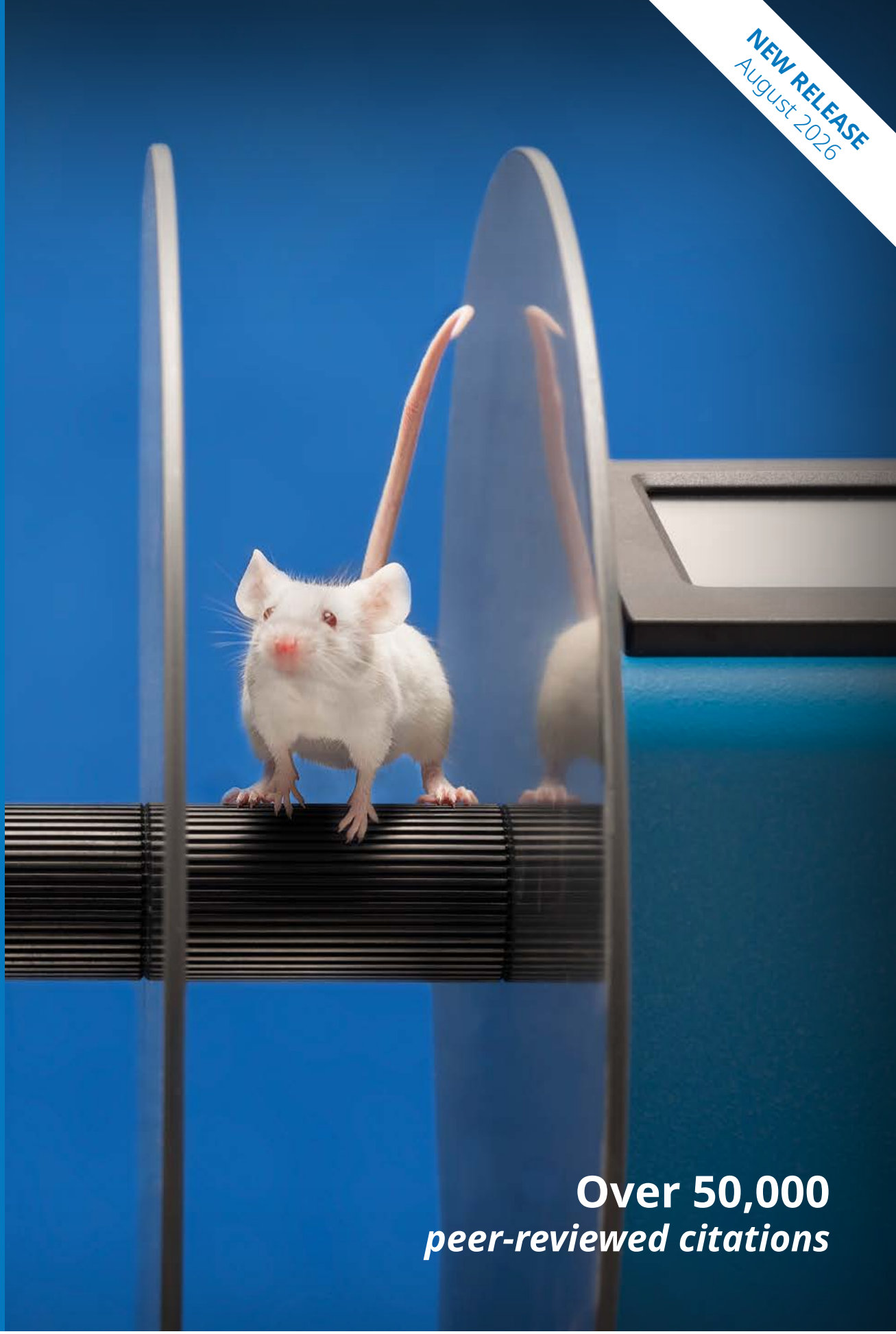
UGO BASILE CATALOGUE

NEW RELEASE
August 2026



Over 50,000
peer-reviewed citations

TRANSFORMING IDEAS INTO INSTRUMENTS

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YOUR COMPANION IN DISCOVERY SINCE **1963**



Complete GA.I.T. setup including the GA.I.T. hardware with corridor, 45° mirror, frontal high-speed camera and lateral cages, plus a preconfigured PC with monitor, keyboard and mouse.

