# Stoeling Neuroscience and Behavior Research Since 1886.



### **Company & Order Information**

# In need of assistance? We can help!

Contact Stoelting for all your scientific needs.



#### U.S. & Canada Order Information:

Web: www.StoeltingCo.com Email: Neuro@StoeltingCo.com

Call: 1-800-860-9775 or 630-860-9700

Fax: 630-860-9775

Mail: Stoelting Co • 620 Wheat Lane Wood Dale, IL 60191 • USA



#### **Europe Order Information:**

Web: www.StoeltingCo.com
Email: Info@StoeltingEurope.com

Call: +353 1 524 2200

Mail: Stoelting Europe • 8 Terenure Place

Terenure, Dublin • D6WY006 • Ireland



#### India Order Information:

Web: www.StoeltingCo.com Email: gentechmd@yahoo.com

Call: +91-11-47563575 or +91-11-47472393

Mail: Gentech Marketing & Distribution Pvt Ltd
B116 & B117, R G Complex, D B Gupta Road

Motia Khan • New Delhi 110055



#### **ALL INTERNATIONAL CUSTOMERS**

(Outside of North America, Europe or India) Please contact Stoelting's North American office for assistance.

#### **SALES INQUIRIES**

Please contact our Sales Department at Stoelting with Neuroscience or ANY-maze related sales inquiries.

#### **TECHNICAL ASSISTANCE**

#### Neuroscience

Please contact our Neuroscience Technical Staff at Neuro@StoeltingCo.com for technical assistance.

#### **ANY-maze**

Please contact ANY-maze Technical Support at TechSupport@ANY-maze.com for technical assistance.

#### ORDERS

Orders may be placed by phone, fax, e-mail (orders@StoetingCo.com) or through our website at www.StoeltingCo.com. For orders placed in the U.S., Canada and Mexico, please address your order to Stoelting Headquarters located in Wood Dale, IL.

For orders placed in Europe, please address your order to Stoelting Europe.

For orders placed in India, please address your order to Stoelting India.

All International orders (outside of North America, Europe and India) please contact our North American office for further assistance. Payments can be made using a credit card (Visa, Mastercard, American Express), bank transfer or purchase order (PO; pre-approved accounts only).

#### **RETURNS AND REPAIRS**

Please contact our Returns Department at Stoelting for assistance with your return/repair. All returned items must be assigned a Return Materials Authorization (RMA) and be accompanied by a completed Equipment Decontamination form. Any merchandise that has not been assigned an RMA or does not include the Equipment Decontamination form will be returned to the sender. A restocking fee may be applied to all returned merchandise at the discretion of Stoelting Co. Customized equipment is not eligible for return.

#### **WARRANTY INFORMATION**

Stoelting Co. warrants its products against defects in materials and workmanship for a period of one-year from the date of shipment. For warranty repairs, please include a copy of your original invoice. Following inspection, you will be contacted with a repair estimate prior to initiation of the repair. Repair costs can be paid by VISA, MASTERCARD, AMEX, bank transfer or purchase order (PO; pre-approved accounts only).

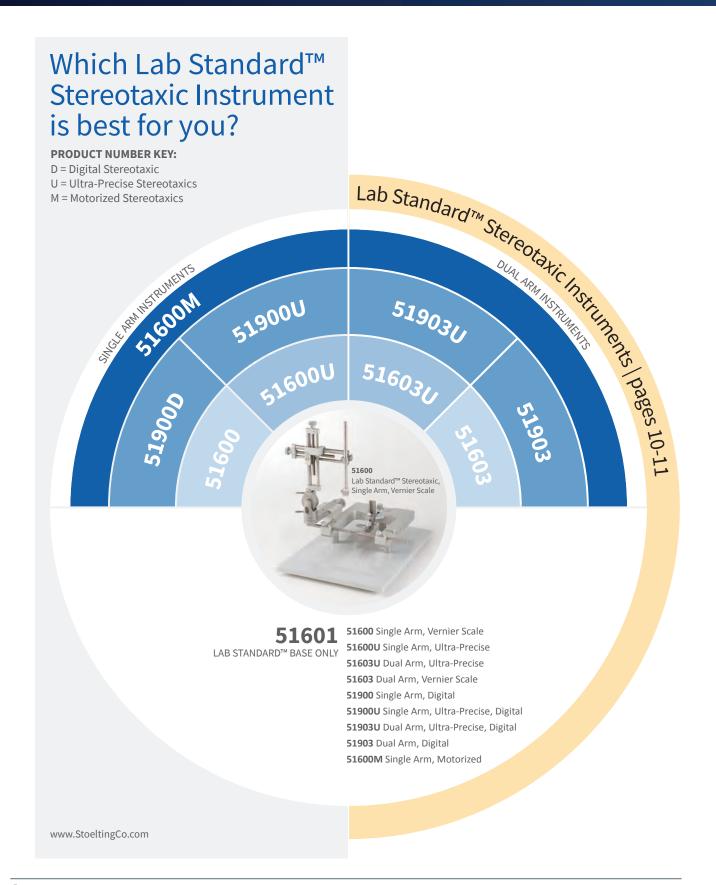
\*Prices and product availability subject to change without notice. Call or visit www.StoeltingCo.com for current prices.

We thank you for your interest in Stoelting products, and look forward to serving you today, and in the years to come.

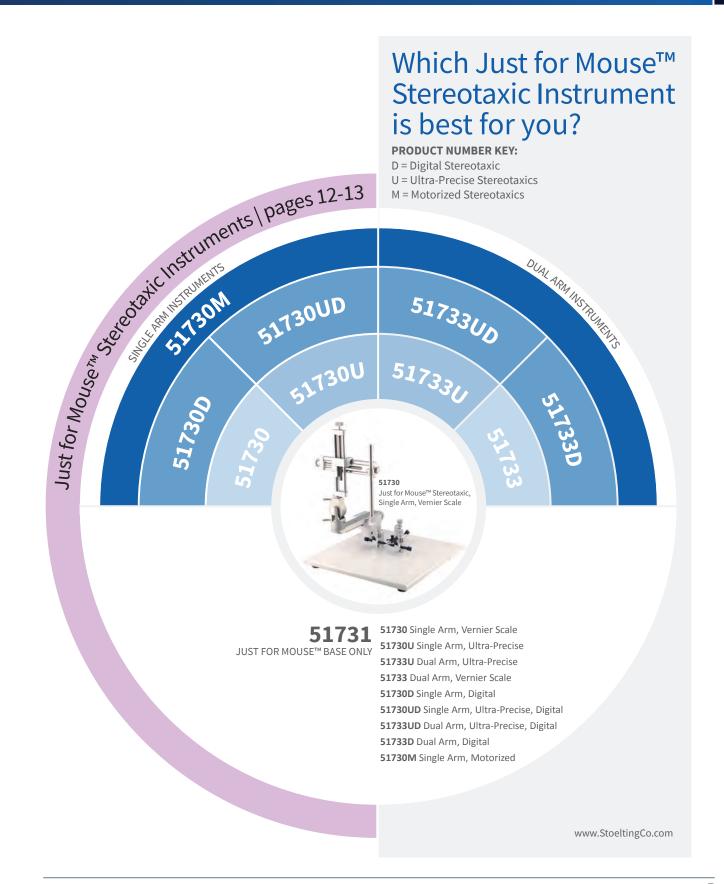
### **Evolution of the Stereotaxic**



### **Evolution of the Stereotaxic**



### **Evolution of the Stereotaxic**



### Inside this Catalog

A	Waterwheel Forced Swim Test 141	Gas Anesthesia, Mobile System 37	Masks, Tie Back4
AC-Powered Cautery Instrument 40	Y-Maze	Gas Anesthesia System, LINK 7 37	Mazes, Behavior
Active Avoidance	Blood Pressure Monitor	Gas Anesthesia, Tabletop	McIlwain™ Tissue Chopper10
Active Gas Scavenger	Bone Strength Tester, Rat and Mouse 109	Gas Anesthesia Vaporizers 36-37	Microdialysis Probe Holder 2
Active/Passive Avoidance System 154		Gas Scavenger	Manual Stereotaxic Injector3
Activity Wheel	C	Gastight Micro-Volume Syringes 34	Markers, Animal Identification 16
Agora Maze	Cage Management,	Gemini Active/Passive Avoidance System 157	Marking Ink, Animal Identification 16
Alcohol Prep Pads	Ugo Basile Beehive System 154	Glass Bead Dry Sterilizer101	McCullock Rat Diving Tank
Analgesia Instruments 142-144	Cannula Holders	Gloves, Surgical49-51	Microsyringes 3
Animal Adaptors23-24	Cat/Monkey Adaptor 24	Latex Exam Gloves	Microwave, In Vivo Brian Fixation 104-10
Animal Identification161-162	Cautery Pens40	Latex-Free Examination Gloves 49	Midgard™ Precision Current Source 16
Animal Restrainers113	C-Clamp Probe Holder	Latex-Free Nitrile Exam Gloves 49	Milker for Rat and Mouse, Automated 16
ANY-maze	Cervical Dislocator108	Sterile Exam Gloves	Mobile Gas Anesthesia Systems 38-3
ANY-maze Video Tracking Software 114	Clips and Clamps	Grip Strength Meter	Motor Activity & Rotational Behavior
ANY-box for Mice and Rats 122	Clippers, Surgical	Guinea Pig Adaptor	Ugo Basile Activity Wheel
ANY-maze Bundle Packages	Combination Hot/Cold Plates143	Н	Ugo Basile Rotometer for Mice 14
ANY-maze Cameras & Accessories 118	Conditioned Place Preference133		Ugo Basile Treadmill
ANY-maze Equipment	Cone Masks	Head Access Rodent Restrainer	for Mice and Rats
ANY-maze Interfaces (AMi-2) 116	Cotton-Tipped Applicators47	Heating Pad	Motorized Stereotaxic Conversion
ANY-maze Remote	D	Heat-flux Radiometer	Mouse Adaptor
ANY-maze Fear Conditioning System 153	_	High-Temperature Cautery Pens 40	Mouse/Neonate Adaptor
ANY-maze Video Tracking Software 114	Decapitators	Histology	Mouse Restrainer
Autoclip™ Wound Closing Kit 42	Dental Cement	Hole Board Test         130           Hot/Cold Plates         143	Multi-Naze
Avoidance Systems	Digital Stereotaxic Conversion	Hot/Cold Plates143	Multi-Purpose Cotton-Tipped Applicators 4
Gemini Active and Passive	Digital Stereotaxic (See Stereotaxic)	1	N
Avoidance System157	Digital Stereotaxic Manipulator Arms 17	I Identification Assista	
Ugo Basile Active Avoidance	Disposable Sharps Containers	Identification, Animal	Nano Tag
Shuttle Box155	Disposable Sterile Surgical Drapes 47	Animal Markers	New Standard Stereotaxic (See also Stereotaxic) 8-
D	Disposable Sterile Scalpels	Ear Punch	
В	Dog/Monkey Adaptor	Laboratory Animal Ear Tags 161	Neuros Syringe
Barnes Maze124	Drills	Illuminators121	Novel Object Recognition 131-13
Battery-Operated Cautery System 40	Cordless Rechargeable Micro Drill 31	Induction Chambers	Nu Gauze Sterile and Non-Sterile
Beehive Cage Manager	Drill and Injection Robot	Infrared Illumination	General-Use Sponges
Behavior Mazes	Flexible Shaft Drill	Infusion Only Syringe Pumps 102	General Ose Sponges
Bird Adaptor	Micromotor Drill	Infusion/Withdrawl Syringe Pumps103	0
Blood Pressure Monitor	Portable Micro Motor Drill	Injectors, Stereotaxic	Open Field Maze
Bone Anchor Screws	Dual Arm Stereotaxic (see Stereotaxic)	Instrument Cup48, 80	Operon, Ugo Basile
Bone Rongeur	Durham Animal Restrainer	Iodine Solution	Orofacial Pain Assessment Device (OPAD)
Bone Strength Tester			for Rats and Mice
Bone Wax	E	J	OptoDrum: Automated Measurement
Bouffant Caps         46           Brain Dissection         106	Ear Bars	JVP Domes148	of the Optomotor Reflex
Brain Matrices	Ear Punch Instruments	Just for Mouse Stereotaxic (See Stereotaxic)	
Brain Punch Set	Ear Tags		P
Behavior Mazes, Mouse	Economical Micro-Volume Syringes 34	K	Pain Assessment Systems 142-14
Backlit Open Field	Electroconvulsive Device	KD Scientific Infusion Only	Pain & Inflammation
Conditioned Place-Preference	Electronic von Frey™ Touch Tests 158	Syringe Pumps102	Pressure Application
Apparatus	Elevated Plus-Maze	KD Scientific Infusion/Withdrawl	Measurement (PAM)
Hole-Board Test	Elevated Zero-Maze125	Syringe Pumps103	Ugo Basile Combination Hot/Cold Plate
Light/Dark Box	Estrous Cycle Monitor		Analgesia Instrument
Novel Object Recognition Test 131	EZ Clips42	L	Ugo Basile Electronic von Frey 14
Open Field	Electrophysiology	Lab Coats	Ugo Basile Paw Pressure
Behavior Mazes, Rat	Electroconvulsive Device, Ugo Basile . 156	Laboratory Ear Tags	Analgesia Instrument
Conditioned Place-Preference	Lesion-Making Device, Ugo Basile 156	Lab Standard™ Stereotaxic (See Stereotaxic)	Ugo Basile Plethysmometer 14
Apparatus	Examination Gloves	Large Animal Adaptor	Ugo Basile Thermal Gradient Ring 14
Light/Dark Box	_	Large and Extra Large Probe Holders 26-27	Ugo Basile Thermal Plantar
Novel Object Recognition Test 132	F	Learned Helplessness Apparatus 152	Analgesia Instrument 14
Open Field	Face Masks	LED Coolight Illuminator 46	Ugo Basile von Frey Plantar
Behavior Mazes, Rat and Mouse	Fear Conditioning System 153	Lesion-Making Device	Aesthesiometer 14
Barnes Maze	Fiber-Lite Illuminator	Lickometer127	Parafilm M <sup>®</sup> Laboratory Film 4
Elevated Plus-Maze	"Forced Swim" Porsolt Test 129	Light Dark Box	Parallel Rod Floor Apparatus12
Elevated Zero-Maze 125		Lights, Stereotaxic Surgery 44	Passive Avoidance
Porsolt "Forced Swim" Test 129	G	Lubricant, Surgilube® 45	Paw Pressure Instruments for
Radial-Arm Maze	Gas Anesthesia Accessories37		Mice and Rats
Tail-Suspension Test	Vaporizers	M	Photobeam Array, ANY-maze12
T-Maze	Induction Chambers37	Magnifier Glass, Stereotaxic Surgery 44	Plantar Aesthesiometer
Ugo Basile Multi-Maze System 150	Gas Anesthesia Masks28	Manual Microsyringe Pump 102	Plethysmometer Paw Volume Meters 14
Water Maze	Gas Anesthesia, Complete Mobile System 37	Masks, Cone	Plus Maze, Elevated

Porsolt "Forced Swim" Test129	Dual New Standard Stereotaxic,	Sterilizing Pouches 47	W
Pressure Application Measurement	Rat and Mouse9	Surgilube Surgical Lubricant 45	Warming Systems
(PAM)	Just For Mouse Stereotaxic 12-13	Tie Back Face Masks 46	Rodent Warmer X1
Probe Holders26-27	Large Animal Stereotaxic	Triadine 47	Rodent Warmer X2
Pumps & Injectors	Mice Stereotaxic Instruments 12-13	Syringe Pumps	Water Maze
0	Motorized Just For Mouse	KD Scientific Syringe Pumps 102	Water Wheel Forced Swim Test141
Q	Motorized Lab Standard	Manual Microsyringe Pump 102	Withdrawal Syringe Pumps
Quintessential	Motorized New Standard Stereotaxic,	Touch-Screen Syringe Pumps 103	Wound Closure
Stereotaxic Injector (QSI™) 32	Rat and Mouse	_	Cautery Pens
R	Motorized Stereotaxic Drill and	Т	EZ Clip Wound Closing Clip Kit 42
	Injection Robot	Tail Access Rodent Restrainer	
Rabbit Restrainer	Mouse Stereotaxic Instruments 12-13	Tail-Flick Analgesia Instrument 147	Sutures 41
Radial Arm Maze	Mouse & Neonatal Rat Adaptor 25	Tail-Suspension Test	Χ
Rat Adaptor	New Standard Stereotaxic 8-9	Temperature Recording, Nano Tag 159	
	Parallel Rail Stereotaxic Instrument 22	Thermal Gradient Ring	X1 Rodent Warming System
Head Access Rodent Restrainer 113	Rat & Mouse Stereotaxic Instruments . 8-9	Thermal Plantar Analgesia Instrument 144	X2 Rodent Warming System 39
Mouse Restrainer, Head & Tail Access 113 Rabbit Restrainer	Rat Stereotaxic Instruments 10-11	Thermal Preference142	V
Rodent Restraint Cones	Ultra-Precise Manipulator Arms 16	Tie-back Face Masks	Υ
Tail Access Rodent Restrainer 113	Upgrades & Conversions	Tissue Chopper106	Y-maze
Robotic Stereotaxic	Warming Bases, Rodent 38-39 Stereotaxic LED Light	Tissue Slicer	
Rodent Brain Dissection	Stereotaxic EED Light	T-Maze	Z
Brain Punch Set	Sterile Gauze Pads	Touch Test™ Sensory Evaluator 158	Zero-maze
Rodent Brain Matrices 107	Sterilizer, Hot Glass Bead Dry	Treadmill	
Rota-Rod	Sterilizing Pouches	Triadine (Povidone/Iodine) Solution 47	
Rotometer	Sterilizing Trays	Trimmers, Surgical 43	
Notometer	Surgical Clippers	-	
S	Surgical Drapes	U	
Scalpels, Disposable	Surgical Accessories	Ugo Basile	
Scratch Counting, Automated	Bone Anchor Screws	Activity Wheel149	
Sentry Digital Ultrasonic Cleaner 101	Bone Wax	Agora Maze	
Sharps Disposal Containers45	Dental Cement	Automated Radial-Arm Maze 150	
Shavers	Instrument Cup 48, 80	Cage Manager System, Beehive 154	
Shocker	Surgical Instruments52-101	Combination Hot/Cold Plate 143	
Shoe Covers	Spring Scissors53	Electroconvulsive Device 156	
Shoe Covers.         .46           Sleep Disruptor Cage.         .134	Spring Scissors	Electroconvulsive Device156 Electronic von Frey™145	
Shoe Covers.       46         Sleep Disruptor Cage.       134         Small Bird Adaptor       24	Spring Scissors.         53           Operating Scissors         59           Dissecting Scissors         65	Electroconvulsive Device156 Electronic von Frey™145 Fear Conditioning System153	
Shoe Covers.         46           Sleep Disruptor Cage.         134           Small Bird Adaptor         24           Small Probe Holders         26	Spring Scissors.         53           Operating Scissors         59           Dissecting Scissors         65           Fine Forceps         70	Electroconvulsive Device	
Shoe Covers.       46         Sleep Disruptor Cage.       134         Small Bird Adaptor       24         Small Probe Holders       26         Smedley Hand Dynamometer.       158	Spring Scissors.         53           Operating Scissors         59           Dissecting Scissors         65           Fine Forceps.         70           Forceps with Teeth         72	Electroconvulsive Device	
Shoe Covers.       46         Sleep Disruptor Cage.       134         Small Bird Adaptor       24         Small Probe Holders       26         Smedley Hand Dynamometer.       158         Sociability Apparatus       128	Spring Scissors.         53           Operating Scissors         59           Dissecting Scissors         65           Fine Forceps.         70           Forceps with Teeth         72           Dressing Forceps.         78	Electroconvulsive Device	
Shoe Covers.       46         Sleep Disruptor Cage.       134         Small Bird Adaptor       24         Small Probe Holders       26         Smedley Hand Dynamometer.       158         Sociability Apparatus       128         Spinal Cord Surgery Adaptors       25	Spring Scissors.         53           Operating Scissors         59           Dissecting Scissors         65           Fine Forceps.         70           Forceps with Teeth         72           Dressing Forceps.         78           Hemostatic Forceps         81	Electroconvulsive Device	
Shoe Covers.       46         Sleep Disruptor Cage.       134         Small Bird Adaptor       24         Small Probe Holders       26         Smedley Hand Dynamometer.       158         Sociability Apparatus       128         Spinal Cord Surgery Adaptors.       25         Sponges       47	Spring Scissors.         53           Operating Scissors         59           Dissecting Scissors         65           Fine Forceps.         70           Forceps with Teeth         72           Dressing Forceps.         78           Hemostatic Forceps         81           Bone Instruments         85	Electroconvulsive Device	
Shoe Covers.       46         Sleep Disruptor Cage.       134         Small Bird Adaptor       24         Small Probe Holders       26         Smedley Hand Dynamometer.       158         Sociability Apparatus       128         Spinal Cord Surgery Adaptors.       25         Sponges       47         Standard Probe Holders       26, 27	Spring Scissors.         53           Operating Scissors         59           Dissecting Scissors         65           Fine Forceps.         70           Forceps with Teeth         72           Dressing Forceps.         78           Hemostatic Forceps         81           Bone Instruments         85           Clamps.         93	Electroconvulsive Device	
Shoe Covers.       46         Sleep Disruptor Cage.       134         Small Bird Adaptor       24         Small Probe Holders       26         Smedley Hand Dynamometer.       158         Sociability Apparatus       128         Spinal Cord Surgery Adaptors.       25         Sponges       47         Standard Probe Holders       26, 27         Sterilizer, Glass Bead       101	Spring Scissors.         53           Operating Scissors         59           Dissecting Scissors         65           Fine Forceps.         70           Forceps with Teeth         72           Dressing Forceps.         78           Hemostatic Forceps         81           Bone Instruments         85           Clamps.         93           Needle Holders         96	Electroconvulsive Device	
Shoe Covers.         46           Sleep Disruptor Cage.         134           Small Bird Adaptor         24           Small Probe Holders         26           Smedley Hand Dynamometer.         158           Sociability Apparatus         128           Spinal Cord Surgery Adaptors         25           Sponges         47           Standard Probe Holders         26, 27           Sterilizer, Glass Bead         101           Startle Response Laboratory	Spring Scissors.         53           Operating Scissors         59           Dissecting Scissors         65           Fine Forceps.         70           Forceps with Teeth         72           Dressing Forceps.         78           Hemostatic Forceps         81           Bone Instruments         85           Clamps.         93	Electroconvulsive Device	
Shoe Covers.       46         Sleep Disruptor Cage.       134         Small Bird Adaptor       24         Small Probe Holders       26         Smedley Hand Dynamometer.       158         Sociability Apparatus       128         Spinal Cord Surgery Adaptors.       25         Sponges.       47         Standard Probe Holders.       26, 27         Sterilizer, Glass Bead.       101         Startle Response Laboratory       (SR-LAB™) System.       157	Spring Scissors.         53           Operating Scissors         59           Dissecting Scissors         65           Fine Forceps.         70           Forceps with Teeth         72           Dressing Forceps.         78           Hemostatic Forceps         81           Bone Instruments         85           Clamps.         93           Needle Holders         96           Instrument Cup         48,80           Surgical Lights         44	Electroconvulsive Device	
Shoe Covers.         46           Sleep Disruptor Cage.         134           Small Bird Adaptor         24           Small Probe Holders         26           Smedley Hand Dynamometer.         158           Sociability Apparatus         128           Spinal Cord Surgery Adaptors         25           Sponges         47           Standard Probe Holders         26, 27           Sterilizer, Glass Bead         101           Startle Response Laboratory	Spring Scissors.         53           Operating Scissors         59           Dissecting Scissors         65           Fine Forceps.         70           Forceps with Teeth         72           Dressing Forceps.         78           Hemostatic Forceps         81           Bone Instruments         85           Clamps.         93           Needle Holders         96           Instrument Cup         48,80	Electroconvulsive Device	
Shoe Covers	Spring Scissors.         53           Operating Scissors         59           Dissecting Scissors         65           Fine Forceps.         70           Forceps with Teeth         72           Dressing Forceps.         78           Hemostatic Forceps         81           Bone Instruments         85           Clamps.         93           Needle Holders         96           Instrument Cup         48,80           Surgical Lights         44           Surgical Preparation         45	Electroconvulsive Device	
Shoe Covers	Spring Scissors.         53           Operating Scissors         59           Dissecting Scissors         65           Fine Forceps.         70           Forceps with Teeth         72           Dressing Forceps.         78           Hemostatic Forceps         81           Bone Instruments         85           Clamps.         93           Needle Holders         96           Instrument Cup         48,80           Surgical Lights         44           Surgical Preparation         45           Surgical Shavers & Trimmers         43	Electroconvulsive Device	
Shoe Covers	Spring Scissors.         53           Operating Scissors         59           Dissecting Scissors         65           Fine Forceps.         70           Forceps with Teeth         72           Dressing Forceps.         78           Hemostatic Forceps         81           Bone Instruments         85           Clamps.         93           Needle Holders         96           Instrument Cup         48, 80           Surgical Lights         44           Surgical Shavers & Trimmers.         43           Surgical Shavers & Trimmers.         43           Surgical Supplies & Accessories         40-101	Electroconvulsive Device	
Shoe Covers	Spring Scissors.         53           Operating Scissors         59           Dissecting Scissors         65           Fine Forceps         70           Forceps with Teeth         72           Dressing Forceps         78           Hemostatic Forceps         81           Bone Instruments         85           Clamps.         93           Needle Holders         96           Instrument Cup         48, 80           Surgical Lights         44           Surgical Shavers & Trimmers         43           Surgical Shavers & Trimmers         43           Surgical Supplies & Accessories         40-101           Surgilube* Surgical Lubricant         45	Electroconvulsive Device	
Shoe Covers.         46           Sleep Disruptor Cage.         134           Small Bird Adaptor         24           Small Probe Holders         26           Smeddley Hand Dynamometer.         158           Sociability Apparatus         128           Spinal Cord Surgery Adaptors.         25           Sponges         47           Standard Probe Holders         26, 27           Sterilizer, Glass Bead         101           Startle Response Laboratory         (SR-LAB**) System         157           StereoDrill and Injectomate Tool         19           Stereotaxic Accessories         23-35           Motorized Stoelting/ Neurostar Wireless         Capillary Nanoinjector         20           Stereotaxic Animal Adaptors         23-25           Stereotaxic Ear Bars         29	Spring Scissors.         53           Operating Scissors         59           Dissecting Scissors         65           Fine Forceps         70           Forceps with Teeth         72           Dressing Forceps         78           Hemostatic Forceps         81           Bone Instruments         85           Clamps.         93           Needle Holders         96           Instrument Cup         48, 80           Surgical Lights         44           Surgical Shavers & Trimmers         45           Surgical Shavers & Trimmers         43           Surgical Supplies & Accessories         40-101           Surgilube® Surgical Lubricant         45           Sutures         41	Electroconvulsive Device	
Shoe Covers.         46           Sleep Disruptor Cage.         134           Small Bird Adaptor         24           Small Probe Holders         26           Smedley Hand Dynamometer.         158           Sociability Apparatus         128           Spinal Cord Surgery Adaptors.         25           Sponges.         47           Standard Probe Holders.         26, 27           Sterilizer, Glass Bead.         101           Startle Response Laboratory         (SR-LAB™) System.         157           StereoDrill and Injectomate Tool         19           Stereotaxic Accessories         23-35           Motorized Stoelting/ Neurostar Wireless         Capillary Nanoinjector         20           Stereotaxic Animal Adaptors         23-25	Spring Scissors.         53           Operating Scissors         59           Dissecting Scissors         65           Fine Forceps.         70           Forceps with Teeth         72           Dressing Forceps.         78           Hemostatic Forceps         81           Bone Instruments         85           Clamps.         93           Needle Holders         96           Instrument Cup         48, 80           Surgical Lights         44           Surgical Shavers & Trimmers.         43           Surgical Shavers & Trimmers.         43           Surgical Supplies & Accessories         40-101           Surgilube® Surgical Lubricant         45           Sutures.         41           Swim Test.         129, 134, 141	Electroconvulsive Device	
Shoe Covers.         46           Sleep Disruptor Cage.         134           Small Bird Adaptor         24           Small Probe Holders         26           Smeddley Hand Dynamometer.         158           Sociability Apparatus         128           Spinal Cord Surgery Adaptors.         25           Sponges.         47           Standard Probe Holders.         26, 27           Sterilizer, Glass Bead.         101           Startle Response Laboratory         (SR-LAB**) System.         157           StereoDrill and Injectomate Tool         19           Stereotaxic Accessories         23-35           Motorized Stoelting/ Neurostar Wireless         Capillary Nanoinjector         20           Stereotaxic Animal Adaptors         23-25           Stereotaxic Ear Bars         29           Stereotaxic Injector         32	Spring Scissors.         53           Operating Scissors         59           Dissecting Scissors         65           Fine Forceps.         70           Forceps with Teeth         72           Dressing Forceps.         78           Hemostatic Forceps         81           Bone Instruments         85           Clamps.         93           Needle Holders         96           Instrument Cup         48, 80           Surgical Lights         44           Surgical Preparation         45           Surgical Supplies & Accessories         40-101           Surgliube® Surgical Lubricant         45           Sutures         41           Swim Test         129, 134, 141           Syringes         34-35	Electroconvulsive Device	
Shoe Covers.         46           Sleep Disruptor Cage.         134           Small Bird Adaptor         24           Small Probe Holders         26           Smeddley Hand Dynamometer.         158           Sociability Apparatus         128           Spinal Cord Surgery Adaptors.         25           Sponges.         47           Standard Probe Holders.         26, 27           Sterilizer, Glass Bead.         101           Startle Response Laboratory         (SR-LAB**) System.         157           StereoDrill and Injectomate Tool         19           Stereotaxic Accessories         23-35           Motorized Stoelting/ Neurostar Wireless         Capillary Nanoinjector         20           Stereotaxic Animal Adaptors         23-25           Stereotaxic Ear Bars         29           Stereotaxic Injectors, Manual         33	Spring Scissors.         53           Operating Scissors         59           Dissecting Scissors         65           Fine Forceps.         70           Forceps with Teeth         72           Dressing Forceps.         78           Hemostatic Forceps         81           Bone Instruments         85           Clamps.         93           Needle Holders         96           Instrument Cup         48,80           Surgical Lights         44           Surgical Shavers & Trimmers         43           Surgical Shavers & Trimmers         43           Surgical Supplies & Accessories         40-101           Surgilube® Surgical Lubricant         45           Sutures         41           Swim Test         129, 134, 141           Syringe Pumps         102-103	Electroconvulsive Device	
Shoe Covers	Spring Scissors.         53           Operating Scissors         59           Dissecting Scissors         65           Fine Forceps.         70           Forceps with Teeth         72           Dressing Forceps.         78           Hemostatic Forceps         81           Bone Instruments         85           Clamps.         93           Needle Holders         96           Instrument Cup         48, 80           Surgical Lights         44           Surgical Shavers & Trimmers         43           Surgical Shavers & Trimmers         43           Surgical Supplies & Accessories         40-101           Surgilube* Surgical Lubricant         45           Sutures         41           Swim Test         129, 134, 141           Syringes         34-35           Syringe Pumps         102-103           Stereotaxic Probe Holders         26	Electroconvulsive Device	
Shoe Covers	Spring Scissors.         53           Operating Scissors         59           Dissecting Scissors         65           Fine Forceps.         70           Forceps with Teeth         72           Dressing Forceps.         78           Hemostatic Forceps         81           Bone Instruments         85           Clamps.         93           Needle Holders         96           Instrument Cup         48, 80           Surgical Lights         44           Surgical Shavers & Trimmers         43           Surgical Supplies & Accessories         40-101           Surgical Supplies & Accessories         40-101           Sutures         41           Swim Test         129, 134, 141           Syringes         34-35           Syringe Pumps         102-103           Stereotaxic Probe Holders         26           Sterilizers and Sterilizing Trays         101	Electroconvulsive Device	
Shoe Covers	Spring Scissors.         53           Operating Scissors         59           Dissecting Scissors         65           Fine Forceps.         70           Forceps with Teeth         72           Dressing Forceps.         78           Hemostatic Forceps         81           Bone Instruments         85           Clamps.         93           Needle Holders         96           Instrument Cup         48, 80           Surgical Lights         44           Surgical Shavers & Trimmers         43           Surgical Shavers & Trimmers         43           Surgical Supplies & Accessories         40-101           Surgilube® Surgical Lubricant         45           Sutures         41           Swim Test         129, 134, 141           Syringes         34-35           Syringe Pumps         102-103           Stereotaxic Probe Holders         26           Sterilizers and Sterilizing Trays         101           Surgical Preparation	Electroconvulsive Device	
Shoe Covers	Spring Scissors.         53           Operating Scissors         59           Dissecting Scissors         65           Fine Forceps.         70           Forceps with Teeth         72           Dressing Forceps.         78           Hemostatic Forceps         81           Bone Instruments         85           Clamps.         93           Needle Holders         96           Instrument Cup         48, 80           Surgical Lights         44           Surgical Preparation         45           Surgical Shavers & Trimmers         43           Surgical Supplies & Accessories         40-101           Surgical Supplies & Accessories         40-101           Surgines         41           Swim Test         129, 134, 141           Syringe Pumps         102-103           Stereotaxic Probe Holders         26           Sterilizers and Sterilizing Trays         101           Surgical Preparation         Als	Electroconvulsive Device	
Shoe Covers.       46         Sleep Disruptor Cage.       134         Small Bird Adaptor       24         Small Probe Holders       26         Smedley Hand Dynamometer.       158         Sociability Apparatus       128         Spinal Cord Surgery Adaptors.       25         Sponges       47         Standard Probe Holders       26, 27         Sterilizer, Glass Bead       101         Startle Response Laboratory       (SR-LAB™) System       157         StereoDrill and Injectomate Tool       19         Stereotaxic Accessories       23-35         Motorized Stoelting/ Neurostar Wireless       Capillary Nanoinjector       20         Stereotaxic Animal Adaptors       23-25         Stereotaxic Ear Bars       29         Stereotaxic Injector       32         Stereotaxic Injectors, Manual       33         Stereotaxic Injector       33         Quintessential Stereotaxic       19ector         Injector (QSI™)       32	Spring Scissors.         53           Operating Scissors         59           Dissecting Scissors         65           Fine Forceps         70           Forceps with Teeth         72           Dressing Forceps         81           Hemostatic Forceps         81           Bone Instruments         85           Clamps.         93           Needle Holders         96           Instrument Cup         48, 80           Surgical Lights         44           Surgical Shavers & Trimmers.         43           Surgical Shavers & Trimmers.         43           Surgical Supplies & Accessories         40-101           Surgilube® Surgical Lubricant.         45           Sutures.         41           Swim Test.         129, 134, 141           Syringe Pumps         102-103           Stereotaxic Probe Holders         26           Sterilizers and Sterilizing Trays         101           Surgical Preparation         Alcohol Prep Pads         45           Bouffant Caps.         46	Electroconvulsive Device	
Shoe Covers	Spring Scissors.         53           Operating Scissors         59           Dissecting Scissors         65           Fine Forceps.         70           Forceps with Teeth         72           Dressing Forceps.         78           Hemostatic Forceps         81           Bone Instruments         85           Clamps.         93           Needle Holders         96           Instrument Cup         48, 80           Surgical Lights         44           Surgical Preparation         45           Surgical Supplies & Accessories         40-101           Surgilad Supplies & Accessories         40-101           Surgilad Supplies & Accessories         41-3           Sutures         41           Swim Test         129,134,141           Syringe Pumps         102-103           Stereotaxic Probe Holders         26           Sterilizers and Sterilizing Trays         101           Surgical Preparation         Al           Alcohol Prep Pads         45           Bouffant Caps         46           Cone Masks         46	Electroconvulsive Device	
Shoe Covers.       46         Sleep Disruptor Cage.       134         Small Bird Adaptor       24         Small Probe Holders       26         Smedley Hand Dynamometer.       158         Sociability Apparatus       128         Spinal Cord Surgery Adaptors.       25         Sponges.       47         Standard Probe Holders.       26, 27         Sterilizer, Glass Bead.       101         Startle Response Laboratory       (SR-LAB™) System.       157         StereoDrill and Injectomate Tool       19         Stereotaxic Accessories       23-35         Motorized Stoelting/ Neurostar Wireless       Capillary Nanoinjector       20         Stereotaxic Animal Adaptors       23-25         Stereotaxic Ear Bars       29         Stereotaxic Injector,       32         Stereotaxic Injectors, Manual       33         Stereotaxic Injector       33         Manual Stereotaxic Injector       33         Quintessential Stereotaxic       1njector (QSI™)       32         Stereotaxic Instruments       8-22         Animal Adaptors       23-25	Spring Scissors.         53           Operating Scissors         59           Dissecting Scissors         65           Fine Forceps.         70           Forceps with Teeth         72           Dressing Forceps.         78           Hemostatic Forceps         81           Bone Instruments         85           Clamps.         93           Needle Holders         96           Instrument Cup         48, 80           Surgical Lights         44           Surgical Preparation         45           Surgical Supplies & Accessories         40-101           Surgical Supplies & Accessories         40-101           Surgiual Supplies & Accessories         41-3           Sutures         41           Swim Test         129, 134, 141           Syringe Pumps         102-103           Stereotaxic Probe Holders         26           Sterilizers and Sterilizing Trays         101           Surgical Preparation         Al           Alcohol Prep Pads         45           Bouffant Caps         46           Cone Masks         46           Cotton-Tipped Applicators         47	Electroconvulsive Device	
Shoe Covers.       46         Sleep Disruptor Cage.       134         Small Bird Adaptor       24         Small Probe Holders       26         Smeddley Hand Dynamometer.       158         Sociability Apparatus       128         Spinal Cord Surgery Adaptors.       25         Sponges.       47         Standard Probe Holders.       26, 27         Sterilizer, Glass Bead.       101         Startle Response Laboratory       (SR-LAB™) System.       157         Stereotnil and Injectomate Tool       19         Stereotaxic Accessories       23-35         Motorized Stoelting/ Neurostar Wireless       Capillary Nanoinjector       20         Stereotaxic Animal Adaptors       23-25         Stereotaxic Ear Bars       29         Stereotaxic Injector.       32         Stereotaxic Injectors, Manual       33         Stereotaxic Injector       33         Quintessential Stereotaxic       1njector (QSI™)         Naul Stereotaxic Instruments       8-22         Animal Adaptors       23-25         Base Plate Options       3-5	Spring Scissors.         53           Operating Scissors         59           Dissecting Scissors         65           Fine Forceps.         70           Forceps with Teeth         72           Dressing Forceps.         78           Hemostatic Forceps         81           Bone Instruments         85           Clamps.         93           Needle Holders         96           Instrument Cup         48, 80           Surgical Lights         44           Surgical Synplies & Accessories         40-101           Surgical Supplies & Accessories         40-101           Surgliube® Surgical Lubricant         45           Sutures         41           Swim Test         129, 134, 141           Syringe Pumps         102-103           Stereotaxic Probe Holders         26           Sterilizers and Sterilizing Trays         101           Surgical Preparation         45           Alcohol Prep Pads         45           Bouffant Caps         46           Cone Masks         46           Cotton-Tipped Applicators         47           Disposable Sterile Surgical Drapes         47	Electroconvulsive Device	
Shoe Covers.       46         Sleep Disruptor Cage.       134         Small Bird Adaptor       24         Small Probe Holders       26         Smeddey Hand Dynamometer.       158         Sociability Apparatus       128         Spinal Cord Surgery Adaptors.       25         Sponges.       47         Standard Probe Holders.       26, 27         Sterilizer, Glass Bead.       101         Startle Response Laboratory       (SR-LAB™) System.       157         StereoDrill and Injectomate Tool       19         Stereotaxic Accessories       23-35         Motorized Stoelting/ Neurostar Wireless       Capillary Nanoinjector       20         Stereotaxic Animal Adaptors       23-25         Stereotaxic Injector       32         Stereotaxic Injectors, Manual       33         Stereotaxic Injector       32         Manual Stereotaxic Injector       33         Quintessential Stereotaxic Injector       33         Quintessential Stereotaxic Injector       32         Stereotaxic Infstruments       8-22         Animal Adaptors       23-25         Base Plate Options       3-5         Classic Lab Standard for Rats       10-11 <td>Spring Scissors.         53           Operating Scissors         59           Dissecting Scissors         65           Fine Forceps.         70           Forceps with Teeth         72           Dressing Forceps.         78           Hemostatic Forceps         81           Bone Instruments         85           Clamps.         93           Needle Holders         96           Instrument Cup         48, 80           Surgical Lights         44           Surgical Shavers &amp; Trimmers         43           Surgical Shavers &amp; Trimmers         43           Surgical Supplies &amp; Accessories         40-101           Surgilube® Surgical Lubricant         45           Sutures         41           Swim Test         129, 134, 141           Syringe Pumps         102-103           Stereotaxic Probe Holders         26           Sterilizers and Sterilizing Trays         101           Surgical Preparation         45           Alcohol Prep Pads         45           Bouffant Caps         46           Cone Masks         46           Cotton-Tipped Applicators         47           Disposable Sterile Surgical Drapes</td> <td>Electroconvulsive Device</td> <td></td>	Spring Scissors.         53           Operating Scissors         59           Dissecting Scissors         65           Fine Forceps.         70           Forceps with Teeth         72           Dressing Forceps.         78           Hemostatic Forceps         81           Bone Instruments         85           Clamps.         93           Needle Holders         96           Instrument Cup         48, 80           Surgical Lights         44           Surgical Shavers & Trimmers         43           Surgical Shavers & Trimmers         43           Surgical Supplies & Accessories         40-101           Surgilube® Surgical Lubricant         45           Sutures         41           Swim Test         129, 134, 141           Syringe Pumps         102-103           Stereotaxic Probe Holders         26           Sterilizers and Sterilizing Trays         101           Surgical Preparation         45           Alcohol Prep Pads         45           Bouffant Caps         46           Cone Masks         46           Cotton-Tipped Applicators         47           Disposable Sterile Surgical Drapes	Electroconvulsive Device	
Shoe Covers.       46         Sleep Disruptor Cage.       134         Small Bird Adaptor       24         Small Probe Holders       26         Smedley Hand Dynamometer.       158         Sociability Apparatus       128         Spinal Cord Surgery Adaptors.       25         Sponges.       47         Standard Probe Holders       26, 27         Sterilizer, Glass Bead.       101         Startle Response Laboratory       (SR-LAB™) System.       157         StereoDrill and Injectomate Tool       19         Stereotaxic Accessories       23-35         Motorized Stoelting/ Neurostar Wireless       Capillary Nanoinjector       20         Stereotaxic Animal Adaptors       23-25         Stereotaxic Ear Bars       29         Stereotaxic Injector.       32         Stereotaxic Injectors, Manual       33         Stereotaxic Injector       33         Quintessential Stereotaxic       199         Stereotaxic Injector       33         Quintessential Stereotaxic       32         Injector (QSI™)       32         Stereotaxic Instruments       8-22         Animal Adaptors       23-25         Base Plate Options       3-	Spring Scissors.         53           Operating Scissors         59           Dissecting Scissors         65           Fine Forceps.         70           Forceps with Teeth         72           Dressing Forceps.         78           Hemostatic Forceps         81           Bone Instruments         85           Clamps.         93           Needle Holders         96           Instrument Cup         48, 80           Surgical Lights         44           Surgical Shavers & Trimmers.         43           Surgical Shavers & Trimmers.         43           Surgical Supplies & Accessories         40-101           Surgilube® Surgical Lubricant.         45           Sutures         41           Swim Test.         129, 134, 141           Syringes         34-35           Syringe Pumps         102-103           Stereotaxic Probe Holders         26           Sterilizers and Sterilizing Trays         101           Surgical Preparation         45           Alcohol Prep Pads         45           Bouffant Caps         46           Cone Masks         46           Cotton-Tipped Applicators         47	Electroconvulsive Device	
Shoe Covers	Spring Scissors.         53           Operating Scissors         59           Dissecting Scissors         65           Fine Forceps.         70           Forceps with Teeth         72           Dressing Forceps.         78           Hemostatic Forceps         81           Bone Instruments         85           Clamps.         93           Needle Holders         96           Instrument Cup         48, 80           Surgical Lights         44           Surgical Shavers & Trimmers         43           Surgical Supplies & Accessories         40-101           Surgical Preparation         45           Sutures         41           Swim Test         129, 134, 141           Syringe Pumps         102-103           Stereotaxic Probe Holders         26           Sterilizers and Sterilizing Trays         101           Surgical Preparation         45           Bouffant Caps         46	Electroconvulsive Device	

