-Rods. The readouts show accrued time that the animal spends on the drum, in addition to experimental parameters. **The Rota-Rod for Rat features direct connection to PC, and the software is included, to facilitate operation and data acquisition!**

47700 Rota-Rod for Rats



Bronchodynamics and Ventilation

Dog Ventilator

**Comes Mounted on a Heavy Duty Cart *Negligible Dead Space Volume*

The Dog Ventilator is sturdy and reliable, featuring a scaled-up version of the same kinematic design as our other ventilators, but dimensioned for dogs. There are 350 ml and 700 ml cylinder/ piston combinations available. The Ventilator has a protective cover, and is fastened to a trolley with heavy duty locking casters, for easy portability when moving through the surgical suite or between stations across the laboratory. The movable cart brings the ventilator to operator height, making it simple to connect to anesthesia stations and the operating table.

5025 Dog Ventilator



Cat & Rabbit Ventilator

**Multiple piston assemblies*

The Cat and Rabbit Ventilator from Ugo Basile consists of a variable speed geared motor, linked by a novel variable stroke mechanism, to an interchangeable cylinder/piston assembly. 50 or 100 ml pistons are available, as is the synchronized START / STOP option.

6025 Cat & Rabbit Ventilator, 50 ml cylinder / piston

6125 Cat & Rabbit Ventilator with Start/Stop

6027 Optional 100 ml piston assembly

Rodent Ventilator

**Piston Driven *Versatile *Multiple Piston / Cylinder Assemblies*

Our Rodent Ventilators are positive pressure pump according to Starling's method. These ventilators can be used with mice, rats, guinea pigs, small birds. Motor speed is precisely regulated by an electronic feedback-controlled drive, thus providing the most accurate and reliable stroke rate control of any respirator available. Electronic noise broadcasting is negligible, and the pumps are also quiet to the ear. Special models are also available with a circuit for synchronized START / STOP, when you need to stop the ventilator mid-stroke. Standard piston is 10 ml, but 5 and 30 ml pistons are available as options.

7025 Rodent Ventilator, 10 ml cylinder / piston

7125 Rodent Ventilator with Start/Stop

7027 Optional 30 ml cylinder / piston assembly

Bronchodynamics and Ventilation

Ventilator for Mice

**Designed Specifically for Mice * Low Tidal Volumes *Fast Respiration Rates*

The New Mouse Ventilator was designed to meet the strict needs and exacting specifications for ventilation of mice. The unique piston design and swiveling motion prevents backlash, virtually eliminates friction, and reduces dead space to the volume of the ports to the animal! The 1 ml piston can deliver from 100 μ l to 1000 μ l, and is interchangeable with a 0.5 ml piston, which gives a tidal volume range even down to 50 μ l. Tidal Volume and Respiratory Rate can both be changed while operating. The red LED readout displays the Respiratory Rate.

28025 Mouse Ventilator



New!

NEW! Gas Anesthesia System

**Digital Flow Meter * Low Tidal Volumes *Fast Respiration Rates*

A Gas Anesthesia System designed for anesthetizing rats and mice. The system consists of a basic benchtop stand which takes very little bench space. A **Digital flow meter** with a broad range of operation, delivers from 0.3 to 16 lpm. Adjustments in 0.1 ml increments can be made within that range, (difficult with an analog flow meter.) The basic system comes with Isoflurane vaporizers, other vaporizers (other anesthetics, as well as Key Fill option) available upon request. The basic rig can sit on the bench, or can mount on a rolling floor stand or the wall. Manifold for multiple stations is available. Other popular **Accessories** include the popular f/air canisters, as well as **active scavenging systems** which use a vacuum to evacuate anesthetic gas to a nearby fume hood. **Breathing circuits for large and small animals**, also available! An economical benchtop anesthesia system, with one analog flow meter, is also available. *See website for details.*



- 21050 Gas Anesthesia System (Benchtop, digital flow meter, vaporizer)*
- 21100 Gas Anesthesia System (Benchtop stand, Digital Flow Meter, vaporizer, breathing circuit & f/air canister starter kit)*
- 21400 Four Station Anesthesia System (Benchtop stand, digital flow meter, vaporizer, plus four Analog flow meters, f/air canisters, breathing circuits)*
- 21150 Economy Anesthesia System (benchtop, analog flow meter)*



*Breathing circuits
*for Mouse (above)
for Rat (shown at left)

Accessories

- 61004 f/air Scavenger canisters, each*
- 61008 f/air Scavenging canisters, case of 8*
- 61010 Breathing Circuit for Rat (Pictured)*
- 61011 Breathing Circuit for Mice*
- 61015 Induction Chamber*
- 61000 Tygon Tubing*
- 61833 Active Scavenging system*



New!