GA.I.T - AI matches Gait Analysis

AI-powered gait assessment for mouse models of motor impairment. Virtually 100% error-free results. No manual corrections needed.

GA.I.T by Ugo Basile, is a next-generation AI-powered Gait Analysis system for mice, designed to simplify data acquisition, analysis and data export in preclinical locomotion studies on rodents.

Unlike contrast-based systems, GA.I.T uses deep learning algorithms to automatically detect paws and body landmarks with virtually 100% accuracy, eliminating the need for manual corrections.

The system combines a compact tabletop device, integrated high-frame-rate camera, dual-view acquisition, preconfigured AI software and a dedicated PC in one ready-to-use package. No GPU configuration or complex setup is required: the system is fully operational out of the box.

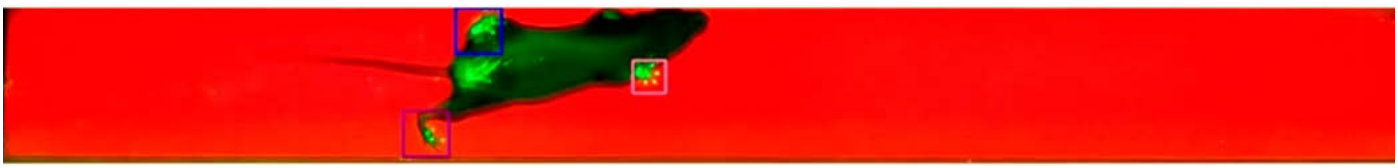
Mice walk spontaneously through the mouse-specific corridor, ensuring naturalistic locomotion without forced movement. The GA.I.T software automatically extracts a comprehensive set of spatial, temporal, postural, interlimb coordination, and tail parameters, covering motor, pain & inflammation and aging research applications.

ORDERING INFORMATION

SKU	Description
48203	GA.I.T Analysis system for mice. Based on AI, include PC and GoPro camera



Specification	
Footprint	69(w) x 56,5(d) cm (does not include PC and 24" monitor)
Total Dimensions	94(w) x 56,5(d) x 45(h) cm
Ventral View Corridor	66,5(w) x 5,5(d) cm
Lateral View Glass Dimensions	66,5(w) x 12,5(d) cm
Lateral Cages Internal Dimensions	12(w) x 8(d) x 8(h) cm
Weight	12 kg



Analyzed frame of a mouse with severe gait impairment: the AI-trained system identifies the paws while automatically excluding ventral body contact from the analysis

Features and Benefits	
Precise paw and body part identification via AI-trained software	Virtually 100% accuracy. Greater accuracy and higher inference speed compared to methods based on contrast. Time saving procedures thanks to tailored AI training. No manual revision needed.
Ready-to-use package	Pre-installed PC, camera and software; operational out of the box
Compact tabletop design	Space-saving footprint; purpose-built for mouse-specific corridor
Very high spatial resolution	Allows discrimination of single fingers and related parameters
Affordable price	Accessible even to laboratories with limited budgets.
Comprehensive parameter set	Spatial, temporal, postural, interlimb coordination and tail parameters
Spontaneous locomotion	No forced movement; naturalistic gait acquisition

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Application

Gait Analysis is a sensitive and integrated readout of nervous system function, reflecting changes in neurophysiology, peripheral nerve integrity, spinal circuitry, and central motor planning.
Gait Anlysis is suited for a broad range of preclinical research models:

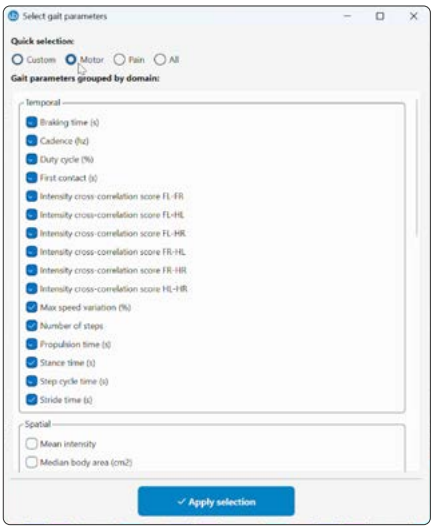
- Motor function and coordination (Parkinson's disease, spinal cord injury, ALS)
- Pain and inflammation models (neuropathic pain, arthritis, post-surgical pain)
- Aging and neurodegeneration research
- Drug efficacy and safety pharmacology studies

In the field of motor function and coordination research, GA.I.T. by Ugo Basile helps researchers quantify gait abnormalities associated with neurodegenerative, neuromuscular and injury-related models, including Parkinson's disease, spinal cord injury and ALS.