### Rat and Mouse Stereotaxic Instruments

# New Standard™ Stereotaxic Instrument for Rat and Mouse

The innovative design of the New Standard™ Stereotaxic Instrument provides users with the ability to perform surgeries on a Mouse or a Rat on the same base. The New Standard™ includes a 100 micron 3-axes, left-hand manipulator arm, separate rat and mouse adaptors, dual-sided (traditional and non-rupture) rat ear bars, dual-sided mouse ear bars, and corner-clamp probe holder. Also, available as Dual, Ultra-Precise, Digital or Motorized.

#### New Standard™ Features

- No U-Frame maximizes operating space
- Designed for a Rat or a Mouse on the same base
- Vertical and horizontal adjustment of ear and nose posts accommodates rodents of all sizes
- Scales at ear and nose posts allows for precise positioning
- Comes standard with integrated warming base!





Sign up now for our 3-day workshops for learning stereotaxic surgical techniques at the Jackson Laboratory. Scan for details, or visit www.jax.org/stereotaxic



### Rat and Mouse Stereotaxic Instruments



### **Rat Stereotaxic Instruments**

### Classic Lab Standard<sup>™</sup> Stereotaxic Instruments for Rats

The Classic Lab Standard™ Stereotaxic Instrument has been a standard in research labs for nearly five decades. The time-proven U-Frame design provides stability and adaptability while the instrument's exclusive, triple-lead screws allow for smooth, consistent movements with rapid positioning. The Classic Lab Standard™ includes a 100 micron, 3-axes, left-hand manipulator arm, rat adaptor, traditional (18°) ear bars, and corner-clamp probe holder. Also available as Dual, Ultra-Precise, Digital, Ultra-Precise Digital, or Motorized.

#### Lab Standard™ Features

- Low cost
- Classic U-Frame design
- Interchangeable adaptors (for Mice or Rats)
- Gas anesthesia compatible
- Absolute lock at 90° vertical
- Comes standard with integrated warming base!

The classic **U-frame** design has been a **standard in research labs** for nearly five decades!



Sign up now for our 3-day workshops for learning stereotaxic surgical techniques at the Jackson Laboratory. Scan for details, or visit www.jax.org/stereotaxic



### **Rat Stereotaxic Instruments**



51600M

**Stoelting Europe** Web: www.StoeltingCo.com / Email: Info@StoeltingEurope.com / Phone: +353 1 524 2200

ear bars available upon request.

Stereotaxic, Rat

Traditional 18° ear bars included. Non-rupture 45°

### **Mouse Stereotaxic Instruments**

### Just for Mouse™ Stereotaxic Instruments for Mice

The Stoelting Just For Mouse™ Stereotaxic Instrument was specifically designed for use with knock-out and transgenic mice. Includes a 10 x 10in (25 x 25cm) square base; 100 micron; 3-axes; left-hand manipulator arm; triple-point mouse and ear bars; snout clamp, and corner clamp probe holder. Also, available as Dual, Ultra-Precise, Digital, Digital Ultra-Precise, or Motorized.

#### Just for Mouse™ Features:

- Dual-arm capable
- Small footprint
- Compact and cost-effective
- Ideal for knock-out and transgenic mice
- Offers multiple head-holding options
- Vertical post adjustment
- Gas anesthesia compatible



The smallest stereotaxic making the biggest impact.

### Most affordable

stereotaxic available!

Traditional (18°) ear bars with rubber tips included. Non-rupture (45°) ear bars available upon request. See below and page 29.





**Sign up now** for our 3-day workshops for learning stereotaxic surgical techniques at the Jackson Laboratory. Scan for details, or visit www.jax.org/stereotaxic

### **Mouse Stereotaxic Instruments**



### Motorized Stereotaxic Manipulator Arms



### Stereotaxic Upgrades & Conversions



### **Digital Conversion**

- Zeroing function at reference point
- 10-micron digital scale
- Increased repeatability

You should consider an upgrade if you currently own a standard model stereotaxic. We can upgrade most major stereotaxic brands. Upgrading your existing stereotaxic to a digital model will reduce the risk of human error, and increase accuracy (10-rather than 100-micron resolution). The large LED display is also useful for surgeries performed in low light, or constrained environments where reading the vernier scale is difficult.

#### **DIGITAL CONVERSION**

51914 Conversion to Digital,

3-axes, Left

51916 Conversion to Digital,

3-axes, Right

### **Motorized Conversion**

**Stoelting's Motorized Stereotaxic Manipulator Arms** are designed for fast, accurate positioning during stereotaxic surgery. Ideal for inexperienced users, the motorized manipulator arms employ a touchscreen display for easy-to-control movement of each axis. Manual movement available anytime. Optional Drill feature available.

#### **Motorized Manipulator Arm Features:**

- Automatic motorized movement using touchscreen display
- Various speeds (4mm/s to 0.1mm/s)
- Manual option always available
- Optional Drill feature
- 1µm movement

#### **MOTORIZED CONVERSION**

51604M

Conversion to Motorized, 3-axes, Left

#### Stereotaxic Care and Maintenance

- Wipe your stereotaxic instrument with soap or a mild detergent.
- Keep your stereotaxic instrument free of dust and debris.
- Never autoclave your stereotaxic instrument.
- Sterilize your stereotaxic instrument using gas or a germicide if necessary.
- Stereotaxic instruments perform best at room temperature 70°-75°F (20°-24°C), and at 45-60% humidity.
- Call for details about calibration service!



### Ultra-Precise Stereotaxic Manipulator Arms

### Ultra-Precise Manipulator Arms

Ultra-Precise Manipulator Arms are ideal for use in stereotaxic surgery where high-accuracy positioning is required. Up to 80mm of travel is available in all directions, with up to 90° angle adjustment, in either the anterior-posterior or medial-lateral planes. Ultra-Precise Manipulators are compatible with all Stoelting Stereotaxics including New Standard™, Lab Standard™, and Just for Mouse™.

#### **Ultra-Precise Features:**

- 10-micron resolution
- Target small brain regions with confidence
- Upgrade ANY Stoelting Stereotaxic and most other stereotaxic brands





#### **ULTRA-PRECISE STEREOTAXIC MANIPULATOR ARMS**

Ultra-Precise Manipulator Arm, 3-Axis, 51604U

**LEFT Hand** 

Ultra-Precise Manipulator Arm, 3-Axis, RIGHT 51606U

Hand

#### COMPLETE ULTRA-PRECISE STEREOTAXIC INSTRUMENTS

Ultra-Precise New Standard™ Stereotaxic, 51500U

Rat and Mouse

51600U Ultra-Precise Lab Standard, Rat

Ultra-Precise Just for Mouse™ 51730U Stereotaxic Instrument

Stoelting **Ultra-Precise Manipulator Arms** offer increased resolution!







### Digital Stereotaxic Manipulator Arms

### Stoelting's Digital Stereotaxic Manipulator Arms

Stoelting's Digital Stereotaxic Manipulator Arms are designed for fast, accurate positioning during stereotaxic surgery. Ideal for inexperienced users, the digital manipulator arms employ an LED module that provides immediate coordinate feedback for repeatable targeting!

- 10-micron resolution
- Upgrade or convert your existing Manipulator Arm (see page 15)
- No computer necessary

#### **DIGITAL MANIPULATOR ARMS**

51904 Digital 3-axes

Manipulator Arm, Left

51906 Digital 3-axes

Manipulator Arm, Right

#### **DIGITAL CONVERSION**

51914 Digital Conversion for

Stoelting Manipulator Arm, Left

51916 Digital Conversion for

Stoelting Manipulator Arm, Right

#### **COMPLETE DIGITAL STEREOTAXIC INSTRUMENTS**

51500D Digital New Lab Standard

Stereotaxic for Rats and Mice

51900 Digital Lab Standard Stereotaxic for Rats



### **Robotic Stereotaxic Instruments**

### Neurostar Robot Stereotaxic Instruments

Stoelting, the leading manufacturer in stereotaxic equipment and Neurostar, the pioneers in robot stereotaxic solutions for animal research, have teamed up to produce the best robotic stereotaxic systems on the market! The robotic systems are ideal for both new and experienced users.

#### **Features include:**

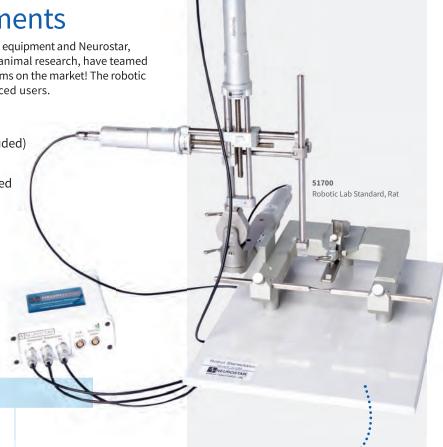
• StereoDrive software (computer not included)

• Atlas integration (Rat or Mouse)

• Motorized movement, computer controlled

 Correction for alignment inaccuracies (tilt correction)

- Correction for variation of brain size
- Auto-calculated angle adjustment
- 1 micron precision



#### **ROBOTIC STEREOTAXIC INSTRUMENTS**

Robotic Lab Standard

51700	Stereotaxic, Rat
51715	Robotic Lab Standard Stereotaxic, Mouse
51770	Robotic Lab Standard Stereotaxic, Rat and Mouse
51725M	Robotic Just for Mice Stereotaxic Instrument
51753	Robotic Dual Arm Lab Standard Stereotaxic, Rat

#### ADD-ON, ROBOTIC MANIPULATOR ARMS

51704	Robotic Manipulator Arm, ADD-ON, 3 Axis, LEFT
51706	Robotic Manipulator Arm, ADD-ON, 3 Axis, RIGHT

#### **CONVERSION, ROBOTIC MANIPULATOR ARMS**

51714	Robotic Manipulator Arm, CONVERSION, 3 Axis, LEFT*
51716	Robotic Manipulator Arm, CONVERSION, 3 Axis, RIGHT*

<sup>\*</sup>Stoelting arms only—Call for quote for conversion of other stereotaxic brands.

# Equipped ••••• with **Warming Base**.

Call Stoelting for dual and additional configurations.

### **Drill and Microinjection Robot**

### **Drill and Microinjection Robot**

The Drill and Microinjection Robot provides automated drilling followed by an intracranial injection using the same holder! This unique robotic stereotaxic is ideal for multiple injection sites with no tool exchange between the drill and injector.

#### **Microinjection Features Include:**

- Integrated into the StereoDrive software (computer not included)
- Define/Store protocols
- Also available as Glass-Capillary Nanoinjector (page 20)
- Atlas integration

#### **Drill Features Include:**

- Integrated into the StereoDrive software
- Depth controlled for safe drilling
- Auto stop function automated dura detection avoids brain damage
- Atlas integration

#### **Drill and Injection Robot Features include:**

- All the above plus NO TOOL EXCHANGE!
- Software synchronization of Drill and Microinjector
- High throughput for drill and inject.
- Time saving and accurate.
- Automated sequencing for multiple injection sites – just program it and it does the work!

#### COMPLETE STEREOTAXIC ROBOTS

51705	Drill and Microinjector Robot, Rat/Mouse
51707	Drill and Microinjector Robot, Rat
51710	Drill Robot, Mouse
51709	Injection Robot, Mouse
51708	Optogenetics Robot (including drill + injector), Mouse

#### **ACCESSORIES FOR STEREOTAXIC ROBOTS**

58632	Smart Remote Control
58633	Automated Synchronization Device for Drill and Injector
51722	Laptop Computer







### **Robotic Stereotaxic Accessories**



### Glass-Capillary Nanoinjector

The Glass-capillary Nanoinjector was specially designed to perform accurate ultraprecise nanoliter volume injections using glass capillaries that can be pulled to ultrathin tips. Wireless solution available.

In combination with the automated drill it can be used in the Drill and Nanoinjection Robot configuration.

#### **Features include:**

- Computer controlled, intuitive interface
- User defined injection volumes, starting from 1nL
- User defined injection rates, starting from 2nL/s
- Can be mounted on micromanipulators/stereotaxic
- Automated sequencing for multiple injection sites-just program it and it does the work!

#### CAPILLARY NANOINJECTOR

51711	Drill and Capillary Nanoinjection Robot, Mouse
51712	Capillary Nanoinjection Robot, Mouse
58646	Capillary Nanoinjector (wireless for micromanipulators)



#### NEW!

### **Smart BregmaFinder**

Breakthrough innovation provides automated camera-driven zero-positioning of the probe over Bregma. The Smart BregmaFinder controls the robotic stereotaxic in order to precisely position the tip of the probe to Bregma.

#### Features include:

- · Easy Bregma Detection
- Camera Driven Positioning
- Experiment Monitoring
- Video Streaming
- Highest Accuracy

#### **SMART BREGMAFINDER**

58635 Smart BregmaFinder

### Recommended Stereotaxic Accessories



**Stoelting** recommends these stereotaxic accessories to make the most of your surgeries.













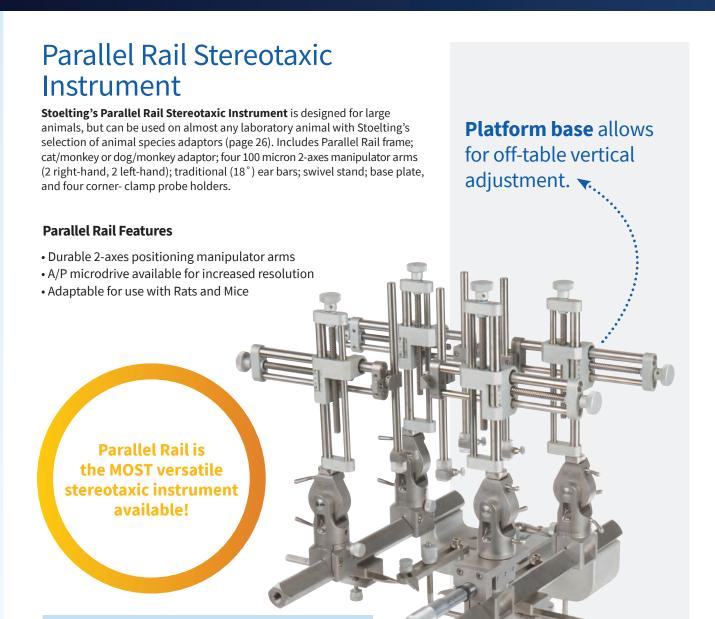
Leading the search for tomorrow's cures

**Upcoming Event!** 

Join us for a 3-day workshop learning surgical stereotaxic techniques with mice at the **Jackson Laboratory!** 

Visit www.jax.org/stereotaxic for workshop schedule and to sign up!

### Large Animal Stereotaxic Instruments



#### PARALLEL RAIL STEREOTAXIC INSTRUMENT

51800	Parallel Rail Instrument, Cat/Monkey Adaptor, 4 manipulator
51804	Manipulator on Rail Clamp, Left
51806	Manipulator on Rail Clamp, Right
51858	A/P Microdrive

Traditional (18°) ear bars included. Non-Puncture (45°) ear bars available upon request.

**51800** Parallel Rail Stereotaxic Instrument (shown with optional

A/P Microdrive)

### Lab Standard Mouse Adaptor

#### **NEW!**

# Lab Standard with Mouse Adaptor

## Position easily and secure your animal gently

Stoelting's Mouse/Neonates Adaptor is designed for use with the traditional 'U' frame Stereotaxic instrument. It employs light, has Delrin Ear Bars with tapered points on one end, and rubber tips on the other, to facilitate surgery on mice and rat pups.

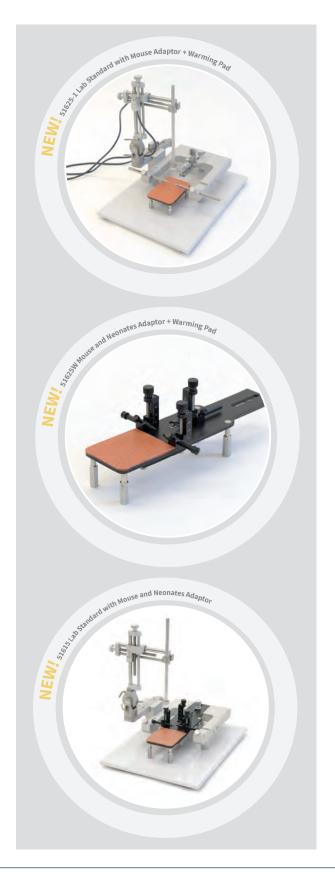
The NEW Stoelting Mouse Adaptor Kit (page 24) uses a more traditional low profile hold for the head and snout of the mouse. Non-Rupture (45°) Ear Bars are included. The 51625-1 Elevated Platform with warming pad is ideal for this adaptor.

#### LAB STANDARD WITH MOUSE & RAT ADAPTORS

51615	Digital Lab Standard with Mouse & Neonates Adaptor
51615T	Lab Standard Stereotaxic, Mouse
51925	Digital Lab Standard with Mouse & Neonates Adaptor
51925T	Digital Lab Standard Stereotaxic, Mouse
51625-1	Elevated Platform for Mouse with Warming Pad
51625W	Mouse & Neonates Adaptor with Warming Pad



Add a **Rodent Warmer** Control Box to **utilize your Adaptors' warming feature!** See Rodent Warmer Control Box options on pages 38-39.