In Vitro Assays and Recording NEW! Isolated Organ Baths and Systems

**Everything You Need for Isolated Organ Studies*

Research involving effects of electrical stimuli or drugs on isolated organs, (nerve, heart, muscle uterus, trachea, vessel strips, auricles,) can be performed under optimum conditions using these bath systems. Wash or test solution are prewarmed via coils and a syringe valve. Provision is made to minimize back diffusion once the chamber is filled. Constant temperature is maintained with a recirculating centrifugal pump and heater. Single, dual, quad, or custom chambers are available, as are a selection of transducers and sensors.

****Basic system is a Single chamber bath with one tissue chamber; two- and four - chamber organ baths, stimulators, etc. also available**

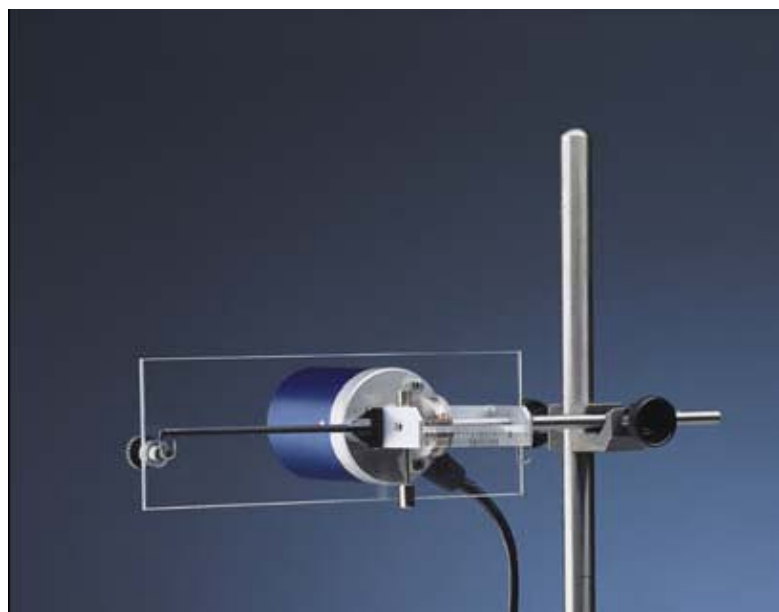
****Contact us to custom tailor an isolated organ system for you**

Isotonic Transducers

**Specialized, Hall Effect Transducers Calibrated for Impeccable Performance*

*Designed for isotonic contractions in isolated organs, particularly smooth muscle, amphibian hearts, etc. A displacement meter under constant load, the lever arm balancing is provided by a calibrated, knurled tungsten alloy counterweight which can be shifted by fractions of a gram with a simple turn. **Low inertia!** Load is monitored by the counterweight rim moving along a scale calibrated in grams. Carry out experiments on extremely small muscle fibers, which can be held under a tension of as little as 100-200 mg. Complete specifications are available online.*

7006 Isotonic Transducer



Isometric Transducers

**Specialized, Ultraprecise Strain Gauge Transducers*

Designed for the precise measurement of force under isometric conditions. Measure changes in force at constant length. These Transducers have been designed for precise measurement of force exerted on a hollow carbon fiber beam, converted into proportional electric signal. Transducers are available with ranges from 0 – 2g, 0 – 10g, and 0 – 50g, and High Sensitivity Transducer with range 0 – 800 mg. Standard connectors 8-pin DIN, also available with connectors to match your system. Guard Plate included. Can be customized for other data acquisition systems. Call for details.