Motor dysfunction can alter stride length, swing and stance timing, step sequence, interlimb coordination, regularity index and body posture. Through AI-powered paw and body-part detection, GA.I.T. provides objective and repeatable gait parameters to characterize motor impairment, monitor disease progression and evaluate therapeutic interventions during spontaneous locomotion.

Main Parameters

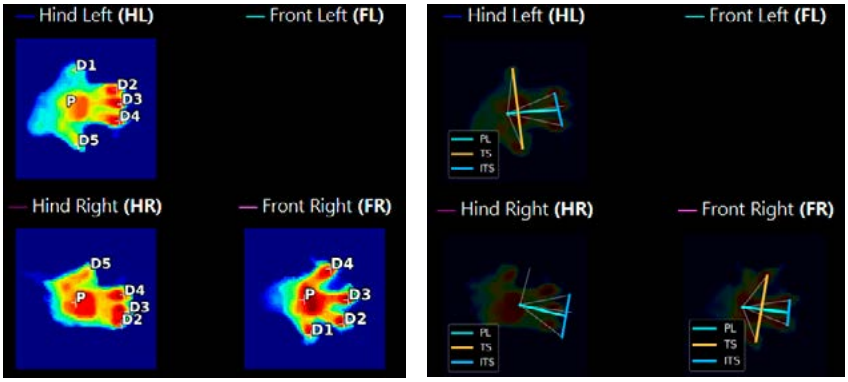
GA.I.T offers a flexible parameter selection designed to adapt the analysis to different research objectives. Users can choose from application-specific preset parameter sets, select only the measurements relevant to their experimental protocol, or include the complete range of available parameters for a comprehensive assessment. This customizable approach streamlines data analysis while allowing researchers to focus on the most meaningful temporal, spatial, postural and coordination-related outcomes for each study.
GA.I.T provides a comprehensive set of parameters for the quantitative assessment of motor function and coordination.
Stride length and time, cadence, stance time, duty cycle, braking and propulsion phases characterize step execution and locomotor rhythm.
Step length, width and relative paw positioning allow researchers to evaluate gait symmetry, base of support and coordination between forelimbs and hindlimbs.
Intensity cross-correlation scores provide an additional measure of temporal coordination between paw contacts, while velocity, speed variation, body-direction angle, path efficiency, tail flexibility and tail laterality contribute to the evaluation of stability, posture and whole-body motor control.



"Choose Parameters" screen in the Export menu

Features and Benefits	
Precise paw and body part identification via AI-trained software	Virtually 100% accuracy. Greater accuracy and higher inference speed compared to methods based on contrast. Time saving procedures thanks to tailored AI training. No manual revision needed.
Ready-to-use package	Pre-installed PC, camera and software; operational out of the box
Compact tabletop design	Space-saving footprint; purpose-built for mouse-specific corridor
Very high spatial resolution	Allows discrimination of single fingers and related parameters
Affordable price	Accessible even to laboratories with limited budgets.
Comprehensive parameter set	Spatial, temporal, postural, interlimb coordination and tail parameters
Spontaneous locomotion	No forced movement; naturalistic gait acquisition
Affordable price	Accessible even to laboratories with limited budgets.

A unique approach to paw geometry analysis



Pictures showing digit recognition and toe spreading analysis.

Thanks to a tailored AI model specifically developed for mouse footprints, GA.I.T. automatically detects and anatomically labels the position of individual digits, from D1 to D5, for each step. This digit-by-digit recognition enables the automated calculation of four advanced parameters: Palm Length, Toe Spread, Intermediate Toe Spread and the Sciatic Functional Index. Without requiring researchers to manually identify or mark the toes, GA.I.T. provides detailed and objective measurements of paw geometry, expanding automated gait analysis with valuable quantitative information on peripheral nerve function and recovery.