### Stereotaxic Animal Adaptors



### **Mouse Adaptor Kit**

The Stoelting 51660-1 Mouse Adaptor Kit includes a nose clamp assembly with small tooth bar for easy placement. Non-Rupture (45°) Ear Bars are included. The 51625-1 Elevated Platform is ideal for this adaptor and has a built-in warming pad.

**51660-1** Mouse Adaptor Kit, (45°) Ear Bars

51625-1 Elevated Platform for Mouse Lab Standard

### Rat Adaptor Kit

The 51621 Rat Adaptor Kit is included with all Lab Standard™ Stereotaxic Instruments for rats. The nose clamp assembly and either standard Traditional (18°) Ear Bars, or Non-Rupture (45°) Ear Bars are included.

Transform your `stereotaxic frame using our species-

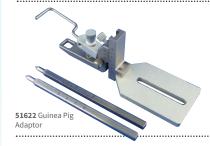
specific adaptors!

All adaptors are available

for use with Parallel Rail Stereotaxic Instrument!

**51621** Rat Adaptor, Traditional (18°) Ear Bars

51620 Rat Adaptor, Non-Rupture (45°) Ear Bars



51621 Rat Adaptor

### Guinea Pig Adaptor Kit

The Guinea Pig Adaptor includes the Non-Rupture (45°) ear bars required for guinea pigs. Also, the nose clamp reaches further back behind the incisors than on the rat adaptors. Compatible with all Lab Standard™ Stereotaxic Instruments.

51622 Guinea Pig Adaptor, Non-Rupture (45°) Ear Bars



### Small Bird Adaptor Kit

The Small Bird Adaptor Kit includes Non-Rupture (45°) Ear Bars, a beak support and "V" shaped beak clamp to secure the beak in place.

51623 Small Bird Adaptor, Non-Rupture (45°) Ear Bars



### Large Animal Adaptor Kits

The Dog/Monkey Adaptor is available only for the 51800 series stereotaxic instruments. Includes one set of Traditional (18°) Ear Bars.

**51852** Dog/Monkey Adaptor, Traditional (18°) Ear Bars

**51826** Cat/Monkey Adaptor, Traditional (18°) Ear Bars



### Marmoset Adaptor

The Marmoset Adaptor holds the marmoset head by means of a vertically adjustable palate bar with infra-orbital bars. The ear bars are Non-Rupture (45°) to prevent rotation of the head.

51678 Marmoset Adaptor, Non-Rupture (45°) Ear Bars

### Stereotaxic Animal Adaptors

Mouse & Neonates Adaptor

Stoelting's Mouse/Neonatal Rat Adaptor transforms the Lab Standard™ stereotaxic for rats into an instrument equipped for mouse and rat pup surgeries.

Model organisms with soft skulls, such as the mouse and the neonatal rat, are difficult to secure firmly in a traditional stereotaxic instrument. The stainless steel ear bars used for adult rats are too heavy to provide a secure hold without compressing the sides of the auditory canal into which to insert the ear bars.

Stoelting's Mouse and Neonatal Rat Adaptor employs light, Delrin® ear bars with tapered points on one end, and rubber tips on the other, to facilitate surgery on mice and rat pups.

Ear bars' height can also be independently adjusted in height to easily level the skull. Laser engraved scales show the vertical positions of the ear bars. A tooth bar and nose clamp secures the nose.

"Triple point" securing of the animal's head in this adaptor makes it the most versatile mouse adaptor available. Set of two jaw holder cuffs included.

MOUSE AND NEONATES ADAPTOR			
51625	Mouse and Neonates Adaptor		
51625W	Mouse and Neonates Adaptor with Warming Pad		
51625-1	Elevated Platform for Mouse Lab Standard		
51625-2	Microscope Platform for Mouse and Neonates		

See ear bar options on page 31.



**Stoelting Spinal Cord Surgery Adaptors** 

Stoelting's Spinal Cord Adaptors utilize the manipulator and base plate of the U-frame stereotaxic instrument, enabling precise spinal preparations. The spinal column is secured by up to four, independent transverse process clamps, as well as a spinous process clamp.

Different sizes for Mouse or Rat!

#### **Spinal Cord Surgery Adaptor Features**

For precise spinal surgery applications

### **STOELTING SPINAL CORD SURGERY ADAPTORS 51695** Rat Spinal Adaptor

**51690** Mouse Spinal Adaptor



### Stereotaxic Probe Holders























### Stereotaxic Probe Holders

### **Probe Holders**

Each Probe Holder has an 11mm square acrylic block, with grooves spaced 1 mm apart.

STANDARD PROBE HOLDERS			
51631	Holder with Corner Clamp		
51682	Horizontal Probe Holder, 90° (with Corner Clamp)* *Not Shown		
51632	Holder with Side Clamp		
51634	Holder with "C" Clamp		

The Large Probe Holder is compatible with shaft diameters from 6.5-13 mm (0.5 inch). This will hold Hamilton™ Micro-syringes or Stereotaxic Drills. The Extra-Large Drill Holder holds 51449 Micromotor Drill (see page 30) or 13-26 mm (one inch) shafts.

LARGE PRO	LARGE PROBE HOLDERS					
51633	Syringe Holder					
51630	Drill Holder for 51449					
51630-1	Drill Holder for 51555 (See page 30)					

The Microdialysis Probe Holder is customized, at Stoelting, to your specification. The hole may be drilled to fit probes from 1.5 to 6.0 mm. Default size is 1.5mm. Please call or email for details.

MICRODIALYSIS PROBE HOLDER				
51637	licrodialysis Probe Holder			
CANNULA HOLDERS				
51636	Cannula Holder, Vertical			
51636-1	Cannula Holder, Horizontal			
51636-2	Cannula Holder for CMA 7, 11, and 12 Guide			

The Double-Head Large Probe Holder has a large "C" gripping component at each end, with the "V" clamp attachment. Dual heads allow a secure hold for two different components. Clamps  $\frac{1}{4}$ " (6.4 mm–12.7 mm) diameter.

DOUBLE-H	EAD LARGE PROBE HOLDER
51638	Double-Head Large Probe Holder

Probe and Syringe
Holders **designed to use with any**Stoelting Stereotaxic **Manipulator Arm**.

Cannula Holders hold 3.4 mm Cannula Heads, as manufactured by Plastics One™, for cannula sets, and ALZET® Osmotic Pumps.

#### **Probe Holder Features:**

- Allows vertical adjustment
- Mount to right- or left-hand micromanipulator
- Compatible with most brands of stereotaxic manipulators



### Gas Anesthesia Masks



### Gas Anesthesia Mouse

The Gas Anesthesia Mouse Mask provides for precise and secure positioning of an animal during anesthesia and surgery. The mask provides positioning of the animal head that is perfect, automatic and effortless! For use with Mouse Stereotaxic Instruments (pages 12-13) and Mouse/Neonatal Rat Adaptor (pages 23-25). We recommend this be used with a gas scavenger device.

#### GAS ANESTHESIA PLATFORM/MOUSE

51609M

Gas Anesthesia Mouse Mask

# Gas Anesthesia for Mouse and Rat

Stoelting's Gas Anesthesia Adapter for Mouse and Rat provides an easy solution for gas delivery to a mouse or rat while still holding the animals head firmly for stereotaxic surgery. This items can be used with most mouse and rat adaptors associated with the Stoelting Lab Standard and Stoelting New Standard Stereotaxic Instruments.

We recommend this item be used with a gas scavenger device.

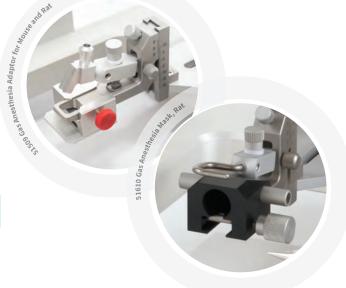
#### GAS ANESTHESIA FOR MOUSE AND RAT

51509

Gas Anesthesia Adapter for Mouse and Rat

51610

Gas Anesthesia Mask, Rat





The Jackson Laboratory

Leading the search for tomorrow's cures

### **Upcoming Event!**

Join us for a 3-day workshop learning surgical stereotaxic techniques with mice at the Jackson Laboratory!

Visit www.jax.org/stereotaxic for workshop schedule and to sign up!

### Stereotaxic Ear Bars

PRODUCT IMAGE	PRODUCT NUMBER	DESCRIPTION	STEREOTAXIC FRAME	ANIMAL	PRICE
	51616	Dual-Sided Ear Bar (18° and 45°)	51500 series and 51600 series	Rat, Guinea Pig, Bird, Monkey, Dog	
Manual San	51611	Traditional Ear Bar (18°)	51600 series	Rat, Monkey, Dog	
	51811	Traditional Ear Bar (18°)	51800 series, 51850 series	Rat, Monkey, Dog	
	51612	Non-Rupture Ear Bar (45°)	51600 series	Rat, Guinea Pig, Chinchilla, Dog, Monkey	
	51812	Non-Rupture Ear Bar (45°)	51800 series, 51850 series	Rat, Guinea Pig, Chinchilla, Dog, Monkey	
3 3	51613	Traditional Ear Bar (20°)	51600 series	Cat, Monkey	
Imfinition	51813	Traditional Ear Bar (20°)	51800 series, 51850 series	Cat, Monkey	
3	51614	Non-Rupture Ear Bar (20°)	51600 series	Cat, Monkey	
infants.	51814	Non-Rupture Ear Bar (20°)	51800 series, 51850 series	Cat, Monkey	
n dina	51611M	Non-Rupture Ear Bar	51600 series	Mouse	
	51617	Dual-Sided Ear Bar (18° and Rubber Tips)	51500 series	Mouse	
hadinahadan Santa-d	51617-1	Dual-Sided Ear Bar (45° and Rubber Tips)	51500 series	Mouse	
Santonbud	51648	Dual-Sided Ear Bar (18° and Rubber Tips)	51730 series, 51725 series, Mouse and Neonatal Rat Adaptor (51625)	Mouse	
00	51647	Serrated Cuff Holders (set of 2)	51730 series, 51725 series, Mouse and Neonatal Rat Adaptor (51625)	Mouse	
handani marina handa han	51649	Dual-Sided Ear Bar (45° and Rubber Tips)	51730 series, 51725 series, Mouse and Neonatal Rat Adaptor (51625)	Mouse	
	51649-1	45° and Serrated Cuff Holder	51730 series, 51725 series, Mouse and Neonatal Rat Adaptor (51625)	Mouse	

### Surgical Drills

### Micromotor Drill

Allows for a slender profile and easy hand-grip.

This high-speed, Micromotor Drill (up to 38,000 RPM) is configured for stereotaxic surgery, particularly in soft-skull animals, such as neonatal rats and mice. The compact control includes switches for Power On/Off, Forward or Reverse Rotation, with Manual or Foot Speed Control. Speed can be adjusted from low, to full speed, using the dial on the box; or with the foot pedal. Miniature Carbide Drill Bit Kit included (51448).



Burr Drill Bits

**Actual Size!** 

Can be mounted to stereotaxic

#### MICROMOTOR DRILL

51448 Miniature Carbide

51449 Micromotor Drill with Drill Bits51630 Stereotaxic Drill Holder for 51449

Miniature Carbide Burr Drill Bits, Set of 7, Assorted

### Portable Micro Motor Drill

- 0-30,000 RPM
- Lightweight hand piece
- · Lithium Ion rechargeable battery
- Drill bits included

The Portable Micro Motor High-Speed Drill is the ideal choice for stereotaxic drills. Equipped with a light-weight hand piece and pocket size control unit, the micro motor drill provides maximum portability for a variety of applications. Control unit features a digital rpm display and dial speed control for easy monitoring as you work. Speed adjustment up to 30,000 RPM. Run time is approximately 5 hours when unit is fully charged. *Optional Carrying Case and Nylon Carrying Pouch available online*. Miniature Carbide Drill Bit Kit included (51448).

#### **PORTABLE MICRO MOTOR DRILL**

51555 Portable Micro Motor

High-Speed Drill with Drill Bits

**51630-1** Stereotaxic Drill Holder for 51555

Carrying Case Options Available Online!



### Surgical Drills



### Flexible Shaft Drill

- Reliable performance
- Low vibration and noise
- Hands-free operation

A Lab Standard™ drill for over 25 years. The powerful motor and flexible shaft offer very low vibration and noise for long-term, reliable performance. The motor may be suspended from the optional 58652 Motor Support with Table Clamp. The heavy metal foot pedal allows exact speed control, and does not slide away from your foot. The drill includes motor, foot pedal, 1/2" handpiece with 3/32" collet, standard for dental drill bits, and a wrench for changing the collet. Miniature Carbide Drill Bit Kit included (51448).

#### **FLEXIBLE SHAFT DRILL**

58650 Flexible Shaft Drill

58652

51633

Motor Support with Table Clamp

Large Probe Holder\*

Cordless Rechargeable Micro Drill

58610 Cordless Rechargeable
Micro Drill

- Designed for balance and control
- No special tools required
- Up to 8 hours on a single charge

The Cordless Micro Drill is designed for research applications that require surgical drilling. Made of lightweight aluminum alloy for balance and control, the Micro Drill is powered by a rechargeable 6-volt nickel cadmium battery, and can function for up to 8 hours under normal operating

conditions. Speed is 14,400 RPM. Drill comes with a hard plastic case with die-cut foam for convenient storage, a recharger, and 5 carbide steel burrs.





#### **CORDLESS RECHARGEABLE MICRO DRILL**

**58610** Cordless Micro Drill



Check out the Robot Stereotaxic Drill and Injection System–the complete automated, solution for positioning, drilling and injecting! Pages 18-20.

<sup>\*</sup>Required to mount drill to stereotaxic instrument. See page 27

### Quintessential Stereotaxic Injector (QSI™)



### QSI-2 and Manual Stereotaxic Injector



Stoelting Manual

Stereotaxic Injector

51639

glass microsyringes

### Microsyringes







Hamilton microsyringes are made in the U.S.A. using state-of-the-art technology and the finest glass. Please visit our website StoeltingCo.com for additional syringes.

Syringes have removable or permanent needles included with either a 22° point (sharp) or no point (blunt). Luer-tip ends have no needle included.

### Economical Micro-Volume Syringes Tight tolerances between the plunger and the barrel. For use with liquids.

NEEDLE	5μL (26G)	10μL (26G)	25μL (22G)	50μL (22G)	100μL	250μL	500μL
Removable-sharp	51104	51105	51107	51108	51109	51135	51136
Permanent-sharp	51094	51095	51097	51098	51099	51133	51134
Permanent-blunt	51189	51090	51091	51092	51093	51101	51102

### **Ultra Micro-Volume Syringes**

Positive displacement syringe has a tungsten plunger wire that travels inside the needle. The needle acts as the syringe barrel; no dead volume. For use with liquids.

NEEDLE INCLUDED	0.5μL (25G)	1.0μL (25G)	2.0μL (25G)	5 ΟμL (24G)
Removable-sharp	51079	51085	51081	51083
Removable-blunt	51080	51086	51082	51084

### Gastight Micro-Volume Syringes

These syringes have a precision-machined PTFE plunger tip that creates a leak-free seal. The plungers are replaceable. Recommended for use with gas or liquid samples.

NEEDLE INCLUDED	10μL (26G)	25μL (22G)	50μL (22G)	100μL (22G)	250μL (22G)	500μL (22G)
Removable-sharp	53479	53480	53481	53482	53483	53484
Removable-blunt	53485	53486	53487	53488	53489	53490
	53485-1 (32G)*	NA	NA	NA	NA	NA
Permanent-sharp	53469	53470	53471	53472	53473	NA
Permanent-blunt	53474	53475	53476	53477	53478	NA
*Recommended for Stereotaxic Surgeries. Includes 6pk of extra needles.						

NEEDLE NOT INCLUDED						
Luer-tip	53431	53432	53433	53434	53435	53436

### **Neuros Syringe**

Hamilton Neuros™ syringe provides unprecedented functionality for controlled animal injections. An industry first, the Neuros accurately dispenses 50 nL to 100 µL of liquid through an ultrafine blunt point needle that delivers the sample directly into the injection site.

Developed specifically for the neurosciences, the Neuros minimizes injection site damage by increasing needle rigidity and delivering a microvolume of liquid to an exact location.

#### **Benefits of the Neuros Design:**

- Needle rigidity improves insertion path accuracy
- Minimal tissue damage reduces injection variability
- Reduced sample loss saves money and materials
- Fine gauge needle creates smaller injection sites
- · Compatibility with most infusion pumps and stereotaxic holders means an easy integration into existing processes

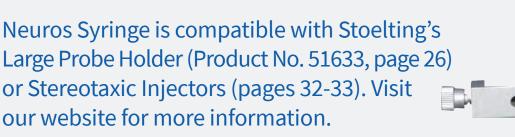


#### **NEUROS SYRINGE**

33733	0.5 μι Syringe Neuros Model, 52ga., Didni
53494	1.0 μl Syringe Neuros Model, 32ga., Blunt
53495	2.0 μl Syringe Neuros Model, 30ga., Blunt
53496	5 μl Syringe Neuros Model, 33ga., Blunt
53497	10 μl Syringe Neuros Model, 33ga., Blunt
53498	25 μl Syringe Neuros Model, 33ga., Blunt
53499	50 μl Syringe Neuros Model, 33ga., Blunt
53430	100 μl Syringe Neuros Model, 33ga., Blunt
53437	Neuros Replacement Needles, 33ga, Blunt, 5-100 $\mu$ l, 6/PK

0.5 ul Syringe Neuros Model, 32ga., Blunt

Large Probe Holder (Product No. 51633, page 26) or Stereotaxic Injectors (pages 32-33). Visit



### Gas Anesthesia

# LINK 7 Complete Active Surgical Gas Anesthesia System

Stoelting's Link 7 Gas Anesthesia System is your all-inclusive anesthesia solution for stereotaxic and general surgery! This easy-to-use, effective small animal anesthesia system includes three anesthesia stations for increased throughput. Excess anesthetic scavenged away by active charcoal canisters also included. Systems available as tabletop or mobile.

See more of our gas anesthesia products at StoeltingCo.com!











## Gas Anesthesia

**COMPLETE ACTIVE SURGICAL GAS ANESTHESIA SYSTEM** 

LINK 7 Gas Anesthesia System,

Tabletop w/Induction Chamber

LINK 7 Gas Anesthesia System,

Mobile w/Induction Chamber

53930

53931

#### The complete system includes:

- Tabletop and/or Mobile Anesthesia System complete with Isoflurane Vaporizer
- EVAC 4 Active Gas Scavenger (53910 + 53911)
- Hooded Induction Chamber (53915)



## Rodent Warmer X1





## **Rodent Warmer X1**

Use Stoelting's Rodent Warmer before, during and after surgical procedures to improve surgical outcome and overall longevity. Monitor and maintain animal temperature with three programmable settings: animal specific, timer or use with thermal probe. Available with mouse, rat or home-cage heating pad. *Rectal Thermal probe sold separately.* 

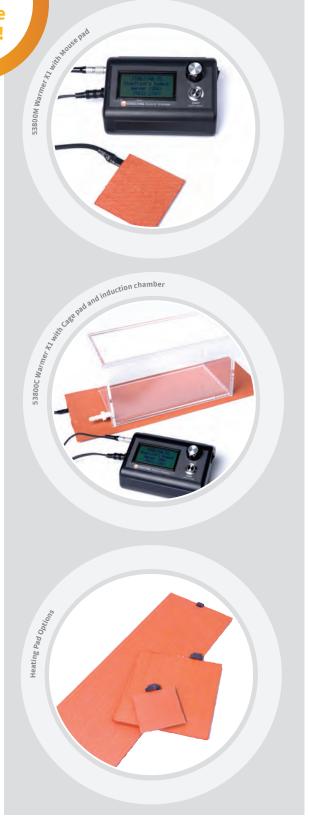
#### **Features:**

- Easy to use dial control
- Preprogrammed animal temperatures
- Use with or without rectal probe (sold seperately)
- · Lightweight, small footprint

# Add a **Rodent Warmer** Control Box to **utilize your Stereotaxic Base's warming feature!**

## RODENT WARMER X1

53800	Stoelting Rodent Warmer Control Box with Cable* *For use with integrated Stereotaxic warming base
53800M	Stoelting Rodent Warmer X1 with Mouse Heating Pad
53800R	Stoelting Rodent Warmer X1 with Rat Heating Pad
53800C	Stoelting Rodent Warmer X1 with Cage Heating Pad
50304	Rectal Thermal Probe



## Rodent Warmer X2





# Rodent Warmer X2 with TouchScreen Display

Use Stoelting's Rodent Warmer X2 before, during and after surgical procedures to improve surgical outcome and overall longevity. The integrated touch screen allows for easy programming and controls 2 independent heating pads simultaneously. Available with mouse, rat or home-cage heating pad. *Rectal Thermal probe sold separately.* 

#### **Features:**

- Integrated touch screen for easy programming
- Controls two independent heating pads simultaneously
- Rectal probe (sold seperately) for body temperature feedback
- Available with a combination of mouse, rat or cage size heating pads
- Heating pad included (mouse, rat or home cage)

#### **RODENT WARMER X2**

53850	Stoelting Rodent Warmer Control Box X2 with Cable
53850-MM	Stoelting Rodent Warmer X2 with Two Mouse Heating Pads
53850-RR	Stoelting Rodent Warmer X2 with Two Rat Heating Pads
53850-CC	Stoelting Rodent Warmer X2 with Two Cage Heating Pads
50304	Rectal Thermal Probe

 $<sup>{}^{\</sup>star}\mathsf{See}$  website for additional combinations

## Cautery



# Low-Temperature Cautery Pens

These patented Aaron RAM™ cauteries have an impressive shelf-life and are quite simply the best cauteries ever made. With a variety of low temperatures and fine tips the surgeon is assured of precise pinpoint hemostasis. All disposable cauteries are individually packaged, sterile, 10 per box.

#### **LOW-TEMPERATURE CAUTERY PENS**

59015	Micro fine tip, 850°F (454°C)
59117	Fine tip, 1300°F (704°C)
59118	Adjustable fine tip, 700°-1200°F (371°-649°C)
59119	Elongated fine tip, 1100°F (593°C)

# High-Temperature Cautery Pens

High- temperature cauteries are popular for many types of procedures including pinpoint hemostasis, controlling diffuse bleeders, vasectomies, and sculpting woven grafts. Individually packaged, sterile, 10 per box.

#### **HIGH-TEMPERATURE CAUTERY PENS**

59016	Fine tip 2200°F (1204°C)	
59120	Loop tip 2200°F (1204°C)	
59123	Adjustable fine tip, 1500-2100°F (816°-1149°C)	
59125	Vasectomy tip, 1800°F (982°C)	
59126	Fine tip micro, 2000°F (1093°C)	
59127	Loop tip micro, 2000°F (1093°C)	
59128	Vasectomy tip micro, 1600°F (871°C)	

# AC-Powered Cautery

This line-powered Cautery Instrument maintains desired temperature, from 300°F to 2200°F (149°C to 1204°C) consistently during tissue contact, and does not rapidly



diminish. The slim, autoclavable handpiece, with six-foot cord, is convenient to maneuver into position. It accepts an assortment of reusable, non-sterile, autoclavable platinum tips.

A-Loop Tip B-Fine Tip, Flat C-Loop Tip, Angled
D-Ball Point E-Fine Tip

O-Circular Tip
V-Vasectomy Tip

ThermaLite® Disposable Tips have the quality of reusable with the convenience of disposable. Specifically designed for the AC-Powered Cautery Instrument, these disposable electrodes heat up faster than the reusable tips.

Reusable Tips have solid 1" brass shanks and the tips are made with 24-gauge platinum wire. They are available as A, B, C, D, E, O, and V tips. These general-purpose electrodes are supplied non-sterile, but may be autoclaved.

Visit website for individual tip options!

#### **AC-POWERED CAUTERY PENS**

59005	Cautery Instrument with Disposable Tips
59011	Optional Wall or Table Mounting Bracket



# Battery-Operated Cautery

The perfect cauterizing tool, this batteryoperated Cautery System provides two operating temperatures: 2200° F and 1300° F (1204° C and 704° C).

The easily replaceable, autoclavable, Nickel-Chrome tips require less power and provide longer battery life. The convenient battery spacer converts the handpiece from high temperature to low temperature. Replacement tips are sold in packs of 10.

#### **AC-POWERED CAUTERY PENS**

59017	Battery-Operated Cautery System	
59018	Replacement Tips, 5mm (10/box)	
59019	Replacement Tips, 10mm (10/box)	

## **Wound Closure**



## **Sutures**

Monofilament nylon, braided silk (permanent) sutures, and chromic gut and synthetic absorbable sutures, are now available from Stoelting. Sold in packages of 12, with semicircular (cutting) needles. All suture indicated for use in general soft tissue approximation and/or ligation and ophthalmic surgery. Only nonabsorbable suture indicated for use in cardiovascular and neurological procedures.



#### **NON-ABSORBABLE**

PRODUCT	PRODUCT NO.	MATERIAL	LENGTH	SIZE	NEEDLE	PRICE
Monofilament	50480	Nylon	30	4	19.0 mm	
	50481	Nylon	30	3	24.0 mm	
	50482	Nylon	30	2	26.0 mm	
Monomid	50483	Nylon	18	5	19.0 mm	
	50484	Nylon	18	4	19.0 mm	
	50485	Nylon	18	3	24.0 mm	
	50486	Nylon	18	2	26.0 mm	
Silk	50487	Silk-Braided	18	5	19.0 mm	
	50488	Silk-Braided	18	4	19.0 mm	
	50489	Silk-Braided	18	3	24.0 mm	
	50490	Silk-Braided	18	2	26.0 mm	

ABSORBABLE						
Natural	50491	Chromic-Gut	30	4	19.0 mm	
	50492	Chromic-Gut	30	3	19.0 mm	
	50493	Chromic-Gut	30	2	24.0 mm	
	50494	Chromic-Gut	30	0	26.0 mm	
Synthetic	50495	Visorb (PGA)-Braided	30	5	19.0 mm	
	50496	Visorb (PGA)-Braided	30	4	19.0 mm	
	50497	Visorb (PGA)-Braided	30	3	19.0 mm	
	50498	Visorb (PGA)-Braided	30	2	24.0 mm	

## **Nylon exhibits:**

- Uniform diameter of the suture
- · Maximum flexibility of the strand
- Excellent and consistent knot security
- Minimal Memory

#### Silk exhibits:

 Smooth flow through tissue while maintaining optimal knot security

#### **Chromic Gut exhibits:**

- Purity of collagen for optimal tensile strength and in vivo performance
- Surface smoothness to facilitate knot run-down and knot strength

#### **Visorb PGA exhibits:**

- Excellent tensile strength throughout the critical wound-healing period
- Predictable absorption profile (absorption complete between 90-100 days)
- Excellent knot security

## **Wound Closure**



Perfect for rapidly closing wounds, providing maxium holding force with minimal trauma. Much easier, and faster to use than the conventional sutures and needles. The Applier works like a staple gun to rapidly apply clips closures. The Applier will hold a single rack of 20, 9mm wound clips, which are held firm and ready to use by a non-rusting beryllium-copper spring. The Applier will provide maxium holding force with minimal trauma. There is no need of assistance to opporate the applier or remover. When the wound is healed, clips are easily removed with the Remover. The EZ Clip™ Kit includes the Applier, case of 1,000, 9mm Wound Clips and Remover. *All parts are sold separately.* 

#### **Features:**

- Autoclavable in the package!
- Smaller "teeth" provide better clamping and wound closure of the animal's skin
- Racks of 20 clips are individually packed for easy handling
- The clips are pyrogen free and non-sterile
- Designed for use with mice and rats

Stoelting exclusive packaging of racks of 20 clips in autoclavable polypropylene provides unmatched ease of sterilization and storage.

#### **Reflex Wound Closing Kit-7mm**

The 7mm Reflex Wound Closing Kit is ideal for mice and other small animals. Wound clips are pre-filled on a rack ready to be loaded in the 7mm Reflex wound clip applier. The 7mm Reflex Wound Closing Kit includes the Applier, box of 100 7mm Wound Clips, and Remover. All parts are sold separately.

- Easy-to-use
- Designed for use with mice

EZ CLIP™	WOUND CLOSING SYSTEM
59020	EZ Clip™ Kit, 9mm
59043	Wound Clip Applier
59046	Wound Clip Remover
59027	9mm Wound Clips, Case/1000
59022	9mm Wound Clips, Box/200
59027-5	9mm Wound Clips, Case/5,000

REFLEX CLIP WOUND CLOSING SYSTEM		
59038	Reflex 7mm Wound Clip Kit	
59036	Wound Clip Applier	
59037	Wound Clip Remover	
59035	7mm Wound Clips, Box/100	
59034	7mm Wound Clips, Case/1,000	

Visit website for clip options.

## **Surgical Shavers and Trimmers**



## Surgical Shaver Kit for Mice and Rats

The Surgical Shaver Kit includes a powerful, cordless blade clipper providing easy mobility around animals. When fully charged, the clippers provide continuous operation for one hour. Kit includes: rechargeable clipper, #40 detachable blade set, charging stand, 2 Ni-MH battery packs, storage case, 4 oz. clipper oil.

#### **Features:**

- Rechargeable, cordless
- 15% faster and 10% smaller than comparable models
- Quiet operation

#### **SURGICAL SHAVERS**

51465	Cordless Shaver with #40 Blade **Recommended**
51482	Blade, Surgical/Shaving #40, Steel, Extra
51483	Blade Surgical/Shaving #50 Blade Steel Extra



Mice, Rechargeable

## Rechargeable Surgical Trimmer Kit for Rats & Mice

The Surgical Trimmer is the shaver of choice for surgical prep! Kit includes a cordless, detachable blade trimmer, charger stand and #40 stainless steel blade for trimming around tight areas.

RECHARO	SEABLE SURGICAL TRIMMERS
51472	ProClip Ion Trimmer
51473	Replacement Blade for 51472 Trimmer
	Cordless trimming made easy!



## Two Speed Surgical Clipper

Professional two-speed clipper designed for extremely fast cutting! Includes: clipper, size 10 UltraEdge blade, and clipper oil.

#### **Features:**

- Two speed operation: 3400 spm and 4400 spm
- Detachable blades for ease of changing and cleaning
- Maintenance free

#### **TWO SPEED SURGICAL CLIPPERS**

51485	Surgical Clipper, Two Speed, w/#10 & #40 blades	
51483	Blade, Surgical/ Shaving #50, Steel, Extra	

## Surgical Lights



## Stereotaxic LED Light

Stoelting's Stereotaxic LED Light is useful for stereotaxic surgery or any location requiring LED light! On/Off switch option also available.