*7003 (0-2g), 7004 (0-10g), 7005 (0-50g) Transducers
7010 (0-800mg) High Sensitivity Transducer*



Data Acquisition and Transducers

NEW! DataCapsule Data Acquisition

**Inexpensive *Four Channels, includes one Integral Bridge Amp
Direct Connect via USB!

The new DataCapsule has been designed for data collection from isolated organ baths, the grip strength meter, and many general lab needs. Four channels, one with an integrated bridge amp. Plug in a transducer (Isometric or Isotonic Transducers, etc.) and start collecting data. Recalibration changes the operational range, to increase sensitivity. Onscreen file recall, review, and add comments. Connects directly to PC via USB. BNC & 8-pin DIN inputs for each channel. *Software Included.* Additional bridge amps may be installed, call for details.



Shown with transducers and laptop, (not included)

17400 Four Channel Data Acquisition System



Multiplexing Pulse Booster

**Four Channels*

The Multiplexing Pulse Booster provides high power (up to 800 mA), and has been designed with four independent, isolated channels, to deliver preset pulses, *independent of your stimulator output current.* A useful complement to any stimulator, to energize up to four in-vitro electrode pairs at the same time. The Multiplexing pulse booster can provide constant current, unipolar or bipolar pulses, and current monitoring! An optional timer enables the Pulse Booster to deliver pulse trains, if your stimulator lacks this feature.

3165 Multiplexing Pulse Booster

Bronchospasm Transducer

for measuring drug side effects on respiratory dynamics

The Bronchospasm Transducer is designed to evaluate spasm-inducing drugs, Shown on the right as coupled to a rat ventilator and chart recorder (not included) it is an air flow meter, provided with a water input valve with an adjustable pressure threshold, connected to the air piping via a bypass. The bronchospasm transducer is also a useful tool for screening substances that induce bronchodilation, as well as for measuring basal conditions and the effects of antagonists such as histamine, bradykinin, etc. The device is compact, sits on the benchtop, and made entirely of Perspex. It is mounted on a base with an integral power supply, and controls. The bronchospasm transducer may be coupled with any electronic chart recorder such as the Data Capsule above.

7020 Bronchospasm Transducer



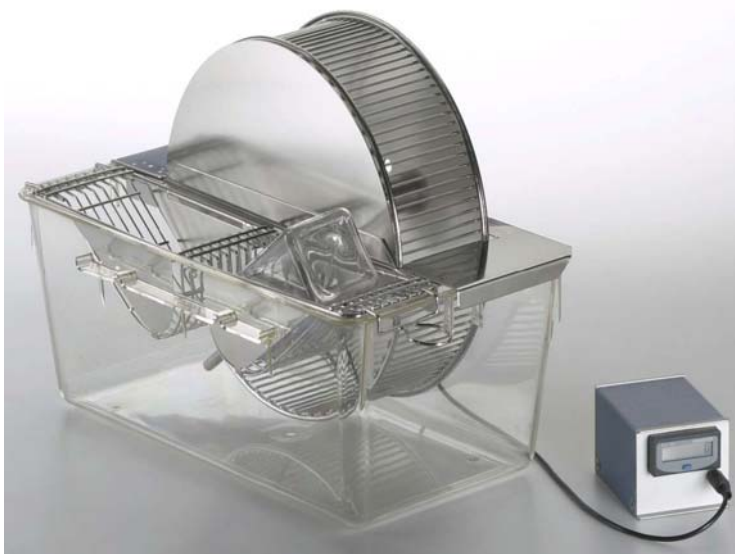
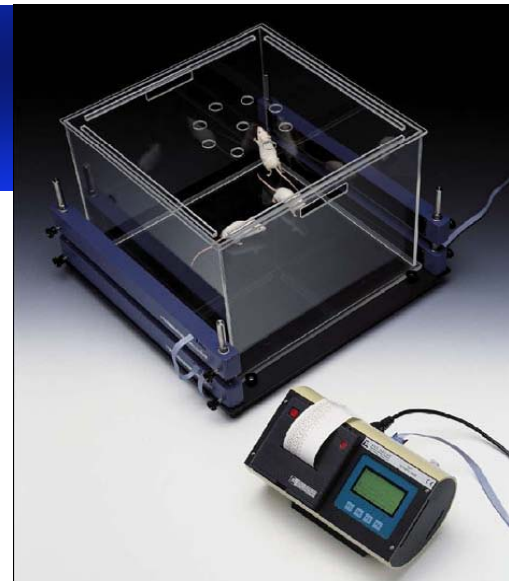
Activity Systems