References

Clarke, K.A. et al., (1999), "Gait Analysis in the Mouse", Physiology and Behavior, https://doi.org/10.1016/S0031-9384(98)00343-6
Wertman, V. et al. (2020), "Low-Cost Gait Analysis for Behavioral Phenotyping of Mouse Models of Neuromuscular Disease", JoVE, https://www.jove.com/t/59878/low-cost-gait-analysis-for-behavioral-phenotyping-mouse-models
Clarke, K.A. et al., (2001) "Development and consistency of gait in the mouse", https://doi.org/10.1016/S0031-9384(01)00444-9
Amende, I. et al., (2005), "Gait dynamics in mouse models of Parkinson's disease and Huntington's disease", Journal of NeuroEngineering and Rehabilitation https://link.springer.com/article/10.1186/1743-0003-2-20

Rota-Rod Family

"More than 7,000 citations"

The "Rota-Rod" technique originated by a 1957 paper of N.W. Dunham and T.S. Miya and has proved to be of great value in research involving phenotyping and screening of drugs which are potentially active on motor coordination and function.
When the animal falls off its cylinder section onto the trip-box below, the switch is activated and time and round per minute are recorded.



ORDERING INFORMATION

SKU	Description
47650	Rota-Rod for Mice
47750	Rota-Rod for Rats
47750-D01	Rota-Rod for Rats XL
47850	Combo Package Rats + Mice Rota-Rod

The golden standard for motor coordination studies

Our models keep on being cited in thousands of scientific articles and even the Rota-Rod name, that Ugo Basile coined for the device, is nowadays one of the most popular and widely used in behavioral neuroscience worldwide.
The experiment can be set up and the results can be monitored, via the 4.3" touch-screen. The operation is surprisingly quiet and the learning curve to learn navigating through the menus and options is very short.
A provided software permits the experiment planning and the creation of custom ramps. Result data can be exported by the provided USB storage key.



Rota-Rod for Mice

Assesses motor coordination using the natural fear of falling response as motivation. Especially for Parkinson's, ALS and other motor diseases.
Simple touch-screen for experiment control and data display.
Customizable, uploadable protocols (speeds, acceleration, multi-step ramps) for efficiency and repeatability. Records up to 5 mice simultaneously. Removable, stainless-steel easy to clean boxes for confining falling mice.
Height to fall is 16cm



Rota-Rod for Rats

The Rota-Rod for Rats, is an evolution of the original model and the result of many years of research in cooperation with the latest development in behavioral and pharmacological research.
The instrument combines the same functionality of the previous version, now considered the standard, with additional new features: surprisingly silent operation, much easier experimental organization and data management.
Height to fall is 30 cm.



Rota-Rod for Large Rats

The Ugo Basile Rota-Rod for obese rats consists of a 6 cm diameter rod, suitably machined to provide adequate (but not excessive) grip. Five flanges divide the four 8.7 cm lanes, enabling 4 rats to be simultaneously on test.
When a rat falls off its rod section into the trip-box below, its endurance in time and RPMs is recorded.
Height to fall is 40 cm.

References

Stella Victorelli et. al., 2023, "Apoptotic stress causes mtDNA release during senescence and drives the SASP", Nature
Haiwang Ji et. al., 2022, "A Mouse Model of Cancer Induced Bone Pain: From Pain to Movement", Front Behav Neurosci
Seok-Ting J. Ang, et. al. 2022, "Muscle 4EBP1 activation modifies the structure and function of the neuromuscular junction in mice", Nature Communications
Moritz Möller, et. al. 2022 "The Role of AlphaSynuclein in Mouse Models of Acute, Inflammatory and Neuropathic Pain", Cells
Stefania Forner, 2021, "Systematic phenotyping and characterization of the 5xFAD mouse model of Alzheimer's disease", Nature

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Complex Wheel for Mouse and Rat RotaRod

Increased sensitivity for testing motor coordination in rodents



The Complex Wheel add-on, available for mice and rats introduces an additional complexity element for the animal to be tested, thanks to the asymmetrical and adjustable rungs, which increase the test sensitivity and add a higher involvement of motor cortex and hippocampus, as compared to the classic RotaRod test (Nagai et al. 2017).
The Complex Wheel is designed in a way that the animal does not have a uniform surface to walk on but rather a number of horizontal bars (rungs) that can be changed in number and positioned in a symmetrical or uneven position to vary the test complexity.
This provides a different task to the animals, which now don't have to walk on a small rod, but rather on an accelerating wheel with irregular rung pattern.