- Magnetic Base/Puck System to anchor Magnifier on non-magnetic surfaces
- Small base (15/8" diameter)
- 10" flex arm (25.4cm)
- Universal Power Supply included (110-220V)

#### STEREOTAXIC LED LIGHT

59290	LED Stereotaxic Light	
59291	On/Off Switch for LED Stereotaxic Light	
59292	Stereotaxic Magnifier Glass	

## Fiber-Lite® Illuminator

- UL, CE, and C-UL approved for global use
- All Fiber-Lite® Illuminators are backed with a 3-year warranty

Fiber-Lite Illuminators offer highintensity, cold light illumination when coupled with any of our single or dual fiber optic light guides, which



provides a lamp life of over 200 hours at full intensity. Each light guide measures 23 inches (58.4cm) long.

#### FIBER-LITE® ILLUMINATOR

59258	Illuminator, 150W, Single Gooseneck	
59259	Illuminator, 150W, Dual Gooseneck	
59265	Light Probe Kit, 6 Probes	
59212	Replacement Bulb	

If your main power supply is 220V, add a "V" to the product number.

# LED Coolight Illuminator

LED Coolight Illuminator has a long-life LED source, and is environmentally and fiscally responsible. It would take 125 replacement bulbs before the LED Coolight hit 75% capacity. Energy use is just onethird of a 150W halogen. LED lights have almost no infared energy—they are truly a "cool light" source—unlike Halogen lamps that transmit IR heat that can



damage a sample or specimen.

#### **LED COOLIGHT ILLUMINATOR**

59254 Coolight Illuminator, LED, Dual Gooseneck Coolight Illuminator, LED, Single Gooseneck \*\*Recommended\*\*

## **Surgical Preparation**



## **Alcohol Prep Pads**

Sterile, nonwoven sponges are saturated with 70% Isopropyl Alcohol. These pads provide maximum absorbency for scrubbing and cleansing. Packaged individually in sealed pouch. Case of 4,000.

#### **ALCOHOL PREP PADS**

Alcohol Prep Pads, Sterile, 11/8" x 23/8" (2.86 cm x 6 cm), Case of 4,000



## Sterile Disposable Scalpels

Stainless steel surgical blades mounted on plastic handles

with fluted finger-grips. Scalpel blade is safely protected by pull-off protector shield. Individually sealed in peel-apart, see-through package. Box of 10.

#### STERILE DISPOSABLE SCALPELS

52186 Size 10, Box of 10
52187 Size 11, Box of 10
52188 Size 15, Box of 10



# Surgilube<sup>®</sup> Surgical Lubricant

Forms a transparent lubricating film that spreads readily. Non-irritating to tissue. Allows easy insertion of probes, catheters, surgical instruments, etc. Sterile and bacteriostatic. Box of 12.

#### **SURGILUBE® SURGICAL LUBRICANT**

**50976** Surgilube\*, 2 oz. (59 ml), Box of 12 **50977** Surgilube\*, 4 oz. (118.26 ml) Box of 12

## Parafilm M<sup>®</sup> Laboratory Film

Parafilm M\* is a semi-transparent, flexible thermoplastic. It molds and seals tightly around test tubes, flasks and irregular surfaces. The Dispenser/Cutter (51359) accommodates either 4" or 2" wide rolls, and a quick downward push cleanly cuts at the desired length.



# Sharps Disposal Containers

Sharps Containers feature one-hand, onestep, no-touch sharps depositing. Containers feature horizontal loading. Non-mechanical sharps openings minimize tampering and contamination. Safe to autoclave or incinerate. See website for additional items.

#### SHARPS DISPOSAL CONTAINERS

**52190** 1 Gal. (3.8 L) Red with clear lid

**52191** 2 Gal. (7.6 L) Red with clear lid

**52193** 5 Qt. (4.7 L) Red with clear lid



#### **PARAFILM M® LABORATORY FILM**

51355 | Parafilm® Roll 2"x250ft (5cmx76.2m)

**51356** Case of 24, 2"x250ft (5cm x 76.2m)

**51357** Parafilm® Roll, 4x125ft (10cm x 38.1m)

**51358** Case of 12, Parafilm® Roll 4"x125 ft (10cm x 38.1m)

**51359** Dispenser/Cutter

## **Surgical Preparation**



## **Cone Masks**

Provides the user with 99% filtration efficiency at 1.0µ along with cool, breathable comfort. Elastic band holds mask in place while nosepiece provides superior fit.

#### **CONE MASKS**

50955

Cone Mask, Blue, Case of 300



## **Bouffant Caps**

Made of lightweight, polypropylene fabric for comfort. Soft, non-irritating elastic band. Breathable, vet provides effective protection. Available in blue or white. Case of 500.

#### **NURSES' BOUFFANT CAPS**

50952

50951

Bouffant Caps, 24" (61cm) Blue, Case of 500 Bouffant Caps, 24" (61 cm) White, Case of 500



## Shoe Covers

Tacky Strip—Tread improves traction on slick, slippery floors. Sanitary shoe covers feature a 21/2" (6.35cm) wide tacky strip on the sole to keep wearer from slipping and sliding. Made of strong, abrasionresistant sponbond polypropylene. The full elastic top stretches to

allow for easy on and off. Available in Universal and X-Large sizing. Blue with white tread.

#### **SHOE COVERS**

52076	Shoe Cover, Blue, Dispenser Pack, Universal Size, Case of 300
52078	Shoe Cover, Blue, Bulk Pack, Universal Size, Case of 300
52080	Shoe Cover, Blue, Vacuum Pack, Universal Size, Case of 1,000



## Lab Coats

Disposable, cloth-like, microporous material provides general purpose protection. Economical and lightweight, yet strong and durable. Features elastic wrists and a 5-snap closure. Available in two, three or no pockets. More sizes and colors available online.

#### **LAB COATS**

Lab Coat, White 52056 Medium, 3 pocket, Case of 30

Lab Coat, Blue, 52061 Medium, 3 pocket,

Case of 30

Lab Coat, Purple, 52066 Medium, 3 pocket, Case of 30



50956 Tie Back Face Mask

## Tie Back Face Masks

High filtration efficiency down to 0.6µ. Hypoallergenic innerfacing. Anti-Fog.

#### **TIE BACK FACE MASKS**

Tie-back Mask, Blue, Foam backing, Box of 50 Tie-back Mask,

50957 Blue, Foam backing, Case of 300

Tie-back Mask, Green, No Foam Backing, Case of 300

## **Surgical Preparation**



## Sterilizing Pouches

Self-sealing, compatible with steam, chemical vapor and EO Gas sterilizing processes.

#### **STERILIZING POUCHES**

50985

Sterilizing Pouches 3.5" x 5.25" (9cm x 13.3cm), Box of 200

More Pouches Available on our Website



## Disposable Sterile Surgical Drapes

Used in minor surgical or therapeutic procedures where a sterile field or drape is required. Poly interlined, 3-ply construction of tissue/poly/tissue provides superior absorbency. Avoids possible moisture or bacteria migration.

#### **SURGICAL DRAPES**

50980

Surgical drape, fenestrated, 2¾" (7cm) opening, 18" x 26" (45.7cm x 66 cm), Case of 300



## Triadine<sup>®</sup>

(Povidone/Iodine) Solution Non-irritating, non-staining, fast acting, antimicrobial solution. This antiseptic germicide kills all gram-positive and negative-bacteria, fungi, viruses, protozoa and spores.

#### TRIADINE® SOLUTION

50995	Povidone/Iodine solution, 4oz (118.26ml) bottle, Case of 72
50996	Povidone/Iodine solution, 8oz (236.52 ml) bottle, Case of 24
50997	Povidone/Iodine solution, 16oz (473.04 ml) bottle, Case of 12
50998	Povidone/Iodine solution, 32oz (946.07 ml) bottle, Case of 6
50999	Povidone/Iodine solution, Gallon (3.8 L) bottle, Case of 4



## Sterile and Non-Sterile General-Use Sponges

Unique rayon and polyester nonwoven fabric provides strength, absorbancy and scrubbing texture. Sterile 2's have 2 sponges per envelope and 25 envelopes per box.

#### **NU GAUZE™ STERILE SPONGES**

50968 2" x 2" (5cm x 5cm), 4-ply Sterile 2's, Case of 30 boxes (50/box)

> 4" x 4" (10cm x 10cm)

Sterile Gauze, Case/1200

2" x 2" (5cm x 5cm), Non-Woven Sponge Gauze, Case/8000

More Options Available on our Website.



## Cotton-Tipped Applicators

Are non-sterile applicators, 6" long and packaged in autoclavable paper bags. Box of 1,000.

#### **COTTON-TIPPED APPLICATORS**

50975

Cotton-tipped applicators, box of 1,000

## **Surgical Accessories**



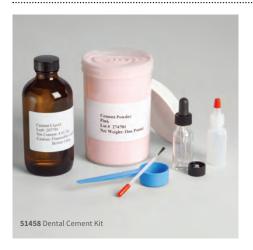
## **Bone Anchor Screws**

Bone Anchor Screws anchor cannulae or other chronically-attached appliances to skull. Stainless Steel Screws #0-80, 1.59 mm O.D., 3.2 mm long. Package of 100.

## Ideal for stereotaxic surgery! Stereotaxic drills pages 30-31

#### **BONE ANCHOR SCREWS**

51457 Bone Anchor Screws, 10051455-5 Drill Bit,1.35mm, Pkg/6



## **Dental Cement**

Dental Cement is used to affix stainless steel to skull or bone, for lab repairs, or for casting of hard acrylic parts. Can be cut, drilled or ground. Sets up in minutes. Kit includes items pictured.

#### **DENTAL CEMENT KIT**

51458 Pink Opaque, 1 lb.51459 Clear, 1 lb.51456 Extra Solvent, 8 oz

These items are available only to the 48 contiguous states and via ground shipment.

## **Bone Wax**

Bone Wax is used to help control bleeding from bone surfaces. Bone wax is a sterile mixture of beeswax and a wax-softening agent. It can achieve local bone homeostasis by acting as a mechanical barrier.



**Visit our website** for our complete line of Surgical Supplies and Accessories!

#### **BONE WAX**

50499

Bone Wax, Pkg/12

## Instrument Cup

An instrument cup designed to arrange surgical instruments in the open position. Made of durable silicone, the instrument cup replaces glass and metal instrument pans, and won't damage delicate instrument tips. Large instruments rest against the bottom and side, while small instruments may be suspended from the scalloped



brim. The Instrument Cup has a wide base (5 in/12.7cm) for stability, making it resistant to slippage on table surface.

#### **INSTRUMENT CUP**

52194

Instrument Cup

## **Examination Gloves**



## Vinyl Exam Gloves

Ideal for general purpose use. Great for applications such as light-duty surgery and general procedures.

• Powder & Latex Free

Single Use

Non-sterile

• Color: Blue

#### **POWDER-FREE VINYL EXAM GLOVES**

51026	Vinyl Exam Gloves,S, 100/box
51028	Vinyl Exam Gloves,M, 100/box
51030	Vinyl Exam Gloves,L, 100/box
51032	Vinyl Exam Gloves,XL, 100/box



## Latex-Free Nitrile Exam Gloves

This is a nitrile glove with a soft and stretchy feel. Fully textured, it protects while providing a reliable grip.

• Powder & Latex Free

• Single Use

• Non-sterile

• Color: Blue

#### LATEX-FREE NITRILE EXAM GLOVES

52006	Nitrile Exam Gloves, XS, 100/box	
51035	Nitrile Exam Gloves, S, 100/box	
51037	Nitrile Exam Gloves, M, 100/box	
51039	Nitrile Exam Gloves, L, 100/box	
51041	Nitrile Exam Gloves, XL, 100/box	
52004	Nitrile Exam Gloves, 2XL, 100/box	



## Vinyl Gloves with Aloe

Soothing aloe surrounds the hands to help protect from drying, chapping and cracking. Ideal for general purpose use. Great for applications such as light-duty surgery and general procedures.

• Powder & Latex Free

• Single Use

• Non-sterile

Color: Green

#### **VINYL EXAM GLOVES WITH ALOE**

54153	Vinyl Gloves with Aloe, Small, 100/box	
54155	Vinyl Gloves with Aloe, Medium, 100/box	
54157	Vinyl Gloves with Aloe, Large, 100/box	
54159	Vinyl Gloves with Aloe, XLarge, 100/box	

## \*\*Recommended\*\*



With an inner coating of aloe, Microflex® A+ Aloe® is a fully textured nitrile glove that helps protect hands from chapping, drying and cracking.

• Powder & Latex Free

Single Use

Non-sterile

• Color: Green

#### **NITRILE EXAM GLOVES WITH ALOE**

51063	Nitrile Gloves with Aloe, Small, 100/box
51065	Nitrile Gloves with Aloe, Medium, 100/box
51067	Nitrile Gloves with Aloe, Large, 100/box
51069	Nitrile Gloves with Aloe, X-Large, 100/box
52009	Nitrile Gloves with Aloe, 2X-Large, 100/box

## **Examination Gloves**



## E-Grip® Latex Exam Gloves

With a micro-textured satin finish, Microflex® E-Grip® provides enhanced gripping power and excellent tactile sensitivity.

Beaded cuff for easy donning. 510(k) approved for medical use.

- Powder Free
- Non-sterile
- Single Use
- Color: Natural

#### **E-GRIP® LATEX EXAM GLOVES**

51009	E-Grip <sup>®</sup> Latex Exam Gloves, S,100/box, 10 boxes
51011	E-Grip® Latex Exam Gloves,M,100/box, 10 boxes
51013	E-Grip® Latex Exam Gloves,L,100/box, 10 boxes
52002	E-Grip <sup>®</sup> Latex Exam Gloves,XL,100/box, 10 boxes



## Neoprene Sterile Exam Gloves

Thin design for superior tactile sensitivity with broad chemical splash resistance.

- Sterile
- Ideal for Double Donning
- Single Use
- · Color: Blue

#### **NEOPRENE STERILE EXAM GLOVES**

Neoprene Sterile Gloves.

51141C	Size 5.5, 4 bx/cs
51142C	Neoprene Sterile Gloves, Size 6, 4 bx/cs
51143C	Neoprene Sterile Gloves, Size 6.5, 4 bx/cs
51144C	Neoprene Sterile Gloves, Size 7, 4 bx/cs
51145C	Neoprene Sterile Gloves, Size 7.5, 4 bx/cs
51146C	Neoprene Sterile Gloves, Size 8, 4 bx/cs
51147C	Neoprene Sterile Gloves, Size 8.5, 4 bx/cs
51148C	Neoprene Sterile Gloves, Size 9, 4 bx/cs

## MidKnight® Nitrile Exam



Gloves

This is a nitrile glove with a soft and stretchy feel. Fully textured, with distinctive black color hides stains and provides contrast for improved visibility.

- Powder & Latex Free
- Non-sterile
- Single Use
- Color: Black

#### **NITRILE EXAM GLOVES**

54140	MidKnight® Nitrile Exam Gloves, XS, 100/box	
54141	MidKnight® Nitrile Exam Gloves, S, 100/box	
54144	MidKnight® Nitrile Exam Gloves, M, 100/box	
54146	MidKnight® Nitrile Exam Gloves, L, 100/box	
54148	MidKnight® Nitrile Exam Gloves, XL, 100/box	
54150	MidKnight® Nitrile Exam Gloves, 2XL, 100/box	



## Evolution One® Latex Exam Gloves

Microflex® Evolution One® is a

latex examination glove that provides reliable protection and comfort, with a secure grip.

- Powder Free
- Single Use
- Non-sterile
- Color: Natural

## **EVOLUTION ONE® LATEX EXAM GLOVES**

54130	Evolution One® Latex Exam Gloves,XS,100/box, 10 boxes	
54132	Evolution One® Latex Exam Gloves,S,100/box, 10 boxes	
54134	Evolution One® Latex Exam Gloves,M,100/box, 10 boxes	
54136	Evolution One® Latex Exam Gloves,L,100/box, 10 boxes	
54138	Evolution One® Latex Exam Gloves,XL,100/box, 10 boxes	

## **Examination Gloves**



## Cobalt® Nitrile Exam Gloves

This is a nitrile glove with a soft and stretchy feel. Fully textured, it protects while providing a reliable grip.such as light-duty surgery and general procedures.

- Powder & Latex Free
- Single Use
- Non-sterile
- Color: Cobalt

#### **COBALT® NITRILE EXAM GLOVES**

54120	Cobalt® Nitrile Exam Gloves, XS, 100/box, 10 boxes	
54122	Cobalt® Nitrile Exam Gloves, S, 100/box, 10 boxes	
54124	Cobalt® Nitrile Exam Gloves, M, 100/box, 10 boxes	
54126	Cobalt® Nitrile Exam Gloves, L, 100/box, 10 boxes	
54128	Cobalt® Nitrile Exam Gloves, XL, 100/box, 10 boxes	



## Latex Exam Gloves with Aloe

With soothing aloe, Microflex®

A+ Aloe® latex gloves protect skin against drying, cracking and chapping. Ideal for workers who have frequent glove changes.

- Powder Free
- Single Use
- Non-sterile
- Color: Natural

#### LATEX EXAM GLOVES WITH ALOE

50817	Latex Gloves with Aloe, XS, 100/box, 10 boxes
51056	Latex Gloves with Aloe, S, 100/box, 10 boxes
51058	Latex Gloves with Aloe, M, 100/box, 10 boxes
51060	Latex Gloves with Aloe, L, 100/box, 10 boxes
51062	Latex Gloves with Aloe, XL, 100/box, 10 boxes

## Perry Style Exam Gloves

This latex, powder-free surgical glove offers the essential protection needed for reliable performance.



Single Use

• Micro-Textured Finish

• Color: Cream

## PERRY STYLE EXAM GLOVES

51042C	Perry Style 42 Sterile Gloves, Size 6, 4 bx/cs	
51043C	Perry Style 42 Sterile Gloves, Size 6.5, 4 bx/cs	
51044C	Perry Style 42 Sterile Gloves, Size 7, 4 bx/cs	
51045C	Perry Style 42 Sterile Gloves, Size 7.5, 4 bx/cs	
51046C	Perry Style 42 Sterile Gloves, Size 8, 4 bx/cs	
51047C	Perry Style 42 Sterile Gloves, Size 8.5, 4 bx/cs	
51048C	Perry Style 42 Sterile Gloves, Size 9, 4 bx/cs	

# See more glove options at www.StoeltingCo.com!

For Surgical Supplies and Accessories see pages 36-101.

## **Inside Surgical Instruments**



# Stoelting's **premiere** line of **surgical instruments** combines precision manufacturing with the **highest-grade** stainless steel.

### What's in this section

Spring Scissors
Operating Scissors
Dissecting Scissors
Fine Forceps
Forceps with Teeth
Dressing Forceps
Hemostatic Forceps
Bone Instruments
Clamps
Needle Holders96
Stereotaxic Instrument Kit
Surgical Accessories
Sutures
Check out our selection of Tungsten Carbide Instruments!

## Micro-Dissecting Spring Scissors



**Micro-Dissecting Spring Scissors** are designed with small tips, useful for cutting delicate tissues during microsurgical procedures. Spring design eliminates handedness (can be used with left or right hand) and minimizes pressure required to close. Straight, curved and angled spring scissors available.

52130-00P

McPherson-Vannas Spring Scissors, 8.5cm (3.3in), 0.3mm Straight Tips



52130-01P

McPherson-Vannas Spring Scissors, 8.5cm (3.3in), 0.3mm Slightly Curved Tips



#### 52130-02P

McPherson-Vannas Spring Scissors, 8.5cm (3.3in), 0.2mm Straight Tips



#### 52130-03P

McPherson-Vannas Spring Scissors, 8.5cm (3.3in), 0.2mm Slightly Curved Tips



## Micro-Dissecting Spring Scissors



## **52130-10P**Vannas Spring Scissors, 8.5cm (3.3in), 0.3mm Straight Tips



#### 52130-11P

Vannas Spring Scissors, 8.5cm (3.3in), 0.3mm Slightly Curved Tips



#### 52130-18P

Vannas Spring Scissors, 8.5cm (3.3in), 0.3mm Side Angled Tips



#### 52130-19P

Vannas Spring Scissors, 8.5cm (3.3in), 0.3mm Bent Tips



## Micro-Dissecting Spring Scissors



**52130-20P** Vannas Spring Scissors, 8.25cm (3.2in), 0.1mm Straight Tips



**52130-31P**McPherson-Vannas Spring Scissors, 10cm (3.9in), 0.3mm Slightly Curved Tips



**52130-50P**Castroviejo Scissors, 9.5cm (3.7in), 0.3mm Straight Tips



**52130-58P**Castroviejo Scissors, 9.5cm (3.7in), 0.3mm Angled Tips

## **Mayo Scissors**

## **Straight-blade Mayo Scissors**

Mayo Scissors are designed for cutting body tissue near the surface of a wound. Also, commonly used to cut suture. They have semi-blunt tips that distinguish them from other surgical scissors. Straight or curved blade Mayo scissors are available. 52136-50P Mayo Scissors, 14.6cm (5.75in), Straight Blades eft-Handed 52136-55P Mayo Scissors, 17cm (6.75in), Straight, Left-Handed Blades 5 x Stronger than Stainles Steel! 5 x Stronger Straight-Blade Mayo Scissors than Stainless Used to Cut Suture. 52136-60P

Mayo Scissors, 14.6cm (5.75in), Straight, Tungsten Carbide Blades

## **Mayo Scissors**





## **Metzenbaum Scissors**

Metzenbaum Scissors are used to cut delicate tissue like dura mater, connective tissue, ligated vessels and muscle. Straight or curved blade scissors of variable lengths available.







52134-01P

Forget something? Add Stoelting's Dry Glass Bead Sterilizer to your order! Sterilizes instruments in 15 seconds or less. See Surgical Instrument Accessories starting on page 101.







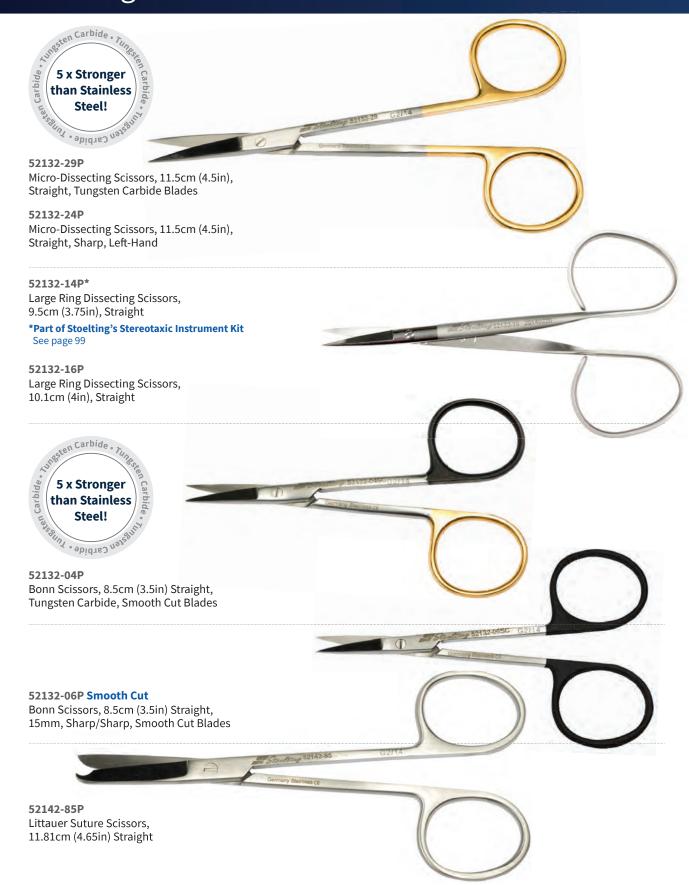




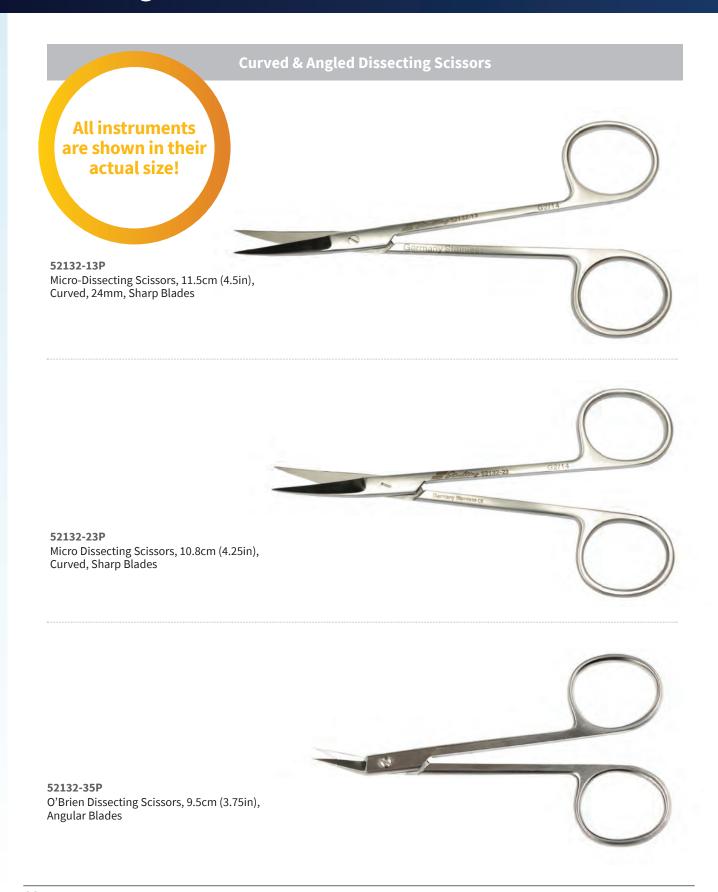














**52132-41P**Stevens Dissecting Scissors, 10.75cm (4.25in), Curved, Sharp Blades



**52132-43P**Stevens Dissecting Scissors, 10.75cm (4.25in), Curved, Sharp Blades

## For a more precise cut, try our Smooth Cut Scissors!



#### 52132-51P Smooth Cut

Micro Dissecting Scissors, 9cm (3.5in), Curved, Sharp/Sharp, Smooth Cut Blades

## Fine Forceps

**Fine Forceps** are multipurpose forceps used for grasping, holding and retracting delicate tissues. Straight, curved and angled forceps available with, and without, serrated tips.

All instruments are shown in their actual size!

Stanting 52102-30 5973

#### 52102-02P

McPherson Forceps 8.5cm (3.3in), Angled Tying Tips

#### 52102-13P

Graefe Forceps, 7.25cm (2.85in), Straight, Cross-Serrated Tips

#### 52102-30P

Micro-Dissecting Forceps, 10.2cm (4in), Straight, Serrated, 0.8mm Tips

#### 52102-32P

Micro-Dissecting Forceps, 10.2cm (4in), Straight, Serrated, 0.5mm Tips

#### 52102-36P

Micro-Dissecting Forceps, 10.2cm (4in), Slight Curve, 0.5mm Tips

#### 52102-35P\*

Micro-Dissecting Forceps, 10.2cm (4in), Curved, Serrated, 0.8mm Tips

#### \*Part of Stoelting's Stereotaxic Instrument Kit See page 99

#### 52102-38P

Micro-Dissecting Forceps, 10.2cm (4in), Full Curve, 0.5mm Tips



#### 52102-37P

Micro-Dissecting Forceps, 10.2cm (4in), Full Curve, 0.8mm Tips



## Fine Forceps

#### 52102-39P

Micro Dissecting Forceps, 10.2cm (4in), Serrated Angle, 0.8mm Tips



1x2 Teeth Pattern

#### 52102-41P\*

Micro-Dissecting Forceps, 10.2cm (4in), 1x2 Teeth Pattern, 0.5mm Tips

\*Part of Stoelting's Stereotaxic Instrument Kit See page 99



52102-54P

Moloney Forceps, 11.75cm (4.6in), Slight Curve, Serrated Tips



**52102-79P** McCullough Forceps, 9.8cm (3.85in), Cross Serrated, 1.5mm Tips



#### 52102-80P

Bonnacolto Forceps, 10.2cm (4in), Cross Serrated, 1.2mm Tips



## 52102-81P

Bracken Iris Forceps, 10.2cm (4in), Curved, Fine, Cross Serrated



#### 52102-82P

Nugent Forceps, 10.8cm (4.25in), Angled, Smooth, 1.2mm Tips



## Fine Forceps with Teeth

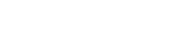
These **Fine Forceps** are designed with sharp serrated tips called teeth. The teeth of the forceps help to grasp, hold and retract large, superficial tissue. Straight or curved forceps with interlocking teeth patterns of 1x2, 2x3 or 3x4 available.

All instruments are shown in their actual size!



#### 52102-15P

Graefe Forceps, 7.25cm (2.875in), Straight Tips, 1x2 Teeth Pattern





#### 52102-60P

Graefe Forceps, 10.2cm (4in), Full Curve,1x2 Teeth Pattern, 0.5mm Tips



#### 52102-40P

Micro-Dissecting Forceps, 10.2cm (4in), Straight, 1x2 Teeth Pattern, 0.8mm Tips



#### 52102-41P

Micro-Dissecting Forceps, 10.2cm (4in), Straight, 1x2 Teeth Pattern, 0.5mm Tips



# Fine Forceps with Teeth



1x2 Teeth Pattern

52102-42P

Micro-Dissecting Forceps, 10.2cm (4in), Slight Curve, 1x2 Teeth Pattern, 0.8mm Tips



**52102-77P**Steven Forceps, 10.2cm (4in),
Straight, 1x2 Teeth Pattern, 1mm Tips



**52106-40P** Semken Forceps, 12.7cm (5in)



1x2 Teeth Pattern

**52106-42P**Semken Forceps, 12.7cm (5in),
Straight, 1x2 Teeth Pattern, 1.2mm Tips

# Forceps with Teeth

**Tissue forceps** are used for compressing or grasping tissues during surgical procedures.

All instruments are shown in their actual size!



**52108-60P** Tissue Forceps, 11.5cm (4.5in), 1x2 Teeth Pattern



52108-62P

Tissue Forceps, 12.75cm (5in), 1x2 Teeth Pattern



### 52108-69P

Tissue Forceps, 14.5cm (5.75in), 1x2 Teeth Pattern



52108-80P

Tissue Forceps, 12.75cm (5in), 3x4 Teeth Pattern

### Forceps with Teeth

**Adson Forceps** are designed with sharp teeth for grasping and holding superficial tissue. Adson forceps with interlocking teeth patterns of 1x2 or 2x3 are available. Not recommended for use with delicate tissues, as sharp teeth may cause damage.



**Brown-Adson Forceps**, or pickups, are used to grasp and hold superficial or delicate tissues. Interlocking side teeth provide a secure grasp without the need to apply increased pressure.



**52104-31P**Brown-Adson Forceps, 12cm (4.7in), Side Teeth Pattern

# **Dumont Style Forceps/Tweezers**

**Dumont Style Forceps** are constructed of the highest-quality stainless steel and are used in procedures requiring precise technique. Commonly referred to as Jeweler's Forceps, Dumont Forceps are used for grasping fine, delicate tissues like nerves and small vessels.