Open Field Activity Cages

**Measure coordinate activity and rearing behaviors*

The Activity Cage has been proved of great value to record spontaneous co-ordinate activity in rats and mice. Two Infrared (IR) Beam Arrays flank a cubicle of clear Perspex. Standard clear vivarium mouse cage can be set directly inside the enclosure, without disturbing the animals! Facing IR arrays contain carefully aligned infrared emitters and detectors. The lower IR arrays record horizontal activity, and upper arrays record vertical activity (rearing) events. Cages can be multiplexed, call Ugo Basile for details. Includes software, Serial Cable and USB adaptor.

7420 Open Field Activity Cage



Activity Wheels

**Economical *Classic Activity Wheel *For Rats or Mice!*

Activity Wheels from Ugo Basile are a convenient and easy measure of conventional activity. Food and water stations are integral to the lid, so the animal can be monitored remotely. A magnetic switch counts whole revolutions, the LCD displaying cumulative rotations. Multiple cages can be linked. Multifunction printer (p.9) can record up to six cages, and a specialized printer can track up to 48 cages!

1850 Activity Wheel for Mice

1800 Activity Wheel for Rats

Feeding and Activity Analyzer

**Innovative *High Throughput Screening*

These custom cages from Ugo Basile connect directly via USB to your computer. Monitor Feeding, drinking, activity. New Data Acquisition Software has been developed to collect data from a single cage, and has expansion capabilities to collect data from an array of cages! **Plug into virtually any computer via USB, or multiplex cages with ease.** All settings may be adjusted through the user friendly software interface. Infrared Beam Break can be added for activity monitoring. Designed to convert to a closed system, for use with Gas Metabolism monitoring; a larger version of the cage on page 11. Call for details.

47452 series Feeding and Activity Cages

41700-084 Electronic Unit feeding, drinking, activity, 8 cages

51800 Software for up to eight cages



Activity and Metabolism

Feeding and Drinking Cages

Classic metabolism cages with receptacles for food & water, and collection of urine and feces. Each may be removed without disturbing the animal. Optional infrared beam arrays (similar to those of the Activity Cages on p. 10) can be mounted on either side of the cage to monitor coordinate activity and rearing behavior. Each cage is comprised of interchangeable parts which can be cleaned in a standard vivarium wash station. Cages are available in sizes for mice, or for rats (to 150g, 150 – 300g, and over 300g.) Call to configure the system which best suits your needs.

47101 series Feeding and Drinking Cages
51800 Software for up to 8 Cages



NEW! One Liter Gas Metabolism Cage

**Feeding and Drinking *Gas Metabolism Cage*

These custom made cages obtain accurate feeding and drinking measurements, while maintaining a "closed system" cage to facilitate *oxygen consumption and carbon dioxide metabolism studies*. Ports on the sides allow for simple attachment, admixture of gasses, and for intake and outflow of gas samples. The enclosures meet IACUC enclosure size specifications. Shown with optional Infrared activity sensors (available upon request.) Integrates with MM-100 and other gas metabolism systems. Multiplex cages via USB!