ORDERING INFORMATION

SKU	Description
47650-327	Complex Wheel for Mouse RotaRod (30 bars) (suitable for Mouse RotaRod SKU 47650)
47750-327	Complex Wheel for Rat RotaRod (22 bars) (suitable for Rat RotaRod SKU 47750; not suitable for Large Rat RotaRod SKU 47750-D01)
47750-D01-327	Complex Wheel for Large Rat RotaRod Complex Wheel (26 bars) (suitable for Rat RotaRod SKU 47750-D01; not suitable for Rat RotaRod SKU 47750)

Specifications	47650-327	47750-327	47750-327-D01
External diameter	95 mm	144 mm	180 mm
Internal diameter	30 mm	60 mm	80 mm
Width	56,3 mm	83 mm	110 mm
No of bars	30	22	26
Distance between bars	9 mm	20 mm	19 mm
Weight	492 gr	675gr	1090 gr
Number of units to fill all RotaRod lanes	5	4	4

Application

What Nagai et al. showed in their 2017 paper is that mice undergoing complex wheel experiments consolidate during sleep a motor skill that engages motor cortex and hippocampus much more than in the traditional rotarod test.Thois required a higher sensitivity device.
This is potentially due to the increased complexity of movements that happen thanks to the irregular rung patterns in the complex wheel task.
The Complex Wheel was developed in conjunction with Prof. Michele Bellesi and Prof. Luisa de Vivo from the University of Camerino (Italy).



Mouse Complex Wheel



Rat Complex Wheel

Enlarger for Mouse and Rat RotaRod

New testing parameter for motor coordination experiment



RotaRod enlargers enable to have an additional parameter to change the complexity of the experiment, by increasing and changing the surface of rods.
Having the possibility to change the diameter and the texture of the rod adds another dimension to the variables that can be tweaked in the rotarod test, by changing the complexity of the test itself.
Enlargers, both for mice and rats RotaRod, can be easily attached on the rotating rods thanks to magnetc fixing.

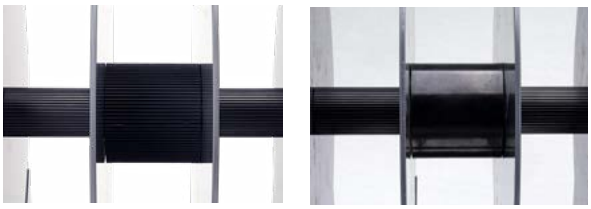
ORDERING INFORMATION

SKU	Description
47650-325	Mouse RotaRod enlarger with grooves (5 pieces set, magnetic fixing) (suitable for Mouse RotaRod SKU 47650)
47650-326	Mouse RotaRod enlarger with rubber (smooth) (5 pieces set, magnetic fixing) (suitable for Mouse RotaRod SKU 47650)
47750-325	Rat RotaRod black enlarger with grooves, (4 pieces set, magnetic fixing) (suitable for Rat RotaRod SKU 47750; not suitable for Large Rat RotaRod SKU 47750-D01)
47750-326	Rat RotaRod enlarger with rubber (smooth), (4 pieces set, magnetic fixing) (suitable for Rat RotaRod SKU 47750; not suitable for Large Rat RotaRod SKU 47750-D01)

Specifications	47650-325	47650-326	47750-325	47750-326
External diameter	60 mm	60 mm	120 mm	120 mm
Internal diameter	30 mm	30 mm	60 mm	60 mm
Width	56,3 mm	56,3 mm	86,5 mm	86,5 mm

Application

Enlargers for Mouse and Rat RotaRod are available to add multiple parameters to change the complexity of the experiment. Enlargers add-on for RotaRod come with grooves to increase the diameter of the rod or in smooth rubber to increase the diameter of the rod and change the surface from a grooved one to a smooth one.



From the right: 47650-325 Mouse RotaRod enlarger with grooves, 47650-326 Mouse RotaRod enlarger with rubber





Tiltable metal grid

Grip Strength Meter

"Automatic peak strength detection & full accessories included"

Automatically measures grip strength of forelimb, hind limb, or all four limbs, in rats and mice as they instinctively resist backwards pull. The integrated force sensor and amplifier for precision measurements and consistency show data into the stand alone (battery powered) unit, or connect to PC software supplied. Includes T-shaped trapezes, grasping tools and plastic or metal grids. Easy-to-use control unit with display, internal memory and quick data transfer (.csv).