**52100-02P**Stainless Steel Forceps, 12cm (4.75in), Straight Tips



**52100-81P\***Stainless Steel Forceps, 11cm (4.3in), Straight Tips

\*Part of Stoelting's Stereotaxic Instrument Kit See page 99

# Kuehne Pan Forceps

**Kuehne Pan Forceps** are specialized forceps, designed with flattened tips, best suited for lifting and transporting microscope slides and glass cover slips.





**52109-59P** Kuehne Pan Forceps, 10.2cm (4in), Straight, Flat Jaw



**52109-60P** Kuehne Pan Forceps, 10.2cm (4in), Angled

# **Dressing Forceps**

**Dressing Forceps** are used to remove gauze or sutures. Straight-tipped forceps with, or without, serrations available.

All instruments are shown in their actual size!



**52109-30P** Thumb Dressing Forceps, 11.5cm (4.5in), Delicate Tips



**52109-36P**Splinter Forceps, 10.2cm (4in), Straight, Fine Tips



**52109-37P** Splinter Forceps 11.5cm (4.5in), Fine Tips

# **Dressing Forceps**



**52108-83P** Thumb Dressing Forceps 12.75cm (5in)



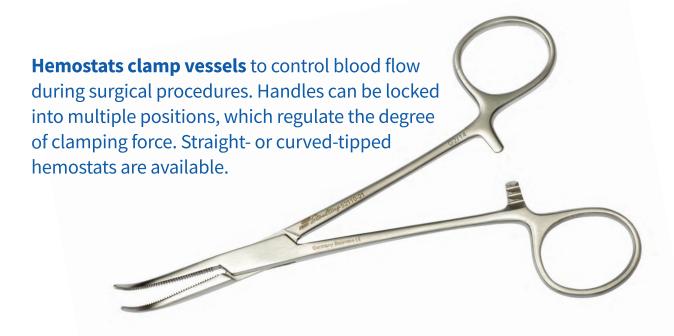
**52109-23P** Thumb Dressing Forceps 11.5cm (4.5in)



**52109-25P** Thumb Dressing Forceps, 14.0cm (5.5in)

# Forceps and Instrument Cup



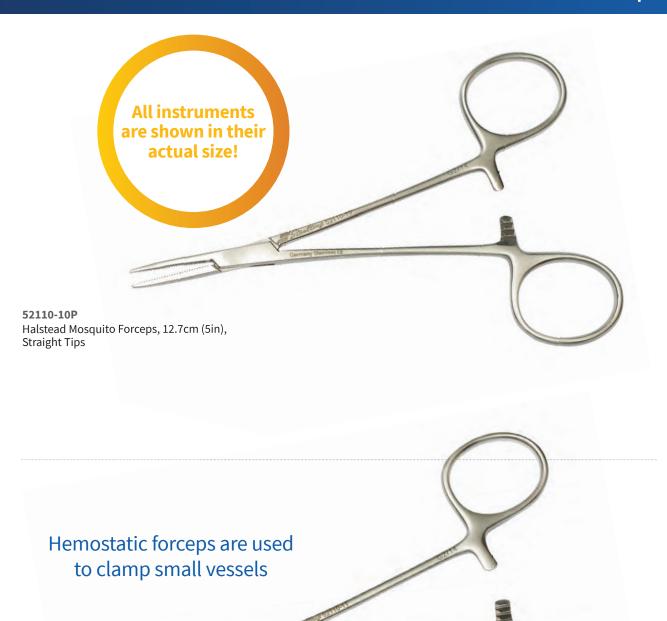


**52110-21P**Reynolds Hemostatic Forceps, 14cm (5.5in), Full-Curved Tips



**52110-31P**Gemini-Mixter Hemostats,
14cm (5.5in), Full-Curved, Delicate Tips





**52110-11P**Halstead Mosquito Forceps, 12.7cm (5in), Curved Tips

### **Delicate Hemostatic Forceps**





**Bone-cutting forceps** are used to grasp or cut through soft bone, cartilage and hard tissue. Used routinely to cut into the skull for extraction of brain tissue.

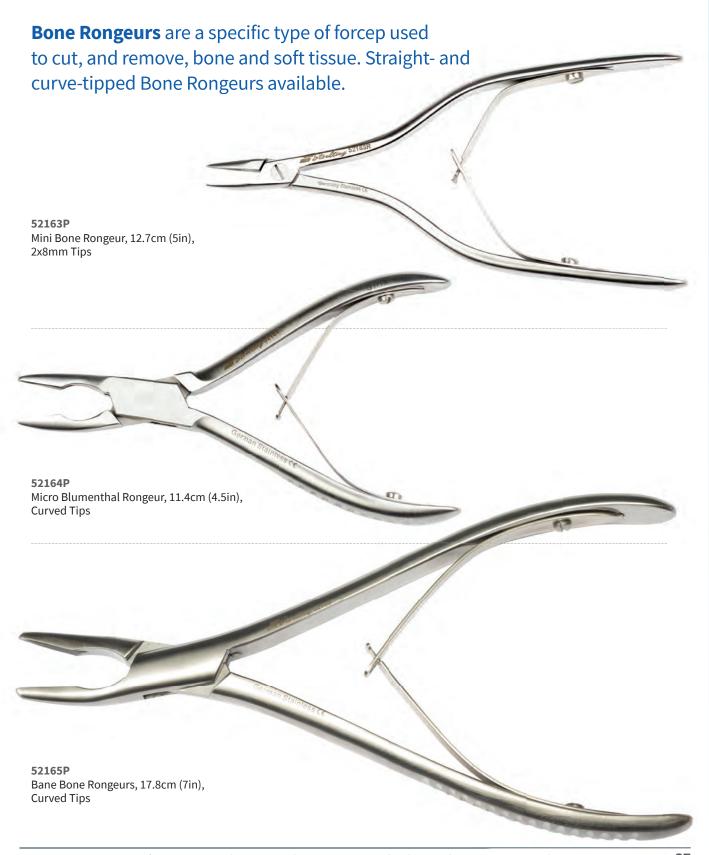


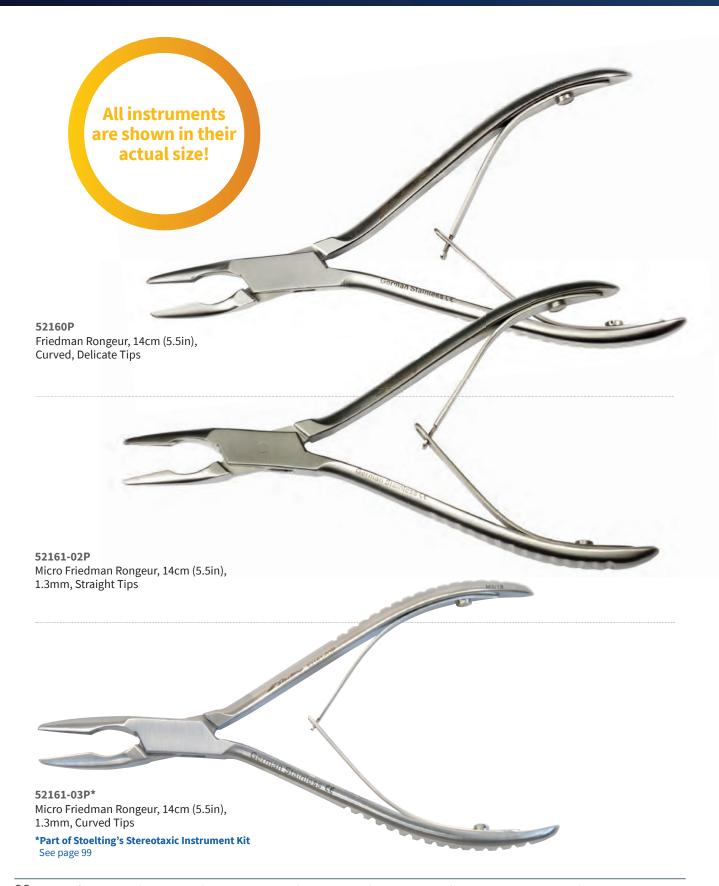
**52166P**Bone-Cutting Forceps, 14cm (5.5in), Convex Jaw, Fine Tips



**52167-80P**Littauer Bone-Cutting Forceps, 11.4cm (4.5in), Straight Tips







**Freer Bone Elevator** is used to elevate, and separate, tissue from the bone.



**52169P** Freer Elevator, 17.8cm (7in), Double-ended

**Freer Bone Chisel** is used to cut, or shave, bone during surgical procedures.



**52170P** Freer Bone Chisel, 16.5cm (6.5in)

# **Specialized Dissection Tools**

**Wecker Spatula** is a flat, blunt, flexible instrument used in cataract surgery. It can also be used for mixing, and applying, dental cement during stereotaxic surgery. The Blunt Dissection Probe is used to pinpoint structures, separate and examine tissues during dissection.



**Blunt Dissection Probe** 

**Retractors** are used to retract, and hold, skin and soft tissue for improved visualization of underlying tissues. Screw-type or self-retaining Retractors are available.

52124P

Agricola Retractor, 4.3cm (1.7in), 3x3 Prongs



52125P

Goldstein Retractor, 2.5cm (1in)



52179\*

Kane Retractor (Stereotaxic Surgery Retractor), 1.5in, **5pk** 

\*Part of Stoelting's Stereotaxic Instrument Kit See page 99



52126-10P

Alm Retractor, 7.6cm (3in), 4x4 Prongs, 5.1cm (2in) Spread



**52126-14P** Alm Retractor, 10.2cm (4in), 4x4 Prongs, 6.4cm (2.5in) Spread



### Retractors





### **Bulldog Clamps**

**Bulldog clamps** are spring-loaded vascular clamps used to temporarily occlude blood vessels during surgery. Straight and curved clamps available.

**52120-38P**Dietrich Bulldog Clamp, 5.1cm (2in), Straight Tips



52120-39P

Dietrich Bulldog Clamp, 5.1cm (2in), Curved Tips



52120-40P

Hopkins Bulldog Clamp, 3.8cm (1.5in), Straight Tips



52120-42P

Hopkins Bulldog Clamp, 3.8cm (1.5in), Slight Curve Tips



52120-43P

Hopkins Bulldog Clamp, 4.7cm (1.85in), Straight Tips





Leading the search for tomorrow's cures

# **Upcoming Event!**

Join us for a 3-day workshop learning surgical stereotaxic techniques with mice at the Jackson Laboratory!

Visit www.jax.org/stereotaxic for workshop schedule and to sign up!

### Dieffenbach Serrefine Clamp

**Dieffenbach Serrefine Clamps** are finely serrated clamps used to occlude blood flow to arteries during surgical procedures.

**52106-77P** Dieffenbach Serrefine 3cm (1.2in), Straight Tips



**Towel Clamps** are locking forceps, generally used to secure surgical towels and drapes, but can also function as skin retractors, or to grasp tissue during surgical procedures.





Surgical Drapes and additional accessories also available. For a complete list of Surgical Accessories visit our website at www.stoeltingco.com.

# Scalpel Handles & Blades

**Scalpels** are used to make sharp, clean incisions during surgical procedures. Available in a variety sizes and styles, scalpel handles and blades are suitable for any surgical procedure. Scalpel handles and blades must be purchased separately.



52171P\*

Scalpel Handle, No.3, 10.1cm (4in)

\*Part of Stoelting's Stereotaxic Instrument Kit See page 99



52172P

Scalpel Handle, No.7, 16.5cm (6.5in)



52174P

Scalpel Handle, No.4, 13.3cm (5.25in)

# Scalpels Are Essential Tools for Any Surgical Suite!



**52175-21P** Sterile Scalpel Blades, Size 21 for No.4, Box/100



**52173-15P**Sterile Scalpel Blades, Size 15 for No.3 and No.7, Box/100



**52173-10P\***Sterile Scalpel Blades, Size 10 for No.3 and No.7, Box/100

\*Part of Stoelting's Stereotaxic Instrument Kit See page 99

### **Needle Holders**

**Needle Holders** provide precise control and hold while maneuvering suture needles. Smooth, or serrated, needle holders of different lengths available. Looking for a stronger hold? Tungsten carbide needle holders provide five times the strength as stainless steel!



Castroviejo Needle Holder w/Catch 14cm (5.5in)

52182P







**52181-94P** Olsen-Hegar Needle Holder Scissors, 14cm (5.5in), Tungsten Carbide



### Stereotaxic Instrument Kit

### **NEW!**

# Stoelting's Stereotaxic Instrument Kit

**Stoelting's Stereotaxic Surgical Instrument kit** contains all the necessary tools for mouse or rat stereotaxic surgeries. You will find precision Stoelting brand surgical instruments including a double sterilizing tray that will fit all the tools. Indeed, this kit also includes the Kane Clamp, exclusive to Stoelting for retracting the skin for optimal view of the skull without causing trauma to the surrounding tissue.



# Needle Hoop Age 20 Page 101 Page 6 90 Pa

### STEREOTAXIC INSTRUMENT KIT

52189

Stereotaxic Surgical Tool Kit



Leading the search for tomorrow's cures

**Upcoming Event!** 

Join us for a 3-day workshop learning surgical stereotaxic techniques with mice at the Jackson Laboratory!

Visit www.jax.org/stereotaxic for workshop schedule and to sign up!

# Did you know...

Stoelting supports more than **40 scientific meetings** every year?

Below is a list of Societies Stoelting has supported for over the past 25+ years!

- Society for Neuroscience
- Society for Behavioral Neuroendocrinology
- International Behavioral Neuroscience Society (IBNS)
- NIH Research Festival
- Canada Neuroscience
- Federation of European Neuroscience Societies (FENS)
- AALAS



### Please contact us if you think Stoelting would be a good fit for your conference!

We provide funding to the symposiums, conferences and meetings in sizes ranging from a few hundred, to tens of thousands of scientists. Not many other companies support the life sciences, particularly neuroscience, as much as Stoelting. Please keep that in mind when deciding where to purchase equipment or supplies. Ask yourself... does this company provide funding and support to the meetings that I attend so that I am able to present my data and interact with other scientists?

Neuro@StoeltingCo.com • 1-800-860-9775

# Sterilizers and Sterilizing Trays



50287 Dry Sterilizer

### Hot Glass Bead Dry Sterilizer

- Sterilization time 2-5 seconds
- Small footprint
- Meets new NIH guidelines

Insert the cleaned surgical instrument for 2-5 seconds, and remove. Within 30 seconds, the surgical instruments are cool enough to use. The chassis stays cool, even at the end of a full day of operations. The air above the unit is cool enough to insert an instrument into the well without discomfort. The working end is sterile before the handles get hot. The sterilizer's small size fits conveniently into the back corner of a hood or surgical table. One package of glass beads is included with the instrument.

### **HOT GLASS BEAD DRY STERILIZER**

50287 Dry Glass Bead Sterilizer

50287V Dry Glass Bead Sterilizer, International 220V

50289 Glass Bead Refill, 10 oz. Pkg.

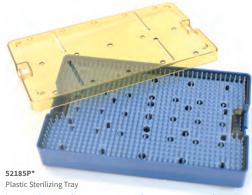
# Sentry Digital Ultrasonic Cleaner

The Sentry Ultrasonic Cleaner is a high efficiency cleaner specially developed to clean surgical instruments. Ultrasonic waves pump micron-sized bubbles into the water. These bubbles fit into the tightest spaces that would be impossible to clean by traditional methods. When the bubbles implode, water hits the instrument at speeds up to 250 mph-a very powerful cleaning action.



### SENTRY DIGITAL ULTRASONIC CLEANER

Ultrasonic Instrument Cleaner (Only available in 120V)



\*Part of Stoelting's Stereotaxic Instrument Kit See page 99



### Plastic Sterilizing Tray

- Tray is safe for all standard methods. Autoclave/dry heat up to 360°F, ETO, and cold solutions.
- Flexibility of layout. Finger-tip mats and "plug-in" inserts for individual instruments.
- Unique "grid" system in all bases, trays, and lids makes it easy to install mats or inserts to protect your instruments.

PLASTIC STERILIZING TRAYS			
CAT. NO.	DESCRIPTION	SIZE	PRICE
52185P*	Sterilizing Instrument Tray	6" x 10" x 1.5"	

### STAINLESS STEEL STERILIZING TRAYS

All trays are solid (non-perforated). LIDS SOLD SEPARATELY.

CAT. NO.	SIZE	PRICE	LID CAT. NO.	LID PRICE
52104	13.5" x 9.75" x 0.75"		N/A	
52106	12.25" x 7.75" x 2.25"		52106L	
52108	10" x 6.5" x 2"		52108L	
52110	9" x 5" x 2"		52110L	

# Infusion/Withdrawal Syringe Pumps

# Manual Microsyringe Pump

Stoelting's Manual Microsyringe Pump is a convenient instrument when using visual feedback to determine the amount to be infused or withdrawn. It also provides an economical means for any application requiring injecting/withdrawing a calibrated volume under manual control.

### **Applications Include:**

- ICSI microtitration
- Chromatography
- Microinjections

### **Accessories Included**

The Microsyringe Pumps includes one 100 Microliter syringe, 1 female Luer Lock-to-tubing adaptor and 10 ft. of Intramedic® PE polyethylene 60 tubing, .030" I.D., x .048" O.D.

See page 34-35 or our website, for a complete selection of available syringes.



51222	Infusion/Withdrawal Pump
51218	Infusion Pump
51218D	Infusion/Withdrawl, Digital (LCD) Pump



# KD Scientific Syringe Pumps

KD Scientific Syringe Pumps with infuse and withdraw capabilities provide maximum flexibility for varied applications. This feature permits applications such as automatic withdrawal of samples and unattended filling of syringes, fluid level adjustments with continual infusing and withdrawing, infusion of drug or nutritional materials, and diffusion into chemical reactors.

# Visit our website: StoeltingCo.com for complete information.

INFUSION/WITHDE	RAWAL PUMPS
-----------------	-------------

53210	2-Syringe Infusion/Withdrawal
53212	2-Syringe Infusion/Withdrawal, Programmable Pump

### **KD SCIENTIFIC PUSH/PULL SYRINGE PUMPS**

53260	Push/Pull Pump, 2 Pair Syringes
53262	Push/Pull Pump, 2 Pair Syringes, Programmable

### **KD SCIENTIFIC HIGH-PRESSURE SYRINGE PUMP**

53240	1-Syringe Pump, High-Pressure
53241	1-Syringe Pump, High-Pressure, Programmable

### **INFUSION SYRINGE PUMPS**

53100	Series 100, 1-Syringe Pump, Infusion
53101	Series 100, 2-Syringe Pump, Infusion
53200	Series 200, 2-Syringe Pump, Infusion
53220	Series 200, 10-Syringe Pump, Infusion
53250	Series 200, 4-Syringe Pump, Infusion
53202	Series 200, 2-Syringe Pump, Infusion, Programmable
53222	Series 200, 10-Syringe Pump, Infusion, Programmable
53252	Series 200, 4-Syringe Pump, Infusion, Programmable

### **Touch-Screen Syringe Pumps**



The unique **Legato Series** offers unparalleled ease of use.

# Touch-Screen Syringe Pumps

The unique Legato Series offers unparalleled ease-of-use through the high resolution touch-screen user interface. This new level of simplicity is combined with advanced fluidic performance to give you the highest level of smooth flow, accuracy and precision to meet all your application needs including drug discovery, nanofluidics, mass spectrometry and more. The Legato series of syringe pumps are available as Infuse Only, Infusion/Withdrawl and Push/ Pull Syringe Pumps.

- Touch-screen interface and easy-to-use display
- Vertical positioning decreases footprint
- Interconnect up to 99 pumps
- Complete regulatory compliance worldwide

Reproducibility  $\pm 0.05\%$ Syringes (Min/Max) 0.5 µl to 140ml 4.3 WQVGA TFT Display

Color Display with Touchpad

Non-Volatile Memory Stores all Settings

Call Stoelting for additional specs

### **KD SCIENTIFIC SYRINGE PUMPS**

53100L	Single Syringe Pump, Infusion Only, Legato
53101L	Nanoliter Syringe Pump, Infusion Only, Legato
53104L	Picoliter Single Syringe Programmable, Legato
53105L	Picoliter Dual Syringe Programmable, Legato
53102L	Single Syringe Programmable, Legato
53103L	Dual Syringe Programmable, Legato, 0.5u-10mL
53200L	Dual Syringe Pump, Infusion Only, Legato
53210L	Dual Syringe Pump, Legato
53212L	Dual Syringe Pump, Programmable, Legato 0.5ul-140mL
53270L	Quad Syringe Pump, Legato
53272L	Quad Syringe Pump, Programmable, Legato

### Microwave In Vivo Brain Fixation

Microwave Fixation System

- Gold standard for brain tissue fixation
- Installation and training included
- Brain tissue fixed in less than 2 seconds!
- Air-cooled system—no water needed
- All controls are done through the touch-screen panel display
- Improved safety design—less than 1mW/cm<sup>2</sup>
- CE marked and approved
- Eliminates the use of other fixation methods such as paraformaldehyde/formalin

Microwave fixation is the method for reliable and rapid fixation of brain tissue. If your research involves protein phosphorylation, no other method compares.

The In Vivo Microwave Brain Fixation System is the fastest and most effective known method for halting brain chemical activity. Levels of enzyme-regulated neurotransmitters, and other rapidly-acting metabolic substances in the brain, are stopped at the levels that existed in the living animal, brain size and structure remain virtually unchanged! The In Vivo Microwave Brain Fixation Systems have been used for more than 30 years to help uncover brain activity in rodents not accessible using conventional methods of brain fixation resulting in publications in Science, Nature, and many, many other well known journals.

### **Better than Freezing**

A common method is the cooling or freezing by immersion of a living animal's head or brain tissue in liquid nitrogen or cooled freon in order to inactivate enzymes. Although, cooling is frequently used in many laboratories, it is not fully effective in preventing post-mortem changes. The time required to freeze deep structure of the brain may range from 10-90 seconds due to the poor thermal conductivity of tissues surrounding the brain. Post-mortem changes will occur during this period.

An alternate method is microwave heating to inactivate enzymes.

If microwave power of sufficient level is focused on the animal's head, the enzymes in the whole brain can be completely inactivated in a very short time. Further, the brain can be dissected easily and slowly at room temperature.

### IN VIVO MICROWAVE FIXATION SYSTEM

50037

In Vivo Microwave Fixation System, 5kW



### **SPECIFICATIONS**

Oscillator

Microwave Power Output

Oscillation Frequency

Cooling Requirements

**Exposure Time** 

Pausing Time

Power Consumption

Frequency

**Power Requirements** 

**Outside Dimensions** 

Weight

Panasonic Magnetron 2M265-M11

5kW max.( 2-5 kW variable)

2,450±30MHz

Air Cooling

O.10-2.99sec (O.O1 sec steps)

3 minutes

8kVA

50 or 60 Hz

190-240V 30A 3 Phase or 380-440V 20A 3 Phase

750W x 550D x 1,275 mmH

Approximately 103 kg

### Microwave In Vivo Brain Fixation

Therefore, the microwave irradiation system is guite useful when measuring acetylcholine, choline, cyclic AMP, cyclic GMP, GABA, DOPA, 5-HTP, serotonin, endorphin, prostaglandin, catecholamines and their metabolites and phosphorylated proteins in the brain.

Microwave fixation is done by elevating the temperature of the brain up to 75-90°C as rapidly as possible.

### **Patented Microwave Focus Applicators**

Microwaves are channeled and focused by the wave guide which focuses the microwaves from above the head, rather than in front. The entire rat head is placed in a uniform microwave field. Movements of the head do not change the field strength or microwave distribution. Thus, uniform fixation of the whole brain is achieved, without "over cooking" and damage to the hypothalamus.

Muromachi's unique applicators provide protection to the researcher and also compensate for individual differences between animals, giving more reproducible results.

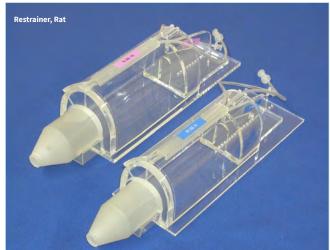
### **Compact Mobile Cabinet**

The Muromachi Microwave Fixation System is enclosed in one cabinet, mounted on 5" casters, with a single convenient control panel. Holders are available for animals from 15 to 500 gms. Order appropriate applicators and holders for your application.

ADDI	ICATOR	C /DEC	TRAINERS
APPL	ILAIUF	(3/KE3	IKAINEKS

50041	Applicator head for rodent sizes 15-40g	
50052	Restrainer, Mouse (15-20g)	
50051	Restrainer, Mouse (20-40g)	
50042	Applicator Head for rodent sizes 150-250g	
50055	Restrainer, Rat (150-250g)	
50043	Applicator head for rodent sizes 250-600g	
50056	Restrainer, Rat (250-400g)	
50057	Restrainer, Rat (400-600g)	







Eliminates the use of other fixation methods such as paraformaldehyde/formalin!

### **Tissue Preparation**

# McIlwain™ Tissue Chopper

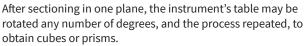
The McIlwain™ Tissue Chopper is a proven instrument for rapidly sectioning living or fixed tissue, without freezing or embedding, to harden the tissue. It cuts living tissue into slices, cubes, arterial rings, etc. with a minimum of functional disturbance.

These preparations can be used in studies of metabolism or for electrophysiology. The McIlwain™ Tissue Chopper may also be used to cube fixed tissue for araldite embedding and EM.

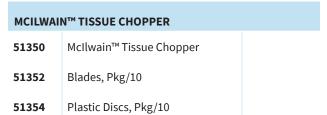
The specimen is affixed to filter paper or plastic discs (51354) and clipped to the instrument's stainless steel table top (cyanoacrylate adhesive may be used to hold tissue pieces in otherwise unstable positions.) The table moves at a pre-set speed. As it moves, a chopping arm is raised automatically, and chops down at frequencies from zero to 200 strokes per minute. A pre-set stop prevents the attached blade from penetrating the filter paper and impacting the

instrument's stainless steel table. In this way, serial sections of live tissue from 0-1 mm thickness may be cut rapidly.

The thickness is pre-set with a micrometer graduated in 1 micron and 25 micron increments.



Includes one pack of blades.



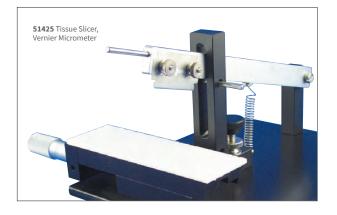
If your main power supply is 220V, add a "V" to the product number.

# Stoelting Tissue Slicer Fast production of living tissue slices

Originally designed to prepare thin slices of living brain, the tissue slicer is also excellent for slicing other tissues, blocking fixed tissue for histology, and slicing electrophoretic gels. Sections as thin as 150 microns can be reliably prepared. Tissue cutting is done with a standard double-edged razor blade.

### **Two Models**

The 51425 Tissue Slicer has a conventional vernier micrometer, resolution 10 microns. The 51415 Digital Tissue Slicer has a digital display electronic micrometer, with 1 micron resolution.



### Advantage of the 51415 Digital Tissue Slicer

- · Switch from mm to inches
- Set zero at any point
- Set low- and high-tolerance limits
- Features over-travel warning signal and output to a printer, processor, data logger or computer

### **Reversible Handedness**

The tissue slicer can be reversed as to left or right handedness. In use, the tissue is placed on the moistened filter paper and moved beneath the cutting edge. The cutting arm is lifted by its handle. The pin is removed and the arm is released, falling by its own weight (and assisted by the spring) thereby slicing through the tissue at high velocity. The cut tissue slice is removed from the razor blade with a small artist's brush moistened in incubation media. The cutting arm is lifted, the dovetail slide moved for the next slice, and the process repeated.

# STOELTING TISSUE SLICER 51425 Tissue Slicer, Vernier Micrometer 51415 Tissue Slicer, Digital Micrometer 51427 Metal Blades, Pkg/10

### **Rodent Brain Dissection**



### **Rodent Brain Matrices**

These matrices are precisely machined and highly polished to ensure reproducible sectioning. Rat and mouse brain matrices are available. Coronal and sagittal sections at 1 mm intervals. All coronal brain matrices have an additional mid-line sagittal cut to aid in the separation of the left and right hemispheres. The mouse brain matrices can also be used on neonatal rat brains. Divisions are 1 mm apart.

Dimensions: 1 Hx1.75 Lx1.125 W in. (2.54H x 4.45L x 2.86W cm)

Stainless steel, 0.5mm intervals also available! Visit StoeltingCo.com

### **ACRYLIC BRAIN MATRICES**

51380	Acrylic Brain Matrix, Coronal, 40-75g	
51381	Acrylic Brain Matrix, Saggital, 40-75g	
51382	Acrylic Brain Matrix, Coronal, 175-300g	
51383	Acrylic Brain Matrix, Saggital, 175-300g	
51384	Acrylic Brain Matrix, Coronal, 300-600g	
51385	Acrylic Brain Matrix, Saggital, 300-600g	

### STAINLESS STEEL BRAIN MATRICES

Stainless Steel 0.5 mm intervals also available See StoeltingCo.com or StoeltingEurope.com for more information.

51386	Steel Brain Matrix, 1.0mm, Coronal, 40-75g
51387	Steel Brain Matrix, 1.0mm, Sagittal, 40-75g
51388	Steel Brain Matrix, 1.0mm, Coronal, 175-300g
51389	Steel Brain Matrix, 1.0mm, Sagittal, 175-300g
51390	Steel Brain Matrix, 1.0mm, Coronal, 300-600g
51391	Steel Brain Matrix, 1.0mm, Sagittal, 300-600g

### **Brain Punch Set**

This Brain Punch Set, with spring-loaded nylon expellers and a convenient handle, facilitates the "Palkovits Punch" technique of dissecting out specific brain nuclei for neurochemistry.

The nuclei are punched from frozen brain sections on glass slides, and expelled into the reagents. Spring-loaded expellers avoid risk of contamination that might be caused by expelling with breath.

Each punch has an electropolished sharp end for smooth cuts and minimal tissue adhesion. The Brain Punch Set includes the following: handle, 0.25, 0.50, 0.75, 1.0, and 1.25 (±5%, slight variation due to electropolish etching to sharpen). Other sizes available. Replacement punches available individually, visit StoeltingCo.com or StoeltingEurope.com.



Other punch sizes available online!

### **BRAIN PUNCH SET**

57401 **Brain Punch Set** 

### Cervical Dislocator & Decapitators



### **Cervical Dislocator**

The Cervical Dislocator is a completely humane and efficient means of sacrificing laboratory rodents bloodlessly. Evidence indicates that the brain stem is terminated instantly by a blow from the metal bar.

When used with the plastic restraint cones, the animal can be effectively and safely restrained during transfer between cages or through all necessary handling. The 5 cm opening is sufficient for most laboratory rodents. A 6 cm model is also available.