47555 Metabolism Cage for Mice
51800 Software for up to 8 Cages



Drinking Conflict Test

**Vogel Conflict / Lickometer *Multiplex chambers *Anxiety Testing*



This new system has been developed for performing Vogel Drinking Conflict experiments. The system consists of a dark animal chamber with grid floor, lick sensor, & water reservoir; a shock controller; electronics control unit; and software. User-set parameters include the phasing (duration, initial pause, intervals with and without shock, etc.) as well as shock intensity. The software records lick and shock events, totals events during each interval, and summarizes experiments. Chambers may be used without shock, as a general lickometer. *The Drinking Conflict System requires a computer, computer is not included with the system.*

45100 Drinking Conflict Test System

***Additional Drinking Chamber & Shocker Units available for multiplexing up to four chambers; call or email for more information.*

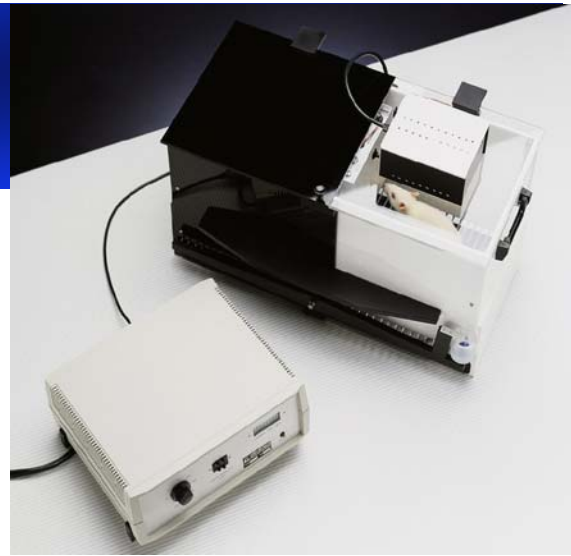
Memory & Conditioned Response

Passive Avoidance System

**Nearly Silent Sliding Door * Step through cage*

A two compartment enclosure with black and white compartments, incorporating the same tilting floor timing sensor as the Shuttle Box System, with a sliding door partition. The start pedal initiates the Door Delay timer, (the opening delay is able to be set from 0 – 99 sec, in 1 sec steps.) **Latency to crossing is measured to 0.1 sec.** A 1 sec safety delay to door closure ensures that the animal is not upset or disturbed by the closing door. Independent lids add to ease of operation and cleaning. Customizable; call for details!

7550 Passive Avoidance System for Rat
7550-M Passive Avoidance System, Mice



Passive Avoidance (Step Down Method)

**For Adult Mice or Juvenile Rats*

A 7 cm platform elevated above the floor grid of a 6 x 10 x 10" box provides the arena for Step Down experiments. The platform is connected to an actuator which causes the platform to shake. When the animal steps off of the platform to the electrified grid, the stop command is used to cut actuator power, halt platform vibration, and trigger the latency counter. Latency time is recorded to 1/10 of a second. The vibration intensity can be changed by a thumb switch on the front panel of the instrument. An 11 cm platform is also included with this set-up.

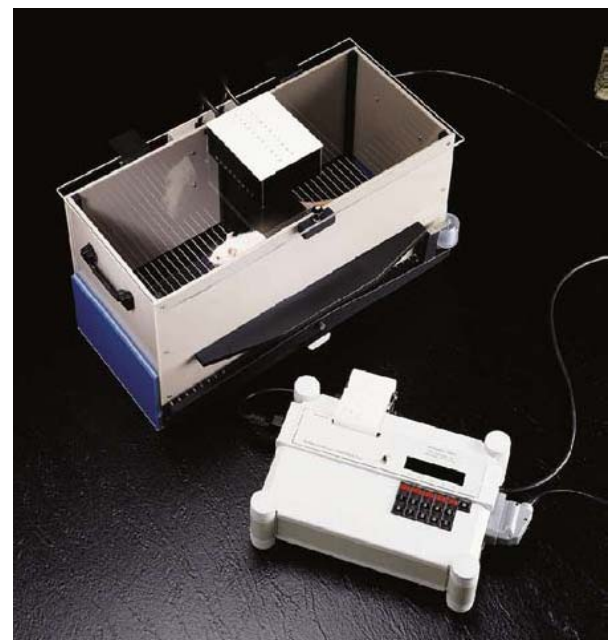
7570 Step Down Passive Avoidance System

Active Avoidance / Reflex Conditioning

**8 – Pole Scrambling shocker *Quiet Operation *Acoustic and Visual Stimuli*

The classic instrument for performing the Shuttle Box Test, with microprocessor controlled production of visual, auditory, and electrical stimuli. The controller allows you to vary intensity, duration, and frequency of stimuli. Enhancements include a tilting floor which triggers cessation of the stimulus when the animal passes through the door and crosses into the adjoining chamber. Perform Shuttle Test, Crossing Test, Timing Experiment, and Conflict Test. Variable stimuli allow optimization of experimental parameters. Thermal printout as well as RS232C.