When pulled by the tail, rodents instinctively grab anything they can, to try to stop this involuntary backward movement, until the pulling force overcomes their grip strength. When positioned in front of the GSM bar, or trapeze, or grid, the animal grasps at it.

After the animal loses its grip on the grasping bar, the peak amplifier automatically records and stores the peak pull-force achieved by the limbs and shows it on the display.

- Automatically stores and displays the peak pull-force (peak tension) achieved by the limbs before the animal loses its grip.
- Reliable and automated detection of the animal response using peak detector.
- Consistency control to apply the desired force is applied at a consistent rate using the Slope features in the included PC software.
- Quality control software tool shows the applied pulling force, the desired target force rate, and the peak detection in real time.
- Integrated force sensor and peak amplifier for precision measurements. Maximum applicable force of 1500g, with a resolution 0.1g.
- Control unit with internal memory for saving and viewing data. Quick data transfer in Excel (.csv) or text (.txt) format for further analysis.
- No calibration required for normal use. (Proprietary memory chip stores calibration parameters.) the device prompts to auto-zero before making new measurements.
- The meter is provided complete with a set of 3 grasping tools and 3 grids, inlcuding a tiltablemetal one.
- Includes DCA software for signal monitoring, slope control and data export.



Screenshot of the slope feature in the included PC software

Features and Benefits	
Automatic peak detector	Peak pull-force automatically stored
6 tools included: bar, trapeze, plastic and metal grid	Complete system, no other accessories needed
Auto-Zeroing routine at every measurement	No calibration required

ORDERING INFORMATION

SKU	Description
47200	Grip Strength Meter for Mice and Rats

Application

For assessing the effects of substances (drugs, toxins, muscle relaxants), phenotypes and other conditions (motor diseases, ageing, neural damage) on muscle strength.

Specifications	
Force Ranges	0-100gf, 0-500gf, 0-1500gf
Force Increase Rate	Monitored via GSM Electronic Unit or via the DCA3 Software on the PC
Start	AUTOMATIC when force applies to the instrument
Stop	AUTOMATIC or by pedal
Connection to PC	Via USB cable (A to mini-B) and GSM Software (DCA3)

References

Giada Amodeo et. al. 2023, "Characterization of prokineticin system in Crohn's disease pathophysiology and pain, and its modulation by alcohol abuse: A preclinical study", Molecular Basis of Disease

Khalid A.El-Saiy, et. al., 2022, "Modulation of histone deacetylase, the ubiquitin proteasome system, and autophagy underlies the neuroprotective effects of venlafaxine in a rotenone-induced Parkinson's disease model in rats", Chemico-Biological Interactions

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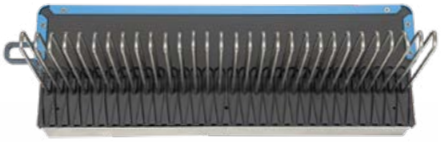
Multi-lane Treadmill

"Interchangeable Lane Assembly for Mice and Rats"

Speed can be selected from 3 to 100m/min, in steps of 1m/min, in constant, accelerating or custom ramp modes.
Manually tiltable running-lane assembly from -25° to +25°, in steps of 5°.
Adaptable for use with rats or mice with simple replacement of the lane assembly. Combination Rat/Mouse package available or easy upgrade to dual use at a later stage.
Incorporates a shock grid at the back of the treadmill to deliver an adjustable mild electric shock, when an aversive stimulus is required. Shock can be pre-set from 0 to 2mA (in 0.1mA steps). Airpuff stimulus is also available on request.
Test settings and monitoring are managed on the 4.3" touch-screen in the control unit.
Endurance, distance (absolute and relative) and speed are automatically measured and recorded.
A special lane-assembly for tethered mice is also available as an alternative to the standard model
A PC software to set up complex ramps and experiment data is also included.

Application

Treadmills are rolling belts (tapis-roulants) with pre-settable speed and adjustable uphill and downhill inclination (slope), enabling forced exercise training and accurate testing of fatigue in lab animals.
As evidence continues to accumulate the impressive range of health benefits that exercise confers, biomedical researchers have increasingly become interested in conducting systematic studies of exercise to further define those benefits.
On the other hand, fatigue is a common and frequently poorly-understood symptom in many diseases and disorders and, above all in aging studies. New preclinical assays of fatigue may help to improve current understanding of fatigue-like behavior in rodents and many other exercise paradigms and address future treatment of fatigue.