CERVICAL DISLOCATOR		
51360	Cervical Dislocator, 5 cm	
51365	Cervical Dislocator, 6 cm	
51361	Plastic Restraint Cones Pkg/50	

### **Decapitators**

Stoelting's small animal decapitator has hardened and ground surgical stainless steel blades, aluminum base and stainless steel hardware. With its 1.5" (3.81 cm) square maximum blade opening, it is suitable for decapitating rats, mice and other small animals. The decapitator cuts cleanly and quickly through bone and tissue. The base has four holes for bench mounting.

The large animal decapitator is similar to our small animal decapitator, but with maximum blade opening of 4" (10.16 cm) square. Replacement blades are available only for the 51330.

51330	
	51331

DECAPITATORS		
51330	Small Animal Decapitator	
51331	Large Animal Decapitator	
51327	Replacement Blades for 51330, Must be factory installed	

Cuts clean and quick!



DECADITATOR

For reliable and rapid fixation of brain tissue in less than 2 seconds, see page 104!

# Rat and Mouse Bone Strength Tester

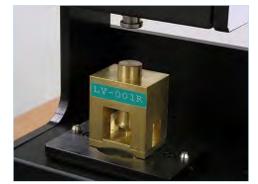




Each Bone Strength Tester is configured for administration of the three-point bending method yielding biomechanical parameters including force, stiffness and energy necessary for break. Torsion, Tensile Strength, Compression and Wound Breaking techniques can also be performed using optional sensors and accessories. Computer software is included for data acquisition.

#### Used to analyze bone strength in studies associated with:

- Age-related Bone Loss
- Hormone Replacement Therapy
- Weight-Bearing Exercise
- Vitamin Deficiency



#### **BONE BREAKING DEVICE**

50420	Bone Strength Tester, Small Animals
50421	LV Compressing Adapter, Rat (5-350g)
50422	LV Compressing Adapter, Rat (350-450g)
50423	Sample Making Device for Bending Test
50424	Sample Making Device for Torsion Test
50425	Femoral Neck Compressing Test Kit
50426	Tensile Test, Rat
50427	Torsion Test, Rat
50428	Bending Test, Mouse
50429	Wound Breaking Strength Test, Mouse and Rat

# **Small Animal Ventilators**



Ideal ventilator for mice, birds, perinatal rats and perinatal mice.

50098 MiniVent Ventilator

# Ventilator For Mice and Perinatal Rodents

The Ventilators for Mice and Perinatal Rodents are compact, quiet, lightweight and virtually vibrationless. They may be positioned directly next to the animal, eliminating tidal volume error due to system compliance.

While designed specifically for mice, the MiniVent can be used for any animals (e.g. birds and perinatal rats) which require tidal volumes in the range of 30-350  $\mu$ l. The MicroVent Ventilator is ideal for very small animals, even perinatal mice, which require tidal volumes in the range of 0-130  $\mu$ l. Both feature respiratory rates of 60-400 breaths per minute.

The tidal volume can be varied continuously throughout its range during operation without interrupting ventilation. The expired air can be recovered at the collection ports for sampling, recycling or generating a positive end expiratory pressure (PEEP). Room air, or any non-explosive gas mixture, can be used to feed the pump intake.

Each ventilator comes complete with: one AC wall-mounted power supply (115 or 220V); two silicone tubings, 1.5mm I/D, 3.0 mm O/D, I4 cm length; one 1.3mm O/D tracheotomy Cannula; one 1.2 OD Intubation Cannula.

Visit our website: StoeltingCo.com for complete information.

No valves to clog. No vibration. Low noise.

#### **Features:**

- Stroke volume range from 30 to 350 μl (MiniVent)
- Stroke volume range from 0 to 130 ml (MicroVent)
- Ventilation rate from 60 to 400 breaths/minute
- Simple adjustment of stroke volume while running
- Valveless piston pump, no valves to clog
- Very small instrument/circuit dead space volume
- · Compact construction, easy to install close to animal
- · No vibration, very low noise
- Reduced tidal volume error

#### **VENTILATOR FOR MICE AND PERINATAL RODENTS**

50098	MiniVent Ventilator	
50099	MicroVent Ventilator	
50100	Midi-Ventilator for Mice	

For 220V, add a "V" to the catalog number

# **Small Animal Ventilators**



# Ugo Basile Rodent/ Cat/Rabbit Ventilators

Ugo Basile's Rodent/Cat/Rabbit Ventilator is a volume-controlled mechanical ventilator (according to Starling's ventilation method), designed for use with rodents, cats, rabbits and animals of similar size. It consists of a variable speed geared motor linked by a novel variable stroke mechanism to easily interchangeable cylinder/piston assemblies.

#### Features:

- Interchangeable cylinder/piston assemblies (5, 10, 30, 50 and 100ml)
- Quiet operation, both acustically and electrically (negligible R.F. broadcasting)
- Reliable mechanics and impeccable finishing: long lasting
- Synchronised START/STOP function available as optional

# Ugo Basile Mouse Ventilator

#### This new Respirator features:

- The tidal volume, in the range 0.1-1 ml (or 0.05-0.5 with the smaller piston installed)
- Ideal for use with mice, small birds and perinatal rats
- Unique design
- Compact
- Reliable
- Silent



# **UGO BASILE ANIMAL VENTILATORS**

50094	Mouse Ventilator, 1.0ml
50095	Mouse Ventilator, 0.5ml
50095-1	Rat Ventilator, 10ml
50095-2	Rodent Ventilator, 5ml
50195-5	Cat/Rabbit Ventilator, 50ml

Visit our website: StoeltingCo.com for additional information.

50195-5 Cat/Rabbit

### **Blood Pressure**



**Blood Pressure Monitor** 

#### Non-invasive Blood Pressure Monitor

- Preheating of animals not required
- Use with animals under 10 grams
- Use with C57 BL6 Mice and colored Mice
- Use with Zucker Fatty Rats
- Use with Hamsters (with a leg cuff anesthetic)
- The only monitor that can be used with Guinea Pigs—even without anesthesia
- The only monitor that can be used with OB (diabetic model) Mice

#### Preheating of animals not required

Provided the room temperature is at least 23°C, the animal's blood pressure can be measured without heating the animal. After photoplethysmographically measuring tail arterial blood pressure, pulses are stored in the computer memory and peak levels of the pulses are plotted on a display.

#### **Easy Operation**

- Two operation modes are available–Mode 1: HR (Heart Rate) and SBP (Systolic Blood Pressure) and Mode 2: HR, SBP, MBP (Mean Blood Pressure) and DBP (Diastolic Blood Pressure, calculated value) can be measured.
- Continuous measurement can be performed up to ten (10) times.

The only non-preheating, non-invasive Blood Pressure Monitor for Mice and Rats

- Printout function
- Colored mice such as C57BL/6, neonatal mice, hamsters (anesthetized) and guinea pigs (non-anesthetized) can be measured.
- Sick animals can be measured. (e.g. animal with cardiac infarction)
- Multi-channel system is no longer needed. Just prepare multiple restrainers, and measurement can be done one after the other.
- Auto-Sequence Function blood pressure of a tail artery of an animal can be monitored automatically at specified time intervals, which can be 1-99 minutes in length.
- An RS-232C interface is provided on the rear panel of the main unit. Using the optional Data Collection Software (Windows OS only) the data obtained can be exported to a personal computer and stored as a CSV file.
- The animal holders are made of dark brown acrylic, allowing BP measurement under relatively stress-free conditions.

#### **Included Accessories**

Includes built-in high-speed printer, 9" (22.86 cm) display, measuring stand, choice of cuff-pulse sensor, animal holder, and 5 rolls of thermal chart paper.

For PC compatibility, Data Collection Software 50391, sold below, is not required.

# 50370 Muromachi Blood Pressure Monitor Data Collection Software for Windows

If your main power supply is 220V, add a "V" to the product number.

# **Animal Restrainers**



#### Mouse Restrainer, **Head and Tail Access**

These mouse restrainers are built in cylinder-shaped perspex. Lateral slots and holes allow for the animals ventilation and make the access for interperitaneal (i.p.) drug administration possible. The available space for the animal can be

adjusted by means of a sliding piston, thereby keeping the whole tail free for a pulse transducer and cuff positioning or for intravenous (i.v.) drug administration. The animal is led in from the back and can walk out in the front, thus avoiding dragging it backwards.

#### MOUSE RESTRAINER, HEAD AND TAIL ACCESS

51324	Mouse Restrainer, Head and Tail access, 0-50g
51325	Mouse Restrainer, Head and Tail access, 0-35g
51326	Mouse Restrainer, Head and Tail access, 0-25g



#### Rabbit Restrainer

Provides total visibility of the animal, and aids in retaining body warmth. The nonslip floor surface provides better footing and helps to calm the animal. A curved back/butt plate minimizes the possibility of a broken neck.

#### **RABBIT RESTRAINER**

51328 Rabbit Restrainer, 0-4 kg 51329 Rabbit Restrainer, 4-7 kg



### Rodent **Restraint Cones**

Disposable plastic restraint cones hold the animal safely in position for injections through the plastic bag, for decapitation, for cervical dislocation, or for examination

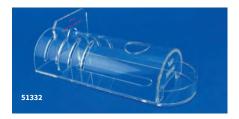
of collected field specimens such as field mice or rats. The scientist avoids contact with feces or urine, and avoids bites and scratches.

The animal is easily loaded into the cone at the wide end, and heads for the breathing hole at the small end. Sold in packs of 50.

#### **RODENT RESTRAINT CONES**

**51361** Plastic Restraint Cones, Pk/50

For more sizes, visit "Histology" on our website! www.StoeltingCo.com



### **Head Access** Rodent Restrainer

Provides access to the head and allows access to food and water. Offered in four sizes to accommodate indicated rodent weights.

#### **HEAD ACCESS RODENT RESTRAINER**

51332	Restrainer, 15-30g
51339	Head Access Rodent Restrainer, 30-125g
51333	Head Access Rodent Restrainer, 125-250g
51334	Head Access Rodent Restrainer, 250-425g

Head Access Rodent



#### **Tail Access** Rodent Restrainer

The head is pushed back by the moveable disk so that the tail projects out the hole in the acrylic plate. Perfect for injections, blood sampling, or blood pressure monitoring. Offered in four sizes to accomodate indicated rodent weight.

#### **TAIL ACCESS RODENT RESTRAINERS**

51338	Tail Access Rodent Restrainer, 15-30g
51337	Tail Access Rodent Restrainer, 30-125g
51336	Tail Access Rodent Restrainer, 125-250g
51335	Tail Access Rodent Restrainer, 250-500g

# ANY-maze Behavioral Tracking Software



**ANY-maze** is today's most advanced video tracking system. Trusted by thousands of researchers around the world, ANY-maze couples an unrivalled depth of features with a simple, familiar design, to provide automated testing in virtually any behavioural test.

**ANY-MAZE** 

60000 ANY-maze

Test ANY-maze for yourself!
Put ANY-maze to use in your research and see the software in action. Download the latest version of ANY-maze at www.ANY-maze.com, or contact us for a FREE 30-day trial!

#### Download for free

Download ANY-maze right now and try it for free. No fuss, forms or bureaucracy - you can be testing ANY-maze in your own apparatus in five minutes time. Got questions? Just email us—we support everyone, forever, for free.

#### try it for As a scientist

Easy-to-use

As a scientist you want to run tests, not spend time learning software and with ANY-maze you'll be up and running in no time. Visit www.ANY-maze.com to learn more!

#### **True flexibility**

ANY-maze will happily track a single mouse in a radial arm maze, or simultaneously track sixteen rats in their home cages for a week. And ANY-maze isn't limited to tracking rodents. Users track quails, marmosets, zebra-fish, goats...

#### **Outstanding value for money**

ANY-maze offers the best value for money of any video tracking system. Not only do you get all the features for a single price - that's right, no modules or add-ons - but lifetime support and unlimited software updates are free!

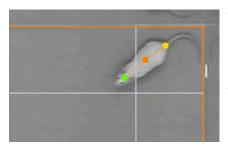
#### **Fully featured**

Despite its ease of use, ANY-maze is no lightweight with features like moveable zones, three-point tracking, and freezing detection, etc., etc.,

#### **AMi-2 interfaces**

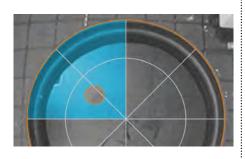
The AMi-2 family of low-cost interfaces make it even easier to connect to a wealth of equipment typically found in behavioural labs, such as optogenetic lasers, shockers, pellet dispensers, levers, running wheels, gas analysers, lickometers, photobeams, levers, cue-lights...you get the idea! See page 116-117.

# ANY-maze Behavioral Tracking Software



Tracking in ANY-maze requires no special set-up or parametersyou put the animal in the apparatus and it tracks

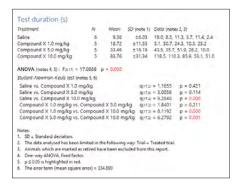
ANY-maze doesn't predefine anything about the apparatus in which it will be tracking



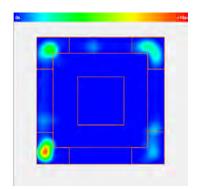
ANY-maze can easily be connected to a wealth of devices commonly used in behavioural tests

**ANY-maze** manages complete experiments

Test	Animal	Code	Stage	Trial	Reason ended	Status
1	1	C	Acquistion	1	Found platform	Completed
2	2	Α	Acquistion	1	Test duration	Completed
3	3	C	Acquistion	1	Found platform	Completed
4	4	A	Acquistion	1	Test duration	Completed
•	5	C	Acquistion	1		Ready
	6	C	Acquistion	1		
	7	В	Acquistion	1		
	8	В	Acquistion	1		
	9	В	Acquistion	1		
	10	В	Acquistion	1		
	11	C	Acquistion	1		
	12	C	Acquistion	1		
	13	В	Acquistion	1		
	14	Α	Acquistion	1		



ANY-maze understands the structure of your experiment, so it's able to analyse results between different groups



ANY-maze can assess literally hundreds of results for a test and present them in different ways



ANY-maze can track in live images from a camera, or in pre-recorded video files



# **ANY-maze Equipment**

# ANY-maze Interfaces (AMi-2)

What do you do if you need to count the number of licks at a water bottle, or determine how far an animal runs in an exercise wheel? Video tracking alone can't help. The answer is AMi-2, the second generation of the popular ANY-maze interface.

There are a total of seven AMi-2 devices which between them can detect and respond to inputs from, amongst other things, levers, running wheels, touch switches and nose-poke holes; and can control devices such as optogenetic lasers, shockers, pellet dispensers, cue lights and speakers. All the AMi-2 devices are fully integrated into ANY-maze and connect to the PC via USB, in most cases you don't even need a power cord.





# AMi-2 Optogenetic Interface The AMi-2 Optogenetic interface is designed to independently control

The AMi-2 Optogenetic interface is designed to independently control up to four optogenetic lasers during behavioural tests performed with ANY-maze. Using the interface, you can either pulse a laser with very high precision at a specific frequency and duty cycle for a set duration, or you can 'play' a series of arbitrary pulses. If your laser supports it, the interface can also dynamically adjust the laser's intensity.

#### **AMI-2 OPTOGENETIC INTERFACE**

60060

Optogenetic Interface for ANY-maze

# AMi-2 Digital interface The AMi-2 Digital interface is designed to connect ANY-maze to a

The AMi-2 Digital interface is designed to connect ANY-maze to a wide range of equipment typically found in behavioural labs, such as: levers, photobeams, running wheels, some shockers and pellet dispensers, cue lights, etc.

#### **AMI-2 DIGITAL INTERFACE**

**60064** Digital Interface for ANY-maze





#### **AMi-2 Touch Switch Interface**

The AMi-2 Touch switch interface is designed to detect when an animal touches something conductive. For example, this might be the animal licking a bottle spout, the animal's paw touching a metal plate on the wall of a cage, or the animal slipping from a grid and its paw touching a metal floor.

#### **AMI-2 TOUCH SWITCH INTERFACE**

60061

Touch Switch Interface for ANYmaze

# **ANY-maze Equipment**



# AMi-2 Relay interface

The AMi-2 Relay interface has six output ports which can be used to turn things on and off under software control. For example, an output could switch on a shocker, turn on a light or activate a pellet dispenser.

#### **AMI-2 RELAY INTERFACE**

60063

Relay Interface for ANY-maze

# AMi-2 Analogue Interface The AMi-2 Analogue interface is designed to connect ANY-maze to

devices which output analogue signals, for example a respiratory gas analyser, a blood pressure monitor or an EEG. The interface can also output digital signals, which can, for example, represent the location of the animal in the apparatus.

#### **AMI-2 ANALOGUE INTERFACE**

60057

Analogue Interface for ANY-maze





# **AMi-2 Audio Interface**

The AMi-2 Audio interface has six outputs which can be connected to 4-ohm or 8-ohm speakers. Each output can independently play white noise, tones or a sound file under full software control.

#### **AMI-2 AUDIO INTERFACE**

60068

Audio Interface for ANY-maze

60066

Speaker for ANY-maze

# Electrophysiology Interface The AMi-2 Electrophysiology interface is designed to help

synchronise tests in ANY-maze with tests in electrophysiology systems. It consists of 6 TTL ports, each of which can be configured independently as an input or and output. Used in conjunction with the Electrophysiology synchronisation element of the protocol, the interface allows you to output TTL signals when a test starts, when a new frame is captured from the camera and/or when ANY-maze stores the animal's position in its results.

#### **ELECTROPHYSIOLOGY INTERFACE**

60069

Electrophysiology Interface



# **ANY-maze Bundle Options**

# ANY-maze Video Tracking Bundle Options

Your complete solution for small animal behavior testing!

ANY-maze is the most versatile, easy-to-use behavior tracking software available. Purchasing a complete ANY-maze package makes it even easier. Purchase an ANY-maze bundle and

Which ANY-maze
Bundle is right for
you? See page 138
for more ANY-maze
Bundle Options!

you'll receive everything you need for your research. All ANY-maze bundle packages include unlimited software technical support.

# ANY-maze with Camera and Accessories Bundle



#### **ANY-maze Camera and Accessories Bundle Includes:**

(you supply the computer and maze/apparatus)

- ANY-maze License (Software)
- Camera
- Camera Accessories (lens, ceiling-mount & cables)

#### ANY-MAZE CAMERA AND ACCESSORIES BUNDLE

ANY-maze System with Camera and Accessories Bundle

# ANY-maze with Computer and Accessories Bundle



#### **ANY-maze Computer and Accessories Bundle**

**Includes:** (you supply the maze/apparatus)

- ANY-maze License (Software)
- Computer (Desk or Laptop)
- Camera
- Camera Accessories (lens, ceiling-mount & cables)

#### **ANY-MAZE COMPUTER & ACCESSORIES BUNDLE**

ANY-maze System with
Computer and Accessories
Bundle, Desktop

ANY-maze System with
Computer and Accessories
Bundle, Laptop

# ANY-maze System/Laptop with On-Site Training











#### **ANY-maze Computer and Training Bundle Includes:**

(you supply the maze/apparatus)

- ANY-maze License (Software)
- Computer (Desk or Laptop)
- Camera
- Camera Accessories (lens, ceiling-mount & cables)
- On-Site Training and Installation from one of our ANY-maze Specialists

#### **ANY-MAZE COMPUTER & TRAINING BUNDLE**

60651 ANY-maze System/Laptop with On-Site Training Bundle

### **ANY-maze Cameras & Accessories**



**USB CAMERA** 

B&W USB 2.0 CMOS Camera 60516

(Lens Sold Separately) \*\*Recommended\*\*

**USB CAMERA LENSES (SOLD SEPARATELY)** 

Lens for 60516, Vari-Focal, 2.8-12mm 60528

\*\*Recommended\*\*

60530 Lens for 60516, Vari-Focal, Narrow Angle

60532 IR-Only Lens Filter for 60528

**USB CABLES & HUBS** 

60058 ANY-maze TTL I/O Cable

**CUSTOM** BNC to TTL Cable

60517B USB 2.0 Male to Mini Cable, 15ft.

60518 USB 2.0 Extender Cable, 10ft.

60574 USB Hub 7-Port with Power Adapter

ANALOG B&W CAMERA

60510 Analog B&W Camera (Lens Sold Separately)

ANALOG CAMERA LENSES (SOLD SEPARATELY)

60520 Lens for 60510, Vari-focal, 2.7-13.5mm

60521 Lens for 60510, Wide Angle

60522 Lens for 60510, Narrow Angle

**COMPUTERS** 

60555 ANY-maze Computer, Desktop

60557 ANY-maze Computer, Laptop

**ACCESSORIES** 

60545 Universal Camera Mounting Bracket

60540 Infrared Night Light Illuminator

60062 ANY-maze Remote Control (Wireless)

60057 ANY-maze Wired Remote Control

> See more options and details at www.ANY-maze.com

# **ANY-maze Accessories**



### ANY-maze photobeam

The AMi-2 photobeams detect when an animal breaks an infrared beam and can be used in a wide variety of situations, such as detecting when an animal passes through a door, detecting nose-pokes, detecting how far down a corridor the animal has travelled.

#### **ANY-MAZE PHOTO-BEAM**

60001-21

AMi Photo Beam, 1 set (IR Transmitter & Receiver)

# ANY-maze Photobeam array

The ANY-maze photobeam array provide a 'curtain' of photobeams and is often used to detect when an animal rears. It can also be as a movement detector, which can generate reliable movement 'counts' in circumstances in which video tracking can't be used. Use with the AMI-2 Digital Interface (see page 116). Includes Stand.

#### **ANY-MAZE PHOTOBEAM ARRAY**

60001-02 AMi Photo-Beam Array, 40cm

60001-03 AMi Photo-Beam Array, 100cm



# ANY-maze digitizer card If you wish to to use analogue cameras with ANY-maze you'll need

a digitizer card. This converts the analogue signal provided by the camera into a digital format which the software can analyse. distances of up to 50 metres.

#### ANY-MAZE DIGITIZER CARD

60499

Digitizer PCIe Card, 4 channel

### ANY-maze animal shocker

The ANY-maze animal shocker administers scrambled shock to 8 independent outputs. The intensity, onset and duration of the shocker are all under software control, so for example, the intensity of the shock could be altered depending on the situation in a test.

#### ANY-MAZE ANIMAL SHOCKER

60001-51

ANY-maze Programmable Shocker



# **ANY-maze Cameras & Accessories**



### **ANY-maze Animal Scale**

Based on settings you specify in the protocol, ANY-maze will prompt you to place an animal on the scales before a test; when you do this, it will weigh the animal and record the result. ANY-maze can also optionally calculate an animal's treatment dose based on its weight.

#### ANY-MAZE ANIMAL SCALE

60052

ANY-maze Animal Scale

AMi-2 Cue lights
The AMi-2 Cue lights are perfect for providing visible cues to animals during tests. The lights are water resistant and are available in a variety of colors and sizes (22mm, white shown here). Use with the AMi-2 Digital Interface (see page 116).

#### **AMI-2 CUE LIGHTS**

60045W

AMi-2 Cue lights, white

#### More colors & options available online!



## AMi-2 Rotary encoder

The AMi-2 Rotary encoder detects rotations an axle. This can be useful in a variety of situations. For example, if the axle has a running wheel mounted on it, the encoder will detect rotations of the wheel; or, if the axle connects to an animal tether, the encoder will detect rotations of the animal. Use with the AMi-2 Digital Interface (see page 116).

#### **AMI-2 ROTARY ENCODER**

60048

AMi-2 Rotary Encoder

### ANY-maze Infrared illuminator

The ANY-maze infrared illuminator allows you to track in very low light or even total darkness.

#### ANY-MAZE INFRARED ILLUMINATOR

60540

ANY-maze Infrared illuminator

Can be wall or ceiling mounted.



# **ANY-box for Mice and Rats**

# ANY-box ANY-maze Driven Multiple Tests with a Single Base

ANY-box is a multi-configuration behavior apparatus designed to automate a range of standard behavioral tests in mice and rats. ANY-box uses the same basic components in different tests, creating a flexible and affordable solution for behavior analysis. Mouse and Rat complete automated systems include everything you need for automated assessment of:

- Memory
- Locomotor Activity
- Anxiety

- Drug Effects
- Exploratory Activity
- Stress Response

ANY-box uses the ANY-maze software and camera to track X- and Y- movements.
A photobeam IR array is included to track Z- movements (rearing behavior) which is incorporated into the ANY-maze software.

# TESTS INCLUDE: Open Field Hole Board

**Novel Object Recognition** 

Light/Dark Box

Conditioned Place Preference

# Individual Automated Tests also available. Each individual automated system includes:

- ANY-box Software
- ANY-maze Interface
- Universal Base Plate
- Camera & Camera Accessories
- Enclosure of your choice: Open Field, Light/Dark, Conditioned Place Preference, Object Recognition, Hole Board or all 5 tests together!



# ANY-box for Mice and Rats



Multiple cage systems available. Call for details.

ANY-box		
65000	ANY-box 5-Behavior Test System, 40cm, Mouse	
68500	ANY-box 4-Behavior Test System, 40cm, Rat*	

#### **COMPLETE AUTOMATED SYSTEMS FOR MOUSE**

62000	ANY-box Open Field, 40cm, Clear w/Photobeam Array	
62050	ANY-box Open Field, 40cm, Opaque w/Photobeam Array	
62055	ANY-box Hole Board Apparatus, 40cm, w/Photobeam Array	
62075	ANY-box Novel Object Recognition, 40cm, Clear w/Photobeam Array	
63000	ANY-box Light/Dark, 40cm, w/Photobeam Array	
64000	ANY-box Conditioned Place Preference, 40cm, w/Photobeam Array	

#### **COMPLETE AUTOMATED SYSTEMS FOR RAT**

60224	ANY-box Open Field, 100cm, Clear w/Photobeam Array
60225	ANY-box Open Field, 100cm, IR Black w/Photobeam Array
65202	ANY-box Conditioned Place Preference, 100cm, Clear w/Photobeam Array

#### **ANY-box MOUSE ENCLOSURES ONLY (40CM)**

60111	Open Field, Clear, Mouse
60122	Open Field, IR Transparent Black, Mouse
62020	Object Recognition, Mouse
62025	Hole Board, Mouse
63100	Light/Dark Box, Mouse
64100	Conditioned Place Preference, Mouse

#### ANY-box RAT ENCLOSURES ONLY (100CM)

60220	ANY-box Open Field, Enclosure Only, 100cm, Clear
60223	ANY-box Open Field, Enclosure Only, 100cm, IR Black
60221	ANY-box Open Field, Enclosure Only, 100cm, Opaque
63201	Light/Dark Box, Enclosure Only, Rat (set of 2)
64201	Conditioned Place Preference, Enclosure Only, Rat (set of 2)
65201	Object Recognition, Enclosure Only, Rat



# **Water Maze**

The Morris Water Maze is one of the most widely used methods in behavioral neuroscience to assess spatial and learning memory. The Water Maze tank is filled with water and equipped with a platform (60030) which acts as a means of escape for animals. During testing, animals learn the location of the platform using spatial cues. The Water Maze tank is made of aluminum and is available in three different sizes for testing of Mice, Rats or both. *Platform (60030) is included.* 

# WATER MAZE 60135 Water Maze, Mouse, 3.5-4.5 ft Diameter (1.07-1.37m) 60136 Water Maze, Mouse/Rat, 4.5-5.5 ft Diameter (1.37-1.68m) 60235 Water Maze, Rat, 5.5-6.5 ft Diameter (1.68-2.0m) AVAILABLE ISLANDS 60030 4 in (10.2 cm) Diameter/12 in (30.5cm) Height

4 in (10.2 cm) Diameter/20 in

(50.8cm) Height

60035

### **Barnes Maze**

The Barnes Maze is designed for testing spatial learning and memory. Within the maze, animals are motivated to escape from the brightly lit, open platform to a small dark recessed chamber (escape box). During testing, the animal learns the spatial location of the escape box. The maze also includes false escape boxes, which help to remove visual cues that might be observed from a distance or through an open hole.



CATALOG NUMBER		TABLE DIA.	HOLE DIA.	HEIGHT	PRICE
60170	Barnes Maze, Mouse	91cm	5cm	90cm	
60270	Barnes Maze, Rat	122cm	10cm	90cm	

#### Save money when purchasing an ANY-maze bundle!

Maze bundle packages include: Laptop computer, USB Camera, Camera Accessories, ANY-maze software and a Stoelting maze of your

choice! See pages 138-139 for more details.





# **Elevated Plus-Maze**

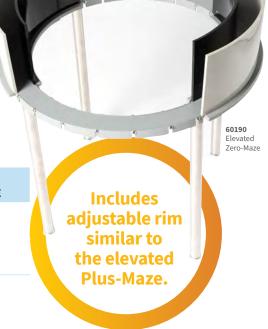
The Elevated Plus-Maze is used to assess anxiety in rodents. The maze exploits the conflict between the innate fear that rodents have of open areas, versus their desire to explore novel environments. The Elevated Plus-Maze is designed with an elevated plus-shaped platform, with two closed arms and two open. Both open arms are equipped with height-adjustable lip to minimize falls.

CATALO	OG NUMBER	LANE WIDTH	ARM LENGTH	WALL HEIGHT	LEG HEIGHT	PRICE
60140	Plus-Maze, Mouse	5cm	35cm	15cm	40cm	
60240	Plus-Maze, Rat	10cm	50cm	40cm	40cm	

# **Elevated Zero-Maze**

The Elevated Zero-Maze is a modification of the Elevated Plus-Maze, which incorporates both traditional and novel ethological measures, in the analysis of anxiety. The design comprises an elevated circular platform, with two opposite enclosed quadrants, and two open. This removes any ambiguity in interpretation of time spent on the central square of the traditional "plus" design, and allows uninterrupted exploration.

CATALO	OG NUMBER	DIA.	LANE WIDTH	WALL HEIGHT	LEG HEIGHT	PRICE
60190	Zero-Maze, Mouse	50cm	5cm	15cm	40cm	
60290	Zero-Maze, Rat	100cm	10cm	30cm	40cm	





# Radial-Arm Maze

The Radial-Arm Maze has been used extensively in evaluating spatial learning and memory. The apparatus consists of eight (or 12) equidistantly-spaced arms radiating from a small, circular central platform. The design ensures that, after checking for food at the end of each arm, the rodent is forced to return to the central platform before making another choice. The subject always has eight (or 12) possible options.

CATALOG NUMBER		LANE	ARM	WALL	PRICE
60150	8-Arm Radial Maze, Mouse	5cm	35cm	9cm	
60250	8-Arm Radial Maze, Rat	10cm	50cm	13cm	

### T-Maze

The T-Maze is used largely in preference and spatial learning tasks. Animals learn to alternate between arms, based on their memory of the previously visited arms, or choose an arm based on the reward presented. The simple, capital T-shape design incorporates a single choice point with only two alternatives.



# Mazes for all your behavior testing needs!

CATALO NUMB		LANE	STEM	ARM	ARM	PRICE
60181	T-Maze, Mouse	5cm	35cm	10cm	28cm	
60281	T-Maze, Rat	10cm	50cm	20cm	40cm	

### Y-Maze

The Y-maze is used to assess exploratory behavior and/or spatial recognition of rodents. Three identical, equidistant arms, designed with gradual turns, promote exploration of the apparatus. Barrier blocks (optional) can be used to employ recognition or reversal paradigms.