7530-M Active Avoidance System Mice
7530 Active Avoidance System for Rat



Neuroscience

Lesion Making Device

**For Generating Brain and Tissue Lesions In Vivo*

A compact, solid state DC lesion maker for the production of localized lesions in small tissue preps, where DC is preferred to RF output. **Current output from 10 μ A to 99mA, and pulse duration from 1 to 99 seconds.** Continuous and timed modes. Protected against short circuit, the electronics are designed to prevent accidental short, if electrodes were to contact each other. Custom Electrodes available on request!

53500 Lesion Making Device



New!



New!

NEW! ECT Unit

**Electroconvulsive Therapy Unit *Wide Current and Frequency Range*

The ECT apparatus is specially designed for neurochemical and neuropharmacological research, and studying cortical or subcortical regions mediating EC threshold. Constant current output ensures reproducible results and accurate determination of the EC threshold. **Feedback Circuitry adjusts for variance in impedance from animal to animal.** Current 1–99mA, Frequency 1–299/sec (+/- 1%). Auricular electrodes are standard; corneal electrodes are available. **Customizable! Send us a request.** An Inverter / Bi-Phasic Unit / Bipolar Inverter is available as an option.

57800 ECT Unit

57800-010 Biphasic Unit / BiPolar Inverter

57800-003 Corneal Electrodes for ECT Unit

57800-303 Optional Foot Pedal for ECT Unit

Synaptosome Superfusion System

**Study Neurotransmitter Release, Synaptosome Fusion *Automated Collection*

The Superfusion System 14900 has been designed to carry out release studies from synaptosomes according to the instrument originally developed in Raiteri's laboratory. Studying physiological mechanisms of transmitter release, and how the process is modified by pathological states, will lead to advances in therapeutics. Upper reservoirs warm washes for 12 parallel chambers. Synaptosomes are loaded as thin layers on microporous filters. An optional multi-channel peristaltic pump loads superfusate and samples can be collected directly into scintillation vials for assay. **Detailed Instructions and Reprints Available!**

14900 Superfusion System



Biological Function Monitor

New!

NEW! Blood Pressure Monitor

Accurate, objective recording of systolic and diastolic pressure

A geared motor permits the pressure generator to provide a *smooth, stepless, increase in cuff pressure*, and superior pulse sensors facilitate operation. Actual pressure is displayed via a **calibrated digital printer** which shows amplitude of the pulse signal. When cuff pressure exceeds diastolic, the signal attenuates until the graph becomes a straight line at maximum arterial pressure (systolic.) Pulse rate is also assessed in real time. **Includes one restrainer, cuff, and sensor for rats or mice;** tail cuff and sensor for dogs are available.

58500 Blood Pressure Monitor for Rats

58600 Blood Pressure Monitor for Mice

NEW! Heater Scanner Box

**High throughput screening of multiple animals*

Used in conjunction with the Blood Pressure Monitor, the Heater Scanner Box is a compact, temperature controlled "cupboard" which allows sequential sampling from a group of animals. Animals in restrainers are prewarmed inside the box, which has connections for cuffs and sensors of **up to five rats or six mice**. A double switch (electric and pneumatic) controls inflation, deflation, and taking readings from the cuff and pulse sensors from subject to subject, without disturbing the animals in the box. The Heater Scanner Box includes five rat restrainers; cuff and pulse sensors are sold separately and should be ordered according to animal size. Also available as a stand-alone heater box cabinet to prewarm the animals, without the scanning function.

58000-850 Heater / Scanner for Rats

58000-845 Heater Box for Prewarming only

New!