ORDERING INFORMATION

SKU	Description
47302	Treadmill for Rats
47303	Treadmill for Mice
47300	Combo Package Treadmill for Mice and Rats
47352	Treadmill for Rats with Airpuff
47353	Treadmill for Mice with Airpuff
47350	Combo Package Treadmill for Mice and Rats with Airpuff

Specifications	
Speed	From 3 to 100m/min (in 1m/min steps)
Modes	Constant, Accelerating, Custom ramps
Slope	Uphill or Downhill from -25° to +25°
Shock	0 - 3mA
Detection	Treadmill automatically detects speed & absolute and relative distances

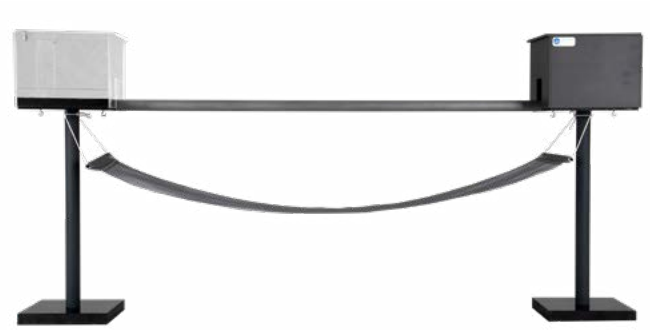
References

Belle. Yu-Hsuan. Wang et. al., 2023, "Mesenchymal stem cells alleviate dexamethasone-induced muscle atrophy in mice and the involvement of ERK1/2 signalling pathway", Stem Cell Research & Therapy
Lyang-Yu Su, et. al., 2023, "Effects of Resveratrol on Muscle Inflammation, Energy Utilisation, and Exercise Performance in an Eccentric Contraction Exercise Mouse Model", Nutrients.
Natalia Leciejewska, et. al., 2022, "Spexin Promotes the Proliferation and Differentiation of C2C12 Cells In Vitro—The Effect of Exercise on SPX and SPX Receptor Expression in Skeletal Muscle In Vivo", Genes.

Balance Beam Walking Test

A simple tool for assessing motor coordination and balance

Balance Beam Walking Test is suited for detecting subtle motor impairments in neurological or neurodegenerative models, such as Parkinson's, Huntington's, cerebellar ataxia or stroke, where other tests like the Rotarod may lack sensitivity.
Different beam widths, shapes (eg. circular or square) and textures can be used to modulate task difficulty, and video tracking can be integrated for objective data collection for at least the speed, the time taken, the falls. Automatically tracking paw slips is still challenging.



ORDERING INFORMATION

SKU	Description
48303	Balance Beam Walking Test for Mice, 6, 12 and 25 mm 3 x gray sanded round pole included
48303	Balance Beam Walking Test for Rats (Dimensions of walking bars on request

Application

The Balance Beam Test is widely used in neuroscience and motor function research to study fo
motor coordination and balance recovery after lesions or pharmacological treatments, progressive motor impairment in neurodegenerative diseases, sensorimotor learning and adaptation and effects of aging, fatigue, or experimental therapies on gait stability





Specifications	Mouse	Rat
Total Dimensions	1390x300x660(h)mm	2022x350x930(h)mm
Start/End box dimensions	195x195x140(h)mm	251x251x210(h)mm
Distance of the beam from the floor	520mm	700mm
Small round beam diameter	6mm	On request
Medium round beam diameter	12mm	On request
Big round beam diameter	25mm	On request

Running Wheels

The ideal tool for circadian rhythms

Running wheels provide a convenient method for measuring rodent spontaneous motor activity over long periods of time. Used for research on circadian rhythms, motor function, aging, energy balance, recovering and pain related exercise. Robust mouse and rat models measure rodent activity across time. Models available with an LCD counter and can also be connected to a Windows PC. Data can be collected from up to 12 wheels simultaneously and analysed by the I/O version of Any-maze.



ORDERING INFORMATION

SKU	Description
1800	Running Wheel for Rats with counter
1850	Running Wheel for Mice with counter
1800-S	Running Wheel for Rats without counter
1850-S	Running Wheel for Mice without counter
52610-BUNDLE	Multifunction Interface for up to 12 running wheels

Features

Revolutions of the activity wheel are automatically counted by the LCD counter (which operates with an extended-life battery) or collected in the PC through the multifunction interface.
Stainless steel wheel with Teflon bushing selected for low friction and smooth operation. The wheel is housed in a standard clear polycarbonate cage for easy viewing and tracking. A stainless steel wire lid with specially designed locks is fastened securely to the cage body.