(орионаі)	can be used to emp	noy recognition	or reversal paradig	31115.		
CATALOG	NUMBER	LANE WIDTH	ARM LENGTH	WALL HEIGHT	PRICE	
60180	Y-Maze, Mouse	5cm	35cm	10cm		
60280	Y-Maze, Rat	10cm	50cm	20cm		
BARIER E	BLOCKS					
60180B	Barrier Block Y-m	aze, Mouse, set	of 2			
60280B	Barrier Block Y-m	aze, Rat, set of	2			

# Parallel Rod Floor

Stoelting's Parallel Rod Foot Fault Apparatus is designed for assessing the effects of drugs, brain damage and disease on motor coordination and fatigue. Tests in up to 16 cages can be performed simultaneously using ANY-maze. This high throughput design makes the test an extremely versatile and valuable screening and phenotyping tool.

#### **Parallel rod Features:**

- · Easier to use than Rota-Rod
- · Provides similar measurements to Rota-Rod testing
- · Provides two measurements not necessarily provided by other tests: Number of errors (foot slips) Horizontal distance traveled (cm)

**Compare to** Rota-Rod. **Use to assess Ataxia and Motor** Coordination.



Using the ratio errors per cm traveled to index ataxia provides a robust and unique measure of genetic contributions to locomotor incoordination.

**ANY-maze** Touch Interface included! See page 116

#### PARALLEL-ROD FLOOR APPARATUS

61000 Parallel-Rod Floor Apparatus, Single Enclosure System 61500 Parallel-Rod Floor Apparatus, Four Enclosure System



# Stoelting Lickometer

The Stoelting Lickometer for Mouse can be used to measure licking/drinking behavior in mice. An electrical signal is generated from the tongue touching the sipper tube so each lick by the mouse is a recorded event. The Stoeltling Lickometer includes the Plexiglas cage and base, controller, and software. This is designed to work with the ANY-maze software, so a computer is required (not included). This Lickometer is designed to be a low-cost measurement of licking/drinking behaviors in mice.

- · Easy to use
- Can be combined with other behavior apparatuses, such as Open Field, Y-maze, etc.
- Easy to clean apparatus



#### STOELTING LICKOMETER

67100	Stoelting Lickometer System
67105	Stoelting Lickometer System with ANY-maze
67101	Stoelting Lickometer, water bottle mount



# Sociability Apparatus

#### Ideal for the investigation of:

Autism

- Social Memory
- Maternal Behavior
- Sociability
- Dominance

The Sociability Apparatus is used to assess social interaction and conditions thereof. The three- chambered apparatus includes two gray "stranger" enclosures with wide grid bars to promote interaction, and a non-reflective gray floor to maximize contrast, for video tracking purposes.

Rat sizes available.



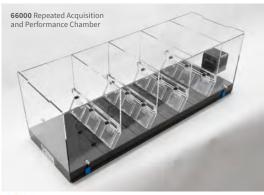
#### **SOCIABILITY APPARATUS**

60450

Sociability Cage, Mouse

60449XL

Sociability Cage, Rat



# ANY-maze Driven

# Repeated Acquisition and Performance Chamber (RAPC)

RAPC is a behavioral monitoring apparatus designed to completely automate and assess spatial learning and memory. RAPC enhances the accuracy of recording temporal measurements, and error scoring, during spatial learning and memory experiments, through the use of the ANY-maze data acquisition software and electronic sensors. In fact RAPC is an ANY-maze software driven product. The software can be used to track as many as 16 chambers simultaneously, and performs full statistical analysis of results immediately upon completion of the experiment.

- Automated data collection results in high throughput and data collection accuracy
- · Acrylic construction allows for easy animal observation
- ANY-maze Software control provides ease of operation
- A single personal computer can collect data from up to 16 chambers simultaneously
- ANY-maze software automatically configures the experiments
- ANY-maze controls the experiment flow, data collection and statistical analysis

Automated assessment of spatial learning and memory!

#### STOELTING REPEATED ACQUISITION AND PERFORMANCE CHAMBER (RAPC)

66000

**RAPC Repeated Acquisition and Performance Chamber** 



### Porsolt "Forced Swim" Test

The Porsolt "Forced Swim" Test is commonly used as a test for depression in rodents. Rodents are subjected to forced swim with no means of escape. The animals learn that escape is impossible and become immobile, moving only to keep their heads above water. Increased immobility is interpreted as depression. The Porsolt cylinder accommodates top-down and side camera positioning for automated detection of immobility behavior with ANY-maze video tracking software.

- Designed for use with Rats and Mice
- Center drain
- Valve for water level adjustment
- Handles for convenient carrying, positioning, emptying and cleaning

CATALOG NUMBER	DIA.	DEPTH	PRICE
<b>60160</b> Porsolt Test	20cm	45cm	

# **Tail-Suspension Test**

- Designed specifically for use with ANY-maze
- Suitable for use with Rats and Mice
- · Convenient, removable walls for easy cleaning

The Tail-Suspension Test is akin to the Forced Swim Test, but avoids the problems of hypothermia, and stress associated with forced swimming. Animals are suspended by their tails, and the amount of "immobility" is measured. Longer periods of immobility are associated with higher depressive scores, and immobility can be reversed with antidepressant treatment.



60125 Tail-Suspension Test

CATALOG NUMBER	HEIGHT	STATION WIDTH	OVERALL WIDTH	PRICE
<b>60125</b> Tail-Suspension Test	54cm	19cm	47cm	

Automate any Stoelting maze with ANY-maze! See page 114 for details.

# **Mouse Behavior Mazes**



# Light/Dark Box

The Light/Dark Box is a characteristic tool used in the assessment of anxiety. The basic measure is the animal's preference for dark, enclosed places over bright, exposed places. Time spent in the lit (light) half of the arena, and the related exploratory behaviors, are reliable parameters for assessing anxiolytic effects that may be useful in identifying and/or screening of anxiolytic and anxiogenic agents.

CATALOG NUMBER	OVERALL WIDTH	HEIGHT	TEST CHAMBER DIMENSION	PRICE
<b>63101</b> Light/Dark Box, Mouse	40cm	35cm	20x40cm	



# Conditioned Place-Preference Apparatus

The Conditioned Place-Preference (CPP) Apparatus is commonly used in the assessment of the rewarding or aversive properties of drugs or to identify the neuronal basis of reinforcement expression. Typically, the test involves association of an environment with drug effects, followed by the association of a different environment without the administration of drugs. Stoelting's Conditioned Place-Preference Apparatus is comprised of two chambers, barrier block and context kit for altering the environment of each chamber.



CATALOG NUMBER	OVERALL WIDTH & HEIGHT	TEST CHAMBER DIM.	START BOX DIM.	PRICE
64101	40cm X 35cm	18 X 20cm	10 X 20cm	

# **Hole-Board Test**

Head dipping on a Hole-Board is frequently used as an indicator of exploratory tendencies in rodent studies. Exploratory behavior in the Hole-Board Apparatus is a highly sensitive measure commonly used to explore and determine pharmacological and genetic influences. Additionally, the holes of the Hole-Board Apparatus can be baited, so the test can be utilized in spatial learning and memory experiments.

	ENCLOSURE			TEST CHAMBER HOLE		
	WIDTH	LENGTH	HEIGHT	DIAMETER	PRICE	
5 5	40cm	40cm	35cm	3cm		

# **Mouse Behavior Mazes**



# **Novel Object Recognition Test**

The Novel Object Recognition Test is based on the premise that rodents will explore a novel object, more than a familiar one, if the animal is able to remember the familiar one. The flexibility of the Novel Object Recognition Test allows for testing of short- or long-term memory, and can be used to selectively test the effects of an acute drug treatment on a specific stage of memory formation.

CATALOG	ENCLOSURE			
NUMBER	WIDTH	DEPTH	HEIGHT	PRICE
<b>62017</b> Novel Object Test, Mouse	40cm	40cm	35cm	
<b>62007</b> Novel Object Accessorires Only (see page 136)	Set of 12 (Includes 2 and round black and	blocks in		



# Rat Behavior Mazes

**CATALOG NUMBER** 

60200

60201

60202

60205

60206

Open Field, Rat,

Opaque Black Walls Open Field, Rat, IR Black

photobeam arrays

Open Field Activity

Clear Walls
Open Field, Rat,

\*For use with

Round, Clear Open Field Activity

Round, Gray



**WIDTH** 

100cm

100cm

100cm

90cm

90cm

LENGTH

100cm

100cm

100cm

90cm

90cm

HEIGHT PR

35cm

35cm

35cm

35cm

35cm

# Open Field

The Open Field Test is commonly used to assess locomotor activity and anxiety-related behaviors in rats. The test apparatus includes a 100cm base plate and a 100cm open field enclosure. Open field enclosures are available in clear, opaque black and IR black (for use with photobeam arrays). Optional Quad divider partitions the Open Field Apparatus into four, 50x50cm enclosures.

CE		



Activity, Round

# **Novel Object Recognition Test**

The Novel Object Recognition Test is based on the premise that rodents will explore a novel object, more than a familiar one, if the animal is able to remember the familiar one. The flexibility of the Novel Object Recognition Test allows for testing of short- or long-term memory, and can be used to selectively test the effects of an acute drug treatment on a specific stage of memory formation. A set of novel object accessories is included (2 each of the square and round blocks in gray, black and white). Optional Quad divider partitions the Open Field Apparatus into four, 50x50cm enclosures.

CATALOG	ENCLOSURE			
NUMBER	WIDTH	LENGTH	HEIGHT	PRICE
<b>65200</b> NOVEL OBJECT TEST, RAT	100cm	100cm	35cm	
62007	Novel Object Accessories, Set of 12			
60210	Quad Divider, Black			



### Rat Behavior Mazes

# Conditioned Place-Preference **Apparatus**

The Conditioned Place-Preference (CPP) Apparatus is used in a wide variety of behavior paradigms. Most commonly it is used in the assessment of the rewarding property of drugs (or other natural reinforcers) or to identify the neuronal basis of reinforcement expression. Typically, a drug is injected, and the animal is placed in a test chamber with distinctive environmental cues.

Each test apparatus includes a 100cm base plate, two sets of place-preference enclosures used for testing two rats simultaneously, barrier block and context kit for altering the environment of each chamber.



CATALOG		OVERALL		TEST CHAMBER	
NUMBER	DESCRIPTION	WIDTH	LENGTH	DIMENSIONS	PRICE
64200	Conditioned Place-Preference Apparatus	100cm	100cm	50 X 100cm	
64200-BB	Acrylic Barrier Block				



63200 Light/Dark Box, 2 Enclosures

# Light/Dark Box

The Light/Dark Box is commonly used to assess anxiety-related behaviors. Rodents exhibit an innate preference for dark, enclosed areas over brightly lit, exposed areas. Time spent in the brightly lit open area, and the related exploratory behaviors, are reliable parameters for assessing anxiolytic effects that may be useful in identifying and/or screening of anxiolytic and anxiogenic agents. Each test apparatus includes a 100cm base plate and two sets of light/dark enclosures used for testing two rats, simultaneously.

NUMBER	DESCRIPTION	OVERALL WIDTH	LENGTH	TEST CHAMBER DIMENSIONS	PRICE
63200	Light/Dark Box	100cm	100cm	50x100cm	

### Check out our full product line at www.StoeltingCo.com

# **Unique Behavior Mazes**



# Stoelting Sleep Disruptor Cage

Stoelting has developed a useful tool for the study of sleeping disorders, REM sleep, and neurodegenerative diseases in mice. The Stoelting Sleep Disruptor Cage produces a stressful environment by utilizing a water environment with 12 individual columns that are just above the water (30mm in diameter), just large enough for a mouse to sit on. But when the mouse goes into REM sleep, the mouse falls into the water. This cage can be used with the ANY-maze Behavioral Tracking Software for video recording and manually scoring other types of behavior.

#### The following features are available:

- Food hopper and water bottle for studies greater than 24 hours
- Draining valve
- No mechanical parts that can break
- Easy to clean

#### **SLEEP DISRUPTOR CAGE**

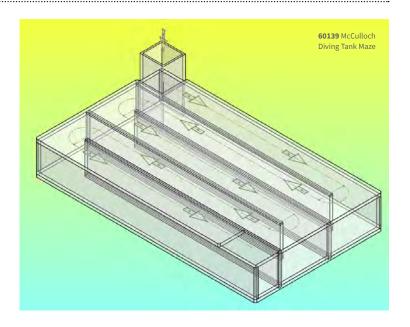
60185

Sleep Disrupter Water Tank, Mice

A new maze and animal model for exploring autonomic reflexes.

# McCulloch Rat Diving Tank

The McCulloch Diving Tank Maze can be used for measuring autonomic reflexes seen in rats. In response to submersion under water, the reflexly-induced response consists of apnea, bradycardia and an alteration of blood flow that maintains flow to the heart, brain and exercising muscles while limiting flow to viscera and non-exercising muscles.



#### MCCULLOCH DIVING TANK MAZE

60139

McCulloch Diving Tank Maze

# Orofacial Pain Assessment Device

# **Orofacial Pain Assessment Device** (OPAD) for Rats and Mice

The Stoelting OroFacial Pain Assessment Device (OPAD) provides an automated measurement of orofacial pain assessment in the trigeminal nerve in rats and mice via hot or cold or mechanical stimulation. Using an operant behavior conflict paradigm, rodents voluntarily (cognitive-based) decide between receiving a reward or avoiding an aversive stimulus to the orofacial region.

The OPAD begins to work when the animal touches and presses between dual Peltier-controlled temperature elements or mechanical protrusions to obtain a liquid reward. As the temperature (hot or cold) becomes aversive, the animal can withdraw. As for mechanical assessment, the animal's orofacial region will be forced to touch the protrusions to proceed to the liquid reward. The ANY-maze OroFacial Software will automatically track the number of licks, contact with elements (both the Peltier and mechanical protrusions), and amount of liquid consumed.

#### **Features:**

- Hot or Cold Temperature Control
- Mechanical stimulation
- Objective Pain Assessment—Easy to use!
- Operant Testing and Measures (not reflexive based)
- High Throughput
- Rackable System
- Up to 16 Cages with a Single Computer
- 4° to 75°C Temperature Range
- Easy to Clean
- Easy USB Connection
- Designed for use with Mice and Rats

#### **Hardware**

The OPAD cage for either mice or rats is seated on a metal base that is easily cleaned. A metal rack for rats and mice are enclosed; easily removed and cleaned between animals. Animals are trained and tested in the cage; the reward bottle is positioned to allow access when simultaneously contacting the thermode or mechanical protrusions with its orofacial region. The water bottle is connected to the data acquisition controller for recording each lick, in addition, contact with the thermode or mechanical protrusions will record each touch and duration, finally the amount (grams) of consumption from the reward bottle is also recorded. Each cage is easily attached to computer via USB port.



#### **Software**

All of this data taken from the hardware will then be displayed and analyzed using the ANY-maze OroFacial Software. The software is used to set-up a protocol and will then display and

A New Tool for Hot, Cold or **Mechanical Pain Assessment in Rats** and Mice. All in a Single **Instrument!** 

track in real-time the following events: temperature changes and contacts with the thermode or mechanical device, licks and weight of the reward bottle. Following completion of the test, the OroFacial Software will display graphs and statistical analysis of the experiment(s);

of course data can be downloaded to other software programs.



#### **OROFACIAL PAIN ASSESSMENT DEVICE (OPAD)**

OroFacial Pain Assessment 67500 Device (OPAD) System,

Rat/Mouse

OroFacial Pain Assessment 67501 Device (OPAD) Additional Cage

# Open Field Maze with Backlighting

#### NEW!

# Open Field Apparatus with Backlighting Stoelling's Backlit base is ideal for video tracking using the

Stoelting's Backlit base is ideal for video tracking using the ANY-maze Software. The three different light levels, Low- 353 Lux, Medium-1156 Lux, and High-2770 Lux allow for better overall tracking of the body with head tracking behavior being greatly enhanced. Back lighting creates a near perfect contrast between the base and the animal.

#### **Features:**

- Perfect for tracking multi-colored animals
- Improves contrast for video tracking
- Three different light levels
- 40cm x 40cm space
- Ideal for Novel Object Recognition testing
- Red light conditions available



**ANY-maze** Driven

#### **OPEN FIELD APPARATUS WITH BACKLIGHTING**

60112B	Backlit Base Plate, 40cm
60100B	Backlit Open Field, 40cm, Clear
60101B	Backlit Open Field, 40cm, Gray
60102B	Backlit Open Field, 40cm, IR Black
62017B	Backlit Novel Object, 40cm, Clear
64101B	Backlit Conditioned Place Preference, 40cm

Test ANY-maze for yourself!
Download the latest version at
www.ANY-maze.com, or contact
us for a FREE 30-day trial!





The Jackson Laboratory

Leading the search for tomorrow's cures

# **Upcoming Event!**

Join us for a 3-day workshop learning surgical stereotaxic techniques with mice at the Jackson Laboratory!

Visit www.jax.org/stereotaxic for workshop schedule and to sign up!



#### **NEW!**

# OptoDrum: Automated Measurement of the Optomotor Reflex

The OptoDrum experience is fully automated. Place a mouse on the platform inside the arena, and the OptoDrum will present slowly rotating stripe patterns to the animal. Its behavior is monitored by a camera, and our software determines if the animal follows the stripe pattern with its head movement. The stripe pattern will be adjusted over time (made more difficult to be seen, e.g. by lowering the contrast), until the animal no longer shows the reflex-driven behavior. No training is necessary for the animal, and only very limited training is necessary for the user. The OptoDrum is incredibly easy to use, right out of the box.

#### The following features are available:

- Automated detection of gaze direction with freely moving animals in a non-static illuminated background.
- Automated adjustment of stimulus pattern by software
- Automated behavioral analysis
- No training required for the animal

OPTODRUM		
65300	OptoDrum: Automated Measurement of the Optomotor Reflex, Mouse	
65310	OptoDrum: Automated Measurement of the Optomotor Reflex, Rat	

**OptoDrum** determines the animal's visual threshold automatically.



# **ANY-maze Bundles**



# ANY-maze Tracking Bundle Options

Your complete solution for behavior testing!

#### **ANY-maze Tracking Bundle Includes:**

(you supply the computer and maze/apparatus)

- ANY-maze License
- Camera
- Camera Accessories (lens, mount, cables)

#### **OPEN FIELD BUNDLES**

68021	Open Field ANY-maze Bundle, Mouse
68021L	Open Field ANY-maze Bundle, Mouse, Laptop
68022	Open Field ANY-maze Bundle, Rat
68022L	Open Field ANY-maze Bundle, Rat, Laptop

#### **RADIAL-ARM MAZE BUNDLES**

68006	Radial-Arm Maze ANY-maze Bundle, 8-arm, Mouse, Desktop Computer
68006L	Radial-Arm Maze ANY-maze Bundle, 8-arm, Mouse, Laptop Computer
68007	Radial-Arm Maze ANY-maze Bundle, 8-arm, Rat, Desktop Computer
68007L	Radial-Arm Maze ANY-maze Bundle, 8-arm, Rat, Laptop Computer

#### **FORCED-SWIM BUNDLES**

68019	Porsolt Forced-Swim Test ANY- maze Bundle, Desktop Computer
68019L	Porsolt Forced-Swim Test ANY- maze Bundle, Laptop Computer

#### **SOCIABILITY BUNDLES**

68020	Sociability ANY-maze Bundle Package, Desktop Computer	
68020L	Sociability ANY-maze Bundle Package, Laptop Computer	

Zero-Maze ANY-maze Bundle,

Mouse Deskton Computer

#### **ZERO-MAZE BUNDLES**

68016

	mouse, besktop computer
68016L	Zero-Maze ANY-maze Bundle, Mouse, Laptop Computer
68017	Zero-Maze ANY-maze Bundle, Rat, Desktop Computer
68017L	Zero-Maze ANY-maze Bundle, Rat, Laptop Computer

# **See pages 122-136** for full maze descriptions and dimensions.



# ANY-maze Bundles

T-MAZE BUNDLES	
68012	T-Maze ANY-maze Bundle, Mouse, Desktop Computer
68012L	T-Maze ANY-maze Bundle, Mouse, Laptop Computer
68013	T-Maze ANY-maze Bundle, Rat, Desktop Computer
68013L	T-Maze ANY-maze Bundle, Rat, Laptop Computer

Y-MAZE BUNDLES		
68014	Y-Maze ANY-maze Bundle, Mouse, Desktop Computer	
68014L	Y-Maze ANY-maze Bundle, Mouse, Laptop Computer	
68015	Y-Maze ANY-maze Bundle, Rat, Desktop Computer	
68015L	Y-Maze ANY-maze Bundle, Rat, Laptop Computer	

ELEVATED PLUS-MAZE BUNDLES	
68004	Elevated Plus-Maze ANY-maze Bundle, Mouse, Desk- top Computer
68004L	Elevated Plus-Maze ANY-maze Bundle, Mouse, Laptop Computer
68005	Elevated Plus-Maze ANY-maze Bundle, Rat, Desktop Computer
68005L	Elevated Plus-Maze ANY-maze Bundle, Rat, Laptop Computer

WATER MAZE BUNDLES		
68001	Water Maze ANY-maze Bundle, Mouse, Desktop Computer	
68001L	Water Maze ANY-maze Bundle, Mouse, Laptop Computer	
68002	Water Maze ANY-maze Bundle, Mouse/Rat, Desktop Computer	
68002L	Water Maze ANY-maze Bundle, Mouse/Rat, Laptop Computer	
68003	Water Maze ANY-maze Bundle, Rat, Desktop Computer	
68003L	Water Maze ANY-maze Bundle, Rat, Laptop Computer	

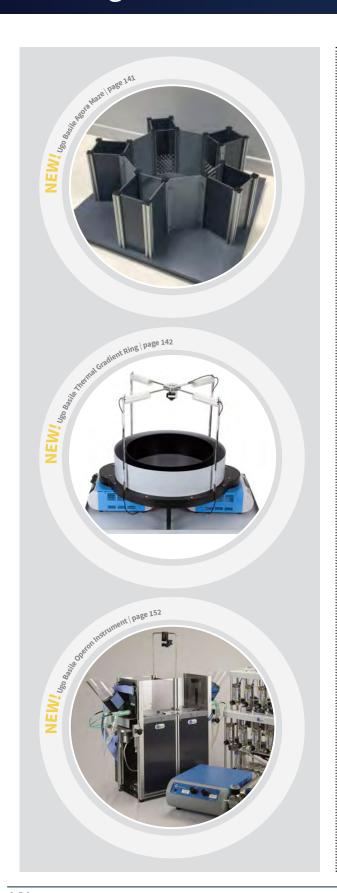
BARNES MAZE BUNDLES		
68010	Barnes Maze ANY-maze Bundle, Mouse, Desktop Computer	
68010L	Barnes Maze ANY-maze Bundle, Mouse, Laptop Computer	
68011	Barnes Maze ANY-maze Bundle, Rat, Desktop Computer	
68011L	Barnes Maze ANY-maze Bundle, Rat, Laptop Computer	

IAIL-SUSPENSION BUNDLES		
68018	Tail-Suspension ANY-maze Bundle, Desktop Computer	
68018L	Tail-Suspension ANY-maze Bundle, Laptop Computer	

**Save money** when purchasing an **ANY-maze Bundle**! Special Bundle discount included in price.



# Inside Ugo Basile



# Stoelting is the **Exclusive**North American **Distributor of Ugo Basile** products!

#### What's in this section

Activity Wheel
Agora Maze
Beehive Cage-Manager System154
Combination Hot/Cold Plate Analgesia Instrument143
Dynamic Plantar™ Anesthesiometer145
Electroconvulsive Device
Electronic von Frey™
Fear Conditioning System
Forced Swim Test
Grip Strength Meter
Hot/Cold Plate Analgesia Instrument
Lesion-Making Device
Multi-Maze System
Operon
Paw Pressure Analgesia Instrument146
Plethysmometer
Pressure Application Measurement (PAM)146
Rota-Rod
Rotometer for Mice
Tail-Flick Analgesia Instrument
Thermal Gradient Ring
Thermal Plantar Analgesia Instrument144
Treadmill for Mice and Rats
Waterwheel Forced Swim Test141

# Ugo Basile Behavior Mazes



# Ugo Basile Agora Maze

The Ugo Basile Agora Maze is a new social interaction cage, designed after the SocioBox Method. The main principle is based on free choice by a subject mouse to spend time in any part of an open circular arena attached to 5 cubicles. Ideal for videotracking with ANY-maze!

The apparatus comes complete with central arena and 5 cubicles with blank walls. Detachable clear sliders divide each cubicle, and holes in the clear panels permit the exchange of odors.

#### **UGO BASILE AGORA MAZE**

Agora maze, sociability 60440 apparatus for mice +

ANY-maze Software

Agora maze, sociability 60441 apparatus for mice, NO Software

# Waterwheel Forced **Swim Test**

Ugo Basile's Waterwheel Forced Swim Test is an automated alternative to the Porsolt Forced Swim Test. The Waterwheel Forced Swim Test consists of a water tank with a water wheel positioned across the center. Animals placed in the tank will attempt to escape by climbing on to the wheel, causing it to turn. The number of turns of the wheel provide an objective measure of escape behavior, eliminating the subjectivity of immobility measurements. Rotation encoder and temperature sensor included.



#### **ANY-maze** Driven

Use with ANY-maze to automatically score number of rotations and perform statistical analysis.

#### **Main Features:**

- Compact and user friendly
- Automate up to 40 tests, simultaneously
- Eliminates subjectivity of immobility measurement
- Connects to ANY-maze for automated scoring and completed data analysis
- Continuous water temperature feedback

#### **WATERWHEEL FORCED SWIM TEST**

60165

Forced Swim Test with Water Wheel, w/o Software

60165S

Forced Swim Test with Water Wheel, Software



# Thermal Gradient Ring

#### **NEW!**

# **Ugo Basile Thermal Gradient Ring (TGR)**

Introducing the Ugo Basile Thermal Gradient Ring (TGR) for mice, a novel device for the analysis of comprehensive thermal preference phenotyping. The TGR consists of a circular track that creates a temperature gradient between two set temperature extremes. The mouse is able to freely move across each zone while ANY-maze records and analyzes the preference behavior.

#### **Main Features**

- Thermal Insulated Aluminum Ring (runway ID 45cm, OD 57cm)
- Two heating devices to establish symmetric gradient
- Circular design guarantees bias-free, reproducible data—no spatial cues or border effects
- Creates 12 zones per side (Δ ≈ 2.3 °C between each zone)
- Includes B/W USB camera and set of 4 dual (visible/I.R.) lights
- Thermal Gradient Ring Mode in ANY-maze for easy protocol set up

Video recording and analysis is performed through ANY-maze Video Tracking Software. The TGR simply connects to your computer via USB and is recognized as an I/O device in ANY-maze. The temperature of all 12 zones is monitored in real time through ANY-maze by the 4 thermocouples embedded in the TGR. Data output includes: preference temperature, time spent in each zone, and percent of time spent above the given temperature.



#### THERMAL GRADIENT RING SYSTEM

65400 Thermal Gradient Ring System









# Pain & Inflammation



# **Ugo Basile Combination** Hot/Cold Plate Analgesia Instrument

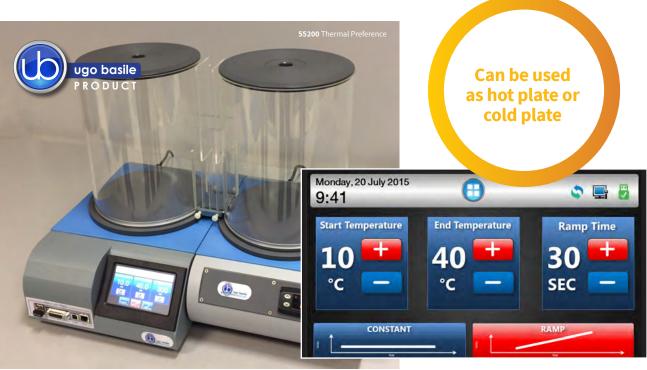
The Ugo Basile Hot/Cold Plate is used to test thermal pain response in mice and rats. Two working modes allow for testing at a fixed or increasing/decreasing temperature (RAMP). All settings programmed with the easy to use touch screen controller.

#### **Features:**

- OPERATING TEMPERATURE: -5.0°C to 65.0°C in steps of 0.1°C, with a precision of 0.5°C
- OPERATING MODES: fixed or ramping temperature
- X-PAD SOFTWARE included
- DATA PORTABILITY: via the USB Memory-Key, included

#### **COMBINATION HOT/COLD PLATE ANALGESIA INSTRUMENT**

55075	Combination Hot/Cold Plate Analgesia Instrument
55076	Optional Hot Plate only
55200	Thermal Preference



# Pain & Inflammation



# Instrument

#### Measures paw sensitivity to heat stimulation

The Ugo Basile Plantar Analgesia Instrument is an advance in methodology for assessing pain sensitivity in laboratory animals.

The instrument comes complete with the sliding infrared source; a glass platform; multiple configuration animal enclosure; a controller, and a manual. The Multiple Configuration Animal Enclosure is appropriate for Mice and Rats and provides maximum flexibility.



#### **UGO BASILE PLANTAR ANALGESIA INSTRUMENT**

55370	Plantar Analgesia Instrument, Mice and Rats
57390	Heat-Flux Radiometer
57102	Durham Animal Restrainers, Set of 2

# Pain & Inflammation



# Ugo Basile Dynamic Plantar Aesthesiometer

For assessment of animal sensitivity to mechanical touch on the paw

- Computer compatibility—direct connection to a PC
- Readout multifunction graphic display
- Memory stick included for data reporting and portability

The Ugo Basile Dynamic Plantar Aesthesiometer is a microprocessor-controlled unit. The experimental data, stored in its internal memory, can be directly exported to the PC via a USB or serial port. The 57820 is provided with a USB memory key, and dedicated software to record all the experimental data of one or more sessions, and to program the experiment layouts from a remote PC.

### **UGO BASILE DYNAMIC PLANTAR AESTHESIOMETER**

Ugo Basile Dynamic 57820 Plantar Aesthesiometer, for Rats and Mice



# Ugo Basile Electronic von Frey™

The Ugo Basile Electronic von Frey Instrument is provides automated assessment of threshold to mechanical stimuli in mice and rats. Mechanical allodynia and hypersensitivity is assessed by stimulating the plantar surface of the animal's hindpaw and latency to paw withdrawal is recorded automatically.

Instrument includes an electronic unit, touch stimulator and software used to compare applied force with desired target force. Optional base assembly includes perforated metal base, with stand, and multi-configuration animal enclosures.