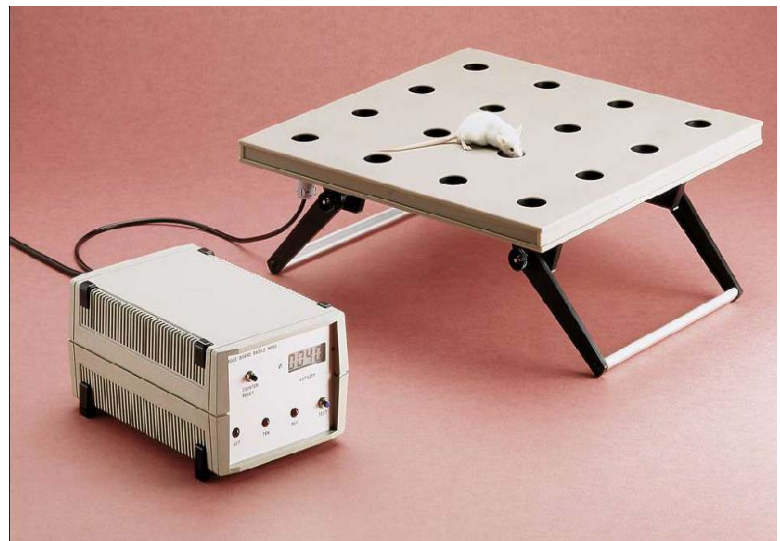


Hole Board for Mice

**Hands-Free Screening *Exploratory Behavior, Memory Assessments*

The Hole Board is designed for screening mice and assessing exploratory behavior and testing memory. Memory tests are accomplished by placing treats at specific locations below a hole, removing after a time, and monitoring head pokes. **Each hole has an infrared emitter and detector. The animal's head pokes through the hole and breaks the beam.** The readout shows accrued head pokes, and data output contains additional experimental parameters such as time and date stamp. Analog Data may be output to computer via the Multifunction Printer.

6650 Hole Board





NEW Behavior Instruments

Atlantis Hydraulic Platforms

Automated Platforms for the Morris Water Maze test



Replace fixed height platforms. Submersible Atlantis Platforms are constructed of clear Perspex. Position in the tank, and connect standard tygon tubing to a port on the side of the tank. Electronics are outside the tank. **One controller will operate from one to four Atlantis platforms** remotely. Raise or lower with the press of a button, or integrate timing via TTL pulses. Height adjustable 1 - 9 cm, in 1 cm steps, 1 cm/sec. The top is 10 cm diam. Using the Atlantis hydraulic platforms allows exclusion of "navigation strategies" so that experiments produce reliable indication of true spatial learning. Single and four platform systems available.

40100 Single Hydraulic Atlantis Platform System
40400 Quad Hydraulic Atlantis System, (4 platforms)

NEW! Behavior Instruments

Elevated Plus Maze



We now manufacture an extensive range of specialized mazes and platforms for most common behavioral tests, and we can make custom platforms to your specifications.

Newest Instruments include chambers for assessing sociability, fear conditioning, place preference, visual cliff, helplessness, and more. Comprehensive specs online!

www.ugobasileUSA.com

www.ugobasile.com

*Call for details,
especially for custom
instrumentation!*



Elevated Zero Maze



Visual Cliff

Specialized Substrates



Place Preference



Sociability Chambers

Rotometer



Paw Pressure Analgesy Meter

**For Mice or Rats *Pressure stimulus *Randall – Selitto Test*

The Randall-Selitto Test, performed since 1965, is automated with the Paw Pressure Analgesy Meter. Used in academic and industrial labs to perform rapid, precise screening of analgesic drugs. The Analgesy Meter features a weight displacing screw driven by a low voltage, geared motor. Easy addition of extra weights, balance adjustment, and quick replacement of parts make this instrument simple to operate. To increase safety, there is an optical switch to measure the start/stop time-lag (the force at which the animal struggles.) Computer connectivity via the Multifunction Printer. Foot pedal included. Optional knife edge pushing rod available, call for details.

37215 Paw Pressure Analgesy Meter



New! Von Frey Filaments & Platforms

**High Quality *Economical *Kit of 20*



page 2



page 15

NEW! Sociability & Behavior Instrumentation

**New Tests *Classic Mazes *Custom Designs*

page 7

NEW! Anesthesia Equipment



pgs 4-5



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