Specifications	Mouse	Rat
Dimensions of wheel	23cm inter. diam. 79mm width 2mm bars, 7mm apart	33cm inter. diam. 96mm width 2mm bars, 9mm apart
Useful internal surface of the cage	14,3(w)x30,2(d)cm	18(w)x38,7(d)cm
Useful internal surface for the animal	6,4(w)x30,2(d)cm	8,4(w)x38,7(d)cm
External Dimensions	14(h)x20,7(w)x36,5(d)cm	21(h)x26,7(w)x48,2(d)cm
Activity Counter	LCD Display	LCD Display

References

Teresa De Cicco et. al. 2024, "Cortactin interacts with αDystrobrevin-1 and regulates murine neuromuscular junction morphology", European Journal of Cell Biology

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Activity Cage

Spontaneous Activity for Rats and Mice, including rearing

Enables recording of spontaneous locomotor activity in rats and mice (individual or groups) using infrared (I.R.) beams. General activity can be an indicator of drug action, toxic substances, neurological damage, or daily rhythms in activity.
Tracks horizontal and vertical activity (rearing). Easily integrated with video-tracking system to measure XY position. Easy touch-buttons, graphic display. High throughput with up to 6 cages monitored by the same electronic unit and printer.



ORDERING INFORMATION

SKU	Description
47420	Multiple Activity Cage
47420-NC	Multiple Activity Cage without animal cage (will be used with home cage)

Application

Activity Cages are useful to record spontaneous coordinate activity in rats and mice (individual or groups) and variations of this activity in time, e.g., in the following types of investigations:

- General toxicology, in ascertaining the action of a drug on the animal's activity, especially if it is subjected to chronic treatment
- Psychopharmacology, in screening drugs which are potentially active on the central nervous system
- Behavioral Sciences, in evaluating the variations of spontaneous activity after changes in environmental conditions
- Very preliminary pain and nociception screening as animals in pain show lowered activity levels

Features and Benefits	
IR photocells arrays of adjustable height	Same instrument for rats and mice
2 pairs of IR photocells arrays	Measure locomotion and rearing
Internal memory and software	Stand-alone or PC-connected

References

Leontina-Elena Filipiuc et. al. 2024, "JWH-182: a safe and effective synthetic cannabinoid for chemotherapy-induced neuropathic pain in preclinical models", Scientific Reports

Hole Board

Classic Exploratory behavior test according to the Boissier-Simon method

The hole board test exploits the 16 holes, each with a pair of photo-beams to measure the exploratory and investigation behavior in mice. The willingness to explore novel environments is a typical instinct and differs from the motor activity behaviour, by counting the head dipping number during a determined period, e.g. 5-10 minutes.
A version without photobeams, but working with videotracking instead is also available



ORDERING INFORMATION

SKU	Description
6650	Hole Board
46653	Hole Board for Video-tracking (requires 60000 ANy-maze software and camera

Specifications	6650/46653
Dimension	40 x 40 cm
Hole diameter	3 cm
Distance between holes (from hole center)	10 cm

Application

Changes in the animal exploratory behavior may indicate alterations in animal motivation to explore or anxiety. For this reason the hole board is frequently used in phenotyping and drug screening, as well as to study the effect of environmental enrichment on animals, as it is supposed to enhance exploratory and cognitive function in rodents.

Features and Benefits	
Photobeam-based (6650)	Simple to use and provides an easy to interpret output
Designed for exploratory behaviour	Allows for running a battery of test to discriminate exploratory instinct from locomotor activity

References

Clara Berdasco et. al. 2023 "Cognitive Deficits Found in a Pro-inflammatory State are Independent of ERK1/2 Signaling in the Murine Brain Hippocampus Treated with Shiga Toxin 2 from Enterohemorrhagic Escherichia coli", Cellular and Molecular Neurobiology
Xiaoxuan Sun et. al. 2021 "Dysfunction of Trio GEF1 involves in excitatory/inhibitory imbalance and autism-like behaviors through regulation of interneuron migration", Molecular Psychiatry