### **UGO BASILE ELECTRONIC VON FREY™**

57814 Ugo Basile Electronic von Frey™ 57816 Base Assembly for Plantar Stimulation

# Pain & Inflamation



# Pressure Application Measurement (PAM)

The Pressure Application Measurement (PAM) device is a novel, easy-to-use tool for measuring mechanical pain threshold in experimental joint hypersensitivity models in rodents. The PAM device has been designed and validated specifically for the mechanical stimulation and assessment of joint pain, ideal for detecting arthritis in rats and mice.

### **UGO BASILE PRESSURE APPLICATION MEASUREMENT**

Ugo Basile PAM Meter, Mouse and Rat

# Ugo Basile Plethysmometer

The Ugo Basile™ Plethysmometer is a microprocessor-controlled volume meter that has long been the standard instrument for measurement of inflammatory edema in the rat and mouse paw.

### **UGO BASILE PLETHYSMOMETER**

57140

Ugo Basile Plethysmometer, Mice and Rats

If your main power supply is 220V, add a "V" to the product number.





# Ugo Basile Paw Pressure Analgesia Instrument

The Paw Pressure Analgesia Instrument is for the Randall-Selitto Test, which requires the application of increasing pressure on the paw between a flat surface and a blunt pointer. It is usually used with animals with one paw inflamed, and one untreated paw, to evaluate drugs for analgesic action.

### **UGO BASILE PAW PRESSURE ANALGESIA INSTRUMENT**

Ugo Basile Paw Pressure
Analgesia Instrument

Ugo Basile Paw Pressure Analgesia
Instrument, Recording

**57206** Ugo Basile Extra Disc Weight

# Grip Strength, Pain & Inflamation

# Ugo Basile Tail-Flick Analgesia Instrument

The Ugo Basile Tail Flick Instrument is used to automatically assess thermal nociceptive threshold in mice and rats. An infrared heat stimulus is focused on the animal tail and reaction time (time to flick) is automatically recorded. An optional Tilted Mouse Restrainer (57369) is necessary to keep the mouse tail on the emitter until stimulated.

### **UGO BASILE TAIL FLICK ANALGESIA INSTRUMENT**

57360	Ugo Basile Analgesia Instrument, Tail Flick
57369	Tilted Mouse Restrainer
57390	Heat-Flux Radiometer

For precise calibration of infrared analgesia meters. To calibrate the I.R. emission of Ugo Basile Plantar Test (144) and Tail-Flick.







# Ugo Basile Grip Strength Meter

The Ugo Basile Grip Strength Meter automatically measures fore- and hindlimb grip strength in mice and rats. Peak pull force achieved by the limb is automatically measured and displayed. Each instrument includes control unit, base plate with grasping bar, and software used for comparing pulling force with desired target force rate.

### **UGO BASILE GRIP STRENGTH METER**

57107 Ugo Basile Grip Strength Meter

# Ugo Basile Rota-Rod

# Ugo Basile Rota-Rod

Ugo Basile designed the first Rota Rod in the 1960s and with thousands of scientific references, is considered the industry leader in Rota Rod technology. The next generation Rota Rod from Ugo Basile combines the same functionality of the original Rota-Rod with additional new features:

- Silent Operation
- Stainless Steel Trip Plate for Easy Cleaning
- Touch Screen Display for Programming Experimental Parameters and Data Collection

Mouse Rota Rod consists of five rotating cylinders and allows for testing five mice, simultaneously. Height to fall is 16cm. Rat Rota Rod consists of four rotating cylinders and allows for testing four rats, simultaneously. Height to fall is 30cm.

### **Settings**

- Speed: 5-80 RPM, in steps of 1RPM
- Mode: Constant speed, ramp (accelerating) and multi-step ramp
- · Rotation: Forward, reverse and rocking



For another method, see page 127 for Stoelting's Parallel Rod!



Zero Noise! XPAD Software Included.

# 9:41 LANE 1 LANE 2 LANE 3 LANE 4 LANE 5 32 12 16 40 15 CONSTANT 35 rpm © STOP

# UGO BASILE ROTA-ROD 57624 Ugo Basile Rota-Rod for Mice 57625 Ugo Basile Rota-Rod for Rats 57626 Ugo Basile Rota-Rod for Rat and Mouse

# Motor Activity & Rotational Behavior

# Ugo Basile **Activity Wheel**

The Ugo Basile Activity Wheel is used to monitor daily activity in mice and rats. The stainless steel wheel is housed in a clear polycarbonate cage with stainless steel wire lid to accommodate food and water for circadian studies. Each running wheel is equipped with a magnetic switch and LCD counter to record number of revolutions. Running wheel cages without magnetic switch and LCD counter are also available.

The Rat Cage measures 48(h)x32(w)x47(d) cm with a wheel diameter of 35cm. Wheel bars are 2mm and spaced 8.8mm apart. The Mouse Cage measures 37(h)x26(w)x38(d) cm with a wheel diameter of 25 cm. Wheel bars are 2mm and spaced 7mm apart.

### **UGO BASILE ACTIVITY WHEEL**

57434	Activity Wheel for Rat, with Counter
57435	Activity Wheel for Rat, without Counter
57436	Activity Wheel for Mouse, with Counter
57437	Activity Wheel for Mouse, without Counter





# **Ugo Basile Rotometer for Mice**

# Measures Rotational Behavior in Untethered Mice

The Ugo Basile Rotometer is widely used to assess rotational behavior commonly associated with:

- Differential expression of neurotransmitter levels (such as GABA or dopamine).
- Developmental anomalies
- Anxiety/stress
- Drug exposure, drug abuse or withdrawal
- · Lesioning, traumatic brain injury or spinal cord damage

Encapsulated magnets taped to the mouse tail, surgically implanted or injected subcutaneosly, are used to automatically count clockwise and counterclockwise rotations. As clockwise and counterclockwise rotations accrue, they are displayed on the front panel of the Rotometer and stored in the internal memory of the instrument. Each Rotometer includes an cylinder animal restrainer and four magnets (2 ea. 2x12mm and 2x15mm).

### **UGO BASILE ROTOMETER FOR MICE**

53000

Rotometer Rodent **Rotation Counter** 

# Ugo Basile Multi-Maze System



The Ugo Basile Multi-Maze for Mice is a modular system providing complete automation of spatial memory experiments including: Y-maze, T-maze and 8-arm Radial Arm Maze.

### Use the Ugo Basile Multi-Maze to:

- · Assess spatial memory
- Test basic working memory
- Discriminate working from reference memory
- Evaluate impairments in the working memory

Proprietary sliding doors retract into the maze floor smoothly
and silently without disrupting the animal during testing.
his sliding mechanism combined with the non-reflective,
nigh contrast maze material provides optimal results with
NY-maze Video Tracking Software (sold separately as Product
Number 60000, see page 114).

valliber 60000, see page 114).		
MULTI-MAZE SYSTEM		
67503	Ugo Basile 3-arm Standard Multi-Maze (Y-maze), Mouse	
67504	Ugo Basile 3-arm Multi-Maze with Automated	

(Y- and T-mazes), Mouse Ugo Basile 8-arm Multi-Maze 67505 (Radial Arm and Y-mazes),

Start Compartment

Mouse



67506	Ugo Basile 3-arm Standard Multi-Maze (Y-maze), Rat	
67507	Ugo Basile 3-arm Multi-Maze with Automated Start Compartment (Y- and T-mazes), Rat	
67508	Ugo Basile 8-arm Multi-Maze (Radial Arm and Y-mazes), Rat	

# Motor Activity & Rotational Behavior

# Ugo Basile Treadmill for Mice and Rats

Introducing Ugo Basile's Next Generation of Rodent Treadmills. Compact and user-friendly, the NEW Ugo Basile Treadmill can be used for both rats and mice. Experimental parameters are programmed into easy-to-use touch screen display. Endurance, distance (absolute and relative) and speed are automatically measured and recorded.

### **Features:**

- Speed: from 3 to 100m/min, in steps of 1m/min amps
- Slope: positive (uphill) or negative (downhill), from -25 to +25°, in 5° steps
- Shock: from 0-2mA (in 0.1mA steps), included
- Modes: constant, accelerating, custom ramps



Treadmil with Included Rat Lanes

### **UGO BASILE TREADMIL FOR MICE AND RATS**

Ugo Basile Treadmil 57630 for Mice and Rats 57631 Ugo Basile Treadmil, Mouse 57632 Ugo Basile Treadmil, Rat

and Rats. **XPAD Software Included!** Monday, 20 July 2 S 🚍 💆 9:41 SETUP START RESULTS **USB STORAGE** UTILITIES

Same device to test both Mice



# Intra/Extra-Dimensional (ID-ED) Attentional Set-Shift

### **NEW!**

# Ugo Basile Operon @ ANY-maze Drive

The Ugo Basile Operon is the ultimate intra/extra-dimensional (ID-ED) attentional set-shifting task for mice. This novel ID/ED Operon task is an effective preclinical tool for studying the executive dysfunctions and cognitive symptoms of psychiatric disorders. A dedicated version of ANY-maze software automatically manages all the Operon tools following a precompiled protocol and collects the data.

### **Features**:

- Automated tridimensional stimulation (visual, odor, and texture)
- Two compartments each with an operant wall with lights, odor delivery, and revolving door
- Odor delivery system (66510) includes 2 channels and 10 independent flow meters
- Left and right nose pokes and pellet dispenser in each compartment
- Fully automated system through ANY-maze Video Tracking Software—includes precompiled protocol!

Already an ANY-maze user? Contact us for special pricing!

### **UGO BASILE OPERON**

66500	Ugo Basile OPERON
66510	Ugo Basile Ol factory System for OPERON
66510	Ugo Basile Air Control System for OPERON



# ANY-maze/Ugo Basile Fear Conditioning System



The ANY-maze/Ugo Basile Fear Conditioning System is a stateof-the-art system for accurately detecting immobility, a behavior commonly associated with fear. The new design utilizes an on-board controller, allowing full atomization of all variables (sound, shock, and light) through ANY-maze.

# The system employs ANY-maze Fear **Conditioning Software to conduct contextual** and auditory-cued fear conditioning paradigms and automate analysis of:

- Total freezing time
- Number of freezing episodes
- · Duration of freezing episodes
- · Latency between stimuli and freezing event

## The system includes the following:

- ANY-maze Fear Conditioning Software
- New, on-board controller
- Shock-100Hz-40KHz; 1-150dB or white noise
- Sound-Constant Current 0.1-2.9mA in 0.1mA steps

- Camera Lens
- Animal Enclosure with Electrified-Grid Floor
- Sound-Attenuating Chamber
- Context Kit to Alter Enclosure Environment



### **UGO BASILE FEAR CONDITIONING SYSTEMS**

60461S	Fear Conditioning System, 1 Mouse
60462S	Fear Conditioning System, 2 Mice
60463S	Fear Conditioning System, 4 Mice
60464S	Fear Conditioning System, 1 Rat
60465S	Fear Conditioning System, 2 Rats
60466S	Fear Conditioning System, 4 Rats

# **Ugo Basile Conditioning Systems**

# Ugo Basile's Beehive Cage-Manager System

Conditioning experiments have never been so easy!

Control five conditioning tests with Ugo Basile's beehive cage-manager system:

- Passive Avoidance (Step-Down or Step-Through)
- Active Avoidance
- Learned Helplessness
- Startle Response/PPI



Use with
Ugo Basile Isolation
Cubicle for Sound
Attenuation.
Contact Stoelting
for details.



learned

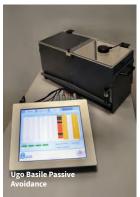
helplessness

# **Ugo Basile Conditioning Systems**









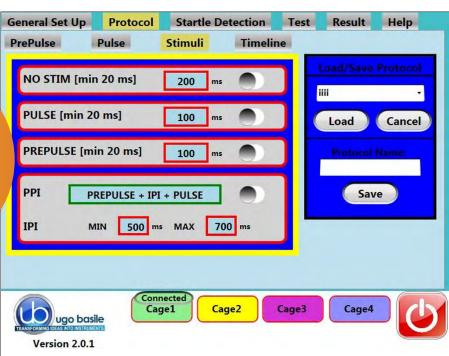


Each system includes a touch-screen controller for programming experimental settings (sound, light, shock) and data export, and one test-specific cage. Up to four cages can be managed with a single control unit. Software key required, call for details.

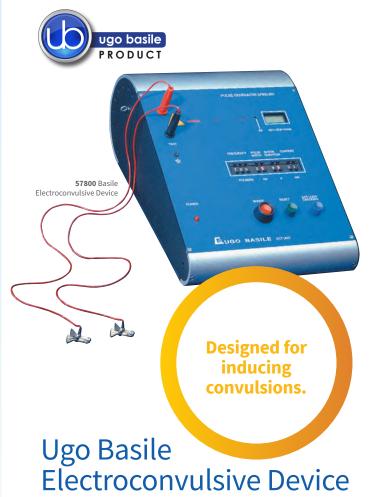
### **UGO BASILE BEEHIVE CAGE-MANAGER SYSTEM**

57553	Passive Avoidance - Step Through	
57560	Passive Avoidance - Step Down	
55532	Active Avoidance	
57500	Learned Helplessness	
58000	Startle response	

Manage all conditioning cages with a single controller!



# Electrophysiology



The Basile Electroconvulsive Device is designed for inducing convulsions in research animals. Consistent, reproducible current levels are produced by feedback circuitry that adjust for variance in impedance of the contact from animal to animal.

The impedance to the animal can be pre-measured and displayed, and a warning signal flashes if the impedance is too great to deliver the desired current level. The Electroconvulsive Device is supplied with auricular (ear lobe) electrodes.

UGO BAS	UGO BASILE ELECTROCONVULSIVE DEVICE	
57800	Basile Electroconvulsive Device	
57802	Auricular Electrodes (included)	
57803	Corneal Electrodes, optional	
57805	Foot Pedal, optional	
57808	Biphasic Unit, optional	

If your main power supply is 220V, add a "V" to the product number.

# Ugo Basile Lesion-Making Device

This compact, solid state direct current (DC) Lesion Maker has been designed for the production of localized lesions in small animals. The current generator is protected against short circuit, which prevents the electronics from getting damaged when the electrodes accidentally come into contact with each other.

The Basile Lesion Making Device provides constant DC current in mA from 10 to 99.99 mA. The pulse duration may be timed by the instrument between 1 and 99 seconds, or manually controlled.

A yellow LED warns when the impedance is too high for the preset current. The current generator is protected against accidental short circuit of the output. Maximum electrode resistance is 20 M $\Omega$  (10 $\mu$ A) down to 2 K $\Omega$  (100mA) and Compliance Voltage is from 1-99V.



# UGO BASILE LESION-MAKING DEVICE 53500 Basile Lesion-Making Device

If your main power supply is 220V, add a "V" to the product number.

# **Operant Conditioning**

# Startle-Response Laboratory (SR-LAB™) System

The Startle-Response Laboratory (SR-LAB) System is the world's most widely-used startle-reflex behavioral research system, and the most successful for measuring Startle Habituation, Pre-Pulse Inhibition (PPI) and Fear Potentiated Startle (FPS).

Execute any-and all-startle-reflex testing paradigms using the SR-LAB Software and specialized additional kits.

### The SR-LAB basic system includes:

- Test cabinet made of composite ABS plastic
- Animal enclosure in choice of standard sizes
- Power supply
- Input and Output cables
- Animal enclosure base
- Software and User Manual
- Software utilities for data analysis

# **Please specify Animal Enclosure** upon ordering:

- Small Animal Enclosure–10-25g
- Small/Medium Animal Enclosure-25-50g
- Medium Animal Enclosure-50-150g
- Large Animal Enclosure–150-450g

Mouse and Rat

• X-Large Animal Enclosure-450-800g





### STARTLE-RESPONSE LABORATORY SYSTEMS

59800	SR-LAB System
59802	SR-LAB System, Additional Unit
59817	SR-LAB Software, FDA PART 11 COMPLIANCE



range of avoidance tests with Gemini's flexible hardware and software!

# Gemini Active and Passive **Avoidance System**

The GEMINI Active and Passive Avoidance System was designed specifically to test active and passive avoidance in rats and mice. Available in two configurations, shock or shock and air puff, GEMINI's unique design allows you to run up to 8 independently-operated stations directly from your laptop! The GEMINI animal shocker scrambles the shock across the grid floor, preventing the animal from determining a pattern, leading to more accurate responses.

### **GEMINI ACTIVE AND PASSIVE AVOIDANCE SYSTEM**

57875	Gemini Avoidance System, Shock, Mouse and Rat
57880	Gemini Avoidance System, Shock and Air Puff, Mouse and Rat
57875M	Gemini Avoidance System, Shock, Mouse only
57880M	Gemini Avoidance System,

# Grip Strength, Pain & Inflamation

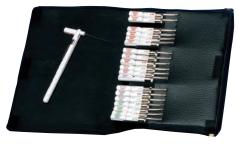
# Touch Test<sup>™</sup> Sensory Evaluator

The Semmes-Weinstein von Frey Aesthesiometer is used for clinical and preclinical assessment and diagnosis of hyper- or hypoesthesia.

### **The Touch Test Sensory Evaluator Kit features:**

- Set of 20 Nylon Monofilaments
- Force Range 0.008-300g
- Retractable Mechanism to Protect Filament

The Semmes-Weinstein monofilaments provide an approximate logarithmic scale of actual force and a linear scale of perceived intensity. Rodents exhibit a paw withdrawal reflex when the paw is unexpectedly touched. The Touch Test Sensory Evaluator can be used on plantar surfaces of the mouse or rat paw. The animal indicates sensation by pulling back its paw. Kit includes set of 20 retractable monofilaments and protective case. Optional base assembly includes perforated metal base with stand and multi-configuration animal enclosures. Individual filaments also available for purchase.



**58011** TouchTest™ Sensory Evaluation Kit

### TOUCH TEST™ SENSORY EVALUATOR

58011

Touch Test™ Sensory Evaluator Kit

57816

Base Assembly for Plantar Stimulation

18020 JVP Domes Complete Set



# JVP Domes

The JVP Domes are the most sensitive method of measuring human tactile spatial resolution.

The set includes 8 acrylic probes with bar/groove widths measuring 0.35. 0.5, 0.75, 1.0, 1.25, 1.5, 2.0 and 3.0mm. Each probe has a columnar handle and

a dome shaped head. The head has an alternating ridge/slot pattern of different width for each probe. The ridged head is pressed against the skin, and the patient/subject must report the alignment of the ridges, longitudinal or transverse. An extensive bibliography is available, including normative data on various body surfaces. Set comes with an illustrated manual with several citations.

### JVP DOMES

18020	Complete Set
18021	Blank Dome
18022	2.5mm
18023	3.5mm
18024	4.0mm
18025	4.5mm
18026	5.0mm
18027	6.0mm
18028	8.0mm
18029	10.0mm
18030	12.0mm



# Smedley Hand Dynamometer

# **Grip strength measurement**

The Smedley Hand Dynamometer is a hand-held instrument for measuring grip strength, fatigue rate and recovery rate.

The handle adjusts to fit the grip length of the hand. The Smedley Hand Dynamometer measures grip strength up to 100 kilograms, in 500 gram graduations. Two dial hands move up together, but one "freezes" at the maximum grip achieved, while the other follows the grip up or down to show the current squeeze strength.

### **SMEDLEY HAND DYNAMOMETER**

19117	Smedley Hand Dynamometer	
19118	MRI-Compatible Hand Dynamometer	

# **Behavior Scratch Counting Test**

# **NEW VERSION!**

# **Automated Scratch Counting for Mice**

# The real-time, long-term, quick, and accurate quantification of scratching behavior in mice

Scratching behavior is a critical biomarker for many laboratories, and important for drug development. Quantification of scratching behavior manually is subjective. The novel Automated Scratch Counting Instrument for Mice calculates frame-to-frame differences by capturing the animals' behavior with image processing software.

The high-speed camera contains an image-processing system enabling real-time quantification of scratching behavior of mice. Records and analyzes scratching behavior continuously for up to 24 hours.

The recording platform has a built-in infrared light panel. Records scratching behavior, in a natural state, using the invisible near-infrared light. This system allows evaluating of scratching behavior not only in regular light but also in the darkness.

### **SCRATCH COUNTING FOR LABORATORY ANIMAL-REAL TIME**

55600

**Automated Scratch** Counting, Mice

# Nano Tag

Continuously record activity and temperature for up to 60 days with nano tag. Smaller than the size of a dime, nano tag is an implantable single-use recording device for mice. The nano tag's internal three-axis accelerometer and temperature sensor automatically collects and stores activity and temperature data. Data from animals housed in the same cage can be collected simultaneously!

Software is required.

### **Features:**

- Three Recording Modes: Loop, Memory and Timer
- Small and Lightweight
- Record from Multiple Animals Simultaneously

### **NANO TAG** NanoTag for Mice 56745 and Rats (5/pk) 56745S NanoTag Viewer Software

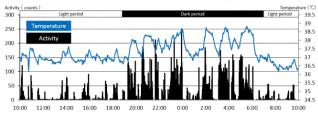
### **Output Data:**

- Number of scratching behaviors
- Duration of scratching behavior
- Graphical representation of scratching behavior
- Test up to 4 mice at one time



Call or email us to schedule a demonstration!





Rat Example data from NISSEI BILIS Co., Ltd. and Shiga Laboratory

# Electrophysiology



HRP in tris buffer, pH 8.6; rat; lateral habenula. 2µA pulsed



Tritiated prolineleucine. VM nucleus, thalamus. 1µA pulsed current, 10 minutes, 20 μ pipette.



A touchpad switch allows reversing polarity. This is useful when using a retaining current to hold the pipette contents in the pipette during entry into the brain.

# **NEW LOOK!**

# Digital Midgard™ **Precision Current Source**

- Touch screen programmability
- Universal power supply
- Internal memory
- Integral high-voltage labels
- Real-time feedback of current status
- · Error warning for current interrupt
- · Error warning for out-of-range

### For Iontophoresis

The latest generation of the popular precision current source, designed at M.I.T. for the iontophoresis of neural transport tracers such as horseradish peroxidase (HRP) or tritiated amino acids into neural tissue, is now available from Stoelting. It may also be used to make small lesions, and in applications requiring precise current control through high impedance.

### **Compliance Voltage**

The Midgard<sup>™</sup> features a high compliance voltage (3000 V) for injections from very small, or partially-clogged, pipette tips. The output current level can be regulated to +/- 0.5%, from 0.0 to 200 MegOhms.

### **Pulsed or Continuous Output**

Pulsed output helps avoid clogging or polarization of the tip of the pipette. The researcher may select pulsed or continuous current with a switch. The pulsed on/off times can be varied from 0.5 to 24 seconds.

### **SPECIFICATIONS**

### OUTPUT

Output current: 2-25 µA, set by touch pads

Compliance voltage: 3000 V

0.5% at 0-200 MegOhms

Load current

Load current accuracy:

reproducibility:

0.25%

Polarity:

Positive or negative, user selected

 $0.01 \mu A$ 

Display resolution: Output connectors:

Two integral H.V. Cables

### **PULSED MODE OPERATION**

Pulse duration: 0.5 to 24 seconds, variable Duty cycle:

Preset to 7 sec. on / 7 sec. off

Timing error:

± 5%

0.1 sec.

Load current fall time:

Load current rise time:

Dependent on load resistance. For 7.0 mA through 200 MegOhms, rise time to 99% of set value is

1 sec.; over-shoot less than 5%.

### MIDGARD™ PRECISION CURRENT SOURCE

51599

Digital Midgard™ Precision Current Source 2.0

Visit "Electrophysiology" on our website, www.StoeltingCo.com to view instrument manual.

# **Animal Identification**

# Laboratory **Animal Ear Tags**

- Ear tags are numbered from 1-100 (available up to 999)
- Available in 5 colors (1.Red 2.Green 3.Blue 4. Light Blue 5.Black)
- Once applied, they cannot be easily removed
- Laser-etched number provides durability
- Custom numbering available (contact for details)
- · Easy-to-read
- Corrosion resistant













Small Animal Ear Tags are specially suited for use with small lab and research animals (mice, rats and other rodents). The lightweight easy-to-read tags allow for trouble-free identification.

Ear Tag Applicator (sold separately) is required for application. Please specify number sequence when ordering.





### **LABORATORY ANIMAL EAR TAGS (SHEET OF 100)**

### **FOR MOUSE**

56779	Ear Tag, Mouse, 5 Colors
56780	Ear Tag, Mouse, Red
56781	Ear Tag, Mouse, Green
56782	Ear Tag, Mouse, Blue
56783	Ear Tag, Mouse, Light Blue
56784	Ear Tag, Mouse, Black

### **FOR RAT**

56785	Ear Tag, Rat, 5 Colors (20 each)
56786	Ear Tag, Rat, Red (Box of 100)
56787	Ear Tag, Rat, Green (Box of 100)
56788	Ear Tag, Rat, Blue (Box of 100)
56789	Ear Tag, Rat, Light Blue (Box of 100)
56790	Ear Tag, Rat, Black (Box of 100)
56791	Ear Tag Applicator

Please specify number sequence when ordering.

# Ear Punch

Ear punches used for notching or punching mouse or rat ears at weaning for easy identification. The 56718 and 56719 have ergonomic handles for easy control. All punches are made of Stainless Steel. Instruments are for non-clinical use only (not for human use).

### **EAR PUNCH**

56719	Ear Punch, 2mm hole, 4in
56717	Thumb Print Ear Punch, 2mm hole, 2in
56718	Ear Punch, 1mm hole, 4in



# **Animal Identification**

# **Animal Markers**

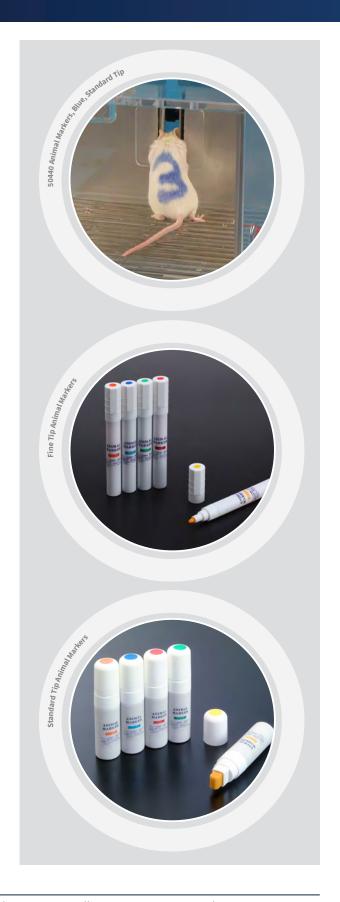
The Animal Marker was developed for easy, long-lasting identification of laboratory animals. Unlike permanent markers and art markers, which can contain chemicals harmful to animals, Animal Marker use "legal pigments," which are approved and regulated by the Japanese Ministry of Health, Labor and Welfare, for use in food, drugs and cosmetics. These pigments are nontoxic and devoid of any hazardous materials. For use on the rodent's coat. Color will not remain on the animal's skin.

### Features:

- Nontoxic and devoid of any hazardous materials
- A single marker can be used to mark 300-500 rats (depending upon animal size and/or applied area)
- Once applied, colors remain for 6-12 weeks
- Standard and fine tip markers available

ANIMAL MARKERS		
50440	Animal Markers, Blue, Standard Tip, pk/2	
50445	Animal Markers, Blue, Fine Tip, pk/3	
50441	Animal Markers, Green, Standard Tip, pk/2	
50446	Animal Markers, Green, Fine Tip, pk/3	
50442	Animal Markers, Red, Standard Tip, pk/2	
50447	Animal Markers, Red, Fine Tip, pk/3	
50443	Animal Markers, Yellow, Standard Tip, pk/2	
50448	Animal Markers, Yellow, Fine Tip, pk/3	
50444	Animal Markers, Orange, Standard Tip, pk/2	
50449	Animal Markers, Orange, Fine Tip, pk/3	
50450	Animal Markers, Black, Standard Tip, pk/2	
50451	Animal Markers, Black, Fine Tip, pk/3	

Visit www.StoeltingCo.com for full list of marker and marking ink color options!



# **Unique Products**

**NEW!** 

**Vaginal Estrous** Cycle Monitor

- The best method of determining proestrus stage
- Powerful tool for the improvement of reproduction efficiency
- Simple operation
- Battery operated

The Rat Vaginal Impedance Monitor is designed to obtain precise information to determine the optimum day for mating during the rat estrous cycle.

The conventional method (vaginal smear method) is a troublesome procedure requiring skill, time and labor.

The electrical impedance of the epithelial cell layer of vaginal mucosa is measured at the frequency of 1 kHz by insertion of the probe into the vagina. In the proestrus stage significantly higher impedance is produced compared to that in the other stages of the estrous cycle. 3 kohm of impedance can be considered a standard for indicating proestrus stage. Measuring range is 0-19.9kohm.

The Rat Vaginal Impedance Monitor is a reliable time and laborsaving device. Operation is so simple a novice can easily use it.

Important Notice: The 59160 was developed exclusively for Rats. A Mouse probe is available, but test results can not be guaranteed.



### **SPECIFICATIONS**

Range	0-19.9 kohm
Accuracy	+/- 1% +/- 1 digit
Display	LCD
	4 Dardanna alala Dattama

4 Rechargeable Battery (Ni-Battery MH) / 30 hr Battery Life **Dimensions** 90W x 135D x 35mmH

Weight Approximately 200g (battery excluded)

### **VAGINAL ESTROUS CYCLE MONITOR**

59160	Electronic Vaginal Estrous Cycle Monitor, Rat
59161	Mouse Probe (50mm x 3.5mm O.D.)
59162	Replacement Rat Probe (55mm x 4.5mm O.D.)





# **Automated Milker** for Rat and Mouse

Ideal for the analysis of breast milk composition

The Automated Milker provides researchers the ability to collect Rat/ Mouse milk directly from the teat. The Milker collects milk from lactating mothers by alternating negative and atmospheric pressures through two solenoid valves and a vacuum pump attached to a microcomputer.

Environmental pollutants, in particular carcinogenic substances and endocrine disrupting chemicals, are a worldwide concern. The influence that these substances have on babies and their development, through breast or cow milk, is of great concern. The ability to gather milk from Rats and Mice, widely used experimental animals, will aid in advancement of research in this area.

### **AUTOMATED MILKER FOR RAT AND MOUSE**

Automated Milker, Rat and Mouse 59150



### U.S. & CANADA

620 Wheat Lane, Wood Dale, IL 60191, USA Phone: 1-800-860-9775 or 630-860-9700 Fax: 630-860-9775 | Email: Neuro@StoeltingCo.com

MAILROOM: If the person named on the address label is no longer with your organization, please route this catalog to their replacement.



8 Terenure Place, Terenure, Dublin, D6WY006, Ireland Phone: +353 1 524 2200 Email: info@StoeltingEurope.com

MAILROOM: If the person named on the address label is no longer with your organization, please route this catalog to their replacement.





The Jackson Laboratory

Leading the search for tomorrow's cures

Upcoming Event!

Join us for a 3-day workshop learning surgical stereotaxic techniques with mice at the **Jackson Laboratory!** 

Visit www.jax.org/stereotaxic for workshop schedule and to sign up!