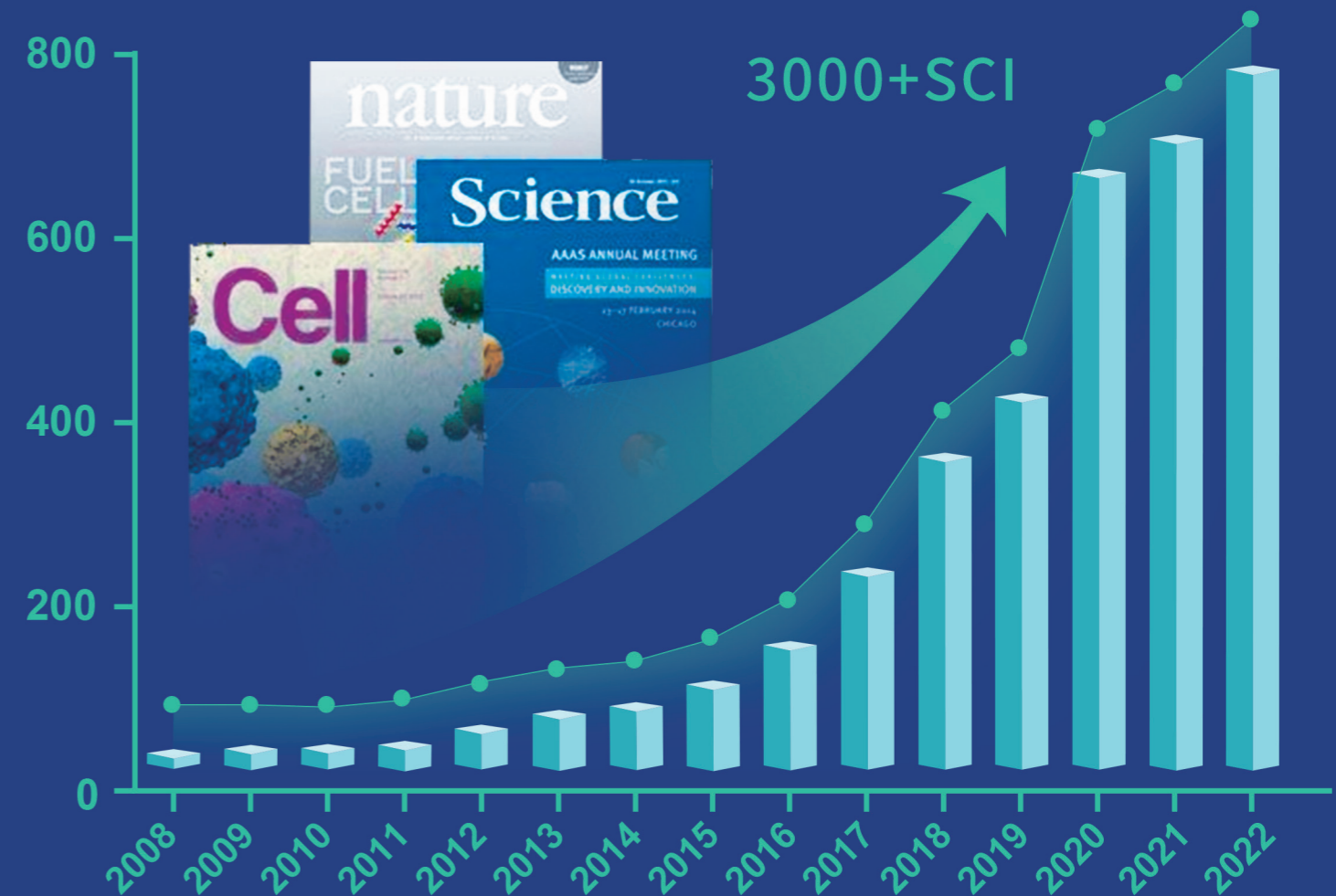# STEREOTAXIC INSTRUMENT
PRODUCT CATALOG

Number of publications using RWD stereotaxic instrument

3000+SCI

RWD Life Science Co.,Ltd
Add: 9/F, 19/F, 20/F, Building 7A, Shenzhen International Innovation Valley, XiLi Street, Dashi 1st Road, Nanshan District, Shenzhen   **E-mail:** rwd@rwdstco.com

RWD Life Science Inc.
Add: 6540 L usk B lvd, S uite C 161 S an D iego, C A 9 2121
Tel: (858)900-5879   **Support:** service@rwdls.com   **Web:** www.rwdstco.com

www.rwdstco.com

Animal Surgery and Modeling Solution

Stereotaxic instrument is an important research equipment widely used in many fields such as neuroanatomy, neurophysiology, neuropharmacology and neurosurgery. Up to now, RWD's stereotaxic instrument has helped global neuroscience researchers to publish more than 3000 articles in Cell, Nature, Science and other academic journals, and has been widely recognized in the industry.

- Meet the needs of rats, mice, guinea pigs, tree shrews, cats, rabbits, dogs, monkeys and other different animal experiments.
- Three kinds of accuracy 100μm, 10μm, 1μm are available.
- Except for the automated model 71000, other models can be upgraded to digital or dual manipulator models.

Automated Stereotaxic Instrument
Operation accuracy is 1μm; Built-in rodent brain atlas and three automatic programs.

Desktop Digital Stereotaxic Instrument
Add digital display module, displacement resolution 10μm.

Standard Stereotaxic Instrument

Rotational Digital Stereotaxic Instrument
Easy to adjust the skull level.

Portable Stereotaxic Instrument
The height of the teeth bar and ear bar can be adjusted for easy adjustment of the cranial level.

Large Animal Stereotaxic Instrument
Used to stereotaxic experiments of cats, dogs, monkeys and other large animals.

Purchase Guide

A complete set of configurations includes a Stereotaxic Instrument, Adaptor, Ear Bars and Holder. Anesthesia Nosecone Mask is required for gas anesthesia.

Holder

Adaptor

Nosecone Mask

Stereotaxic Instrument

Ear Bars
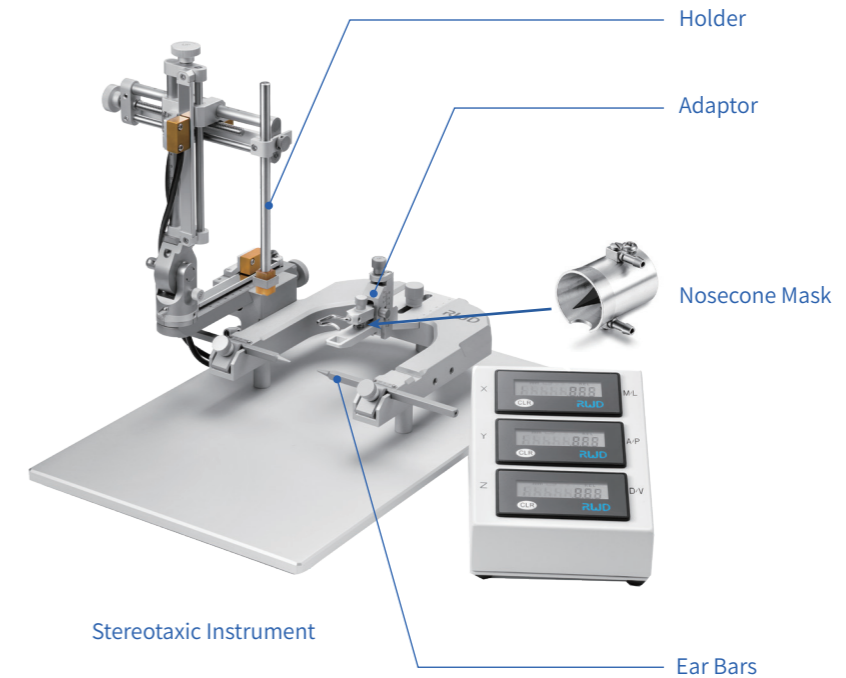
Step 1:

Select according to animal type and experimental needs

The stereotaxic instrument is divided into small and large animal types, the small animal type is mainly used for rodents such as mice, rats, guinea pigs, etc. The large animal type is mainly used for cats, dogs, monkeys, pigs, etc. The automated stereotaxic instrument contains automatic procedures, which are more convenient and efficient, and is very suitable for calcium imaging, multi-point injection and craniotomy experiments. The Rotational Digital Stereotaxic Instrument can quickly adjust the skull level of rodents, and its rotation function is also suitable for angle injection experiments.

Step 2:

Select the appropriate accuracy

The stereotaxic instrument has three kinds of accuracy, the non-digital model is 100μm, the digital model is 10μm, and the automated model is 1μm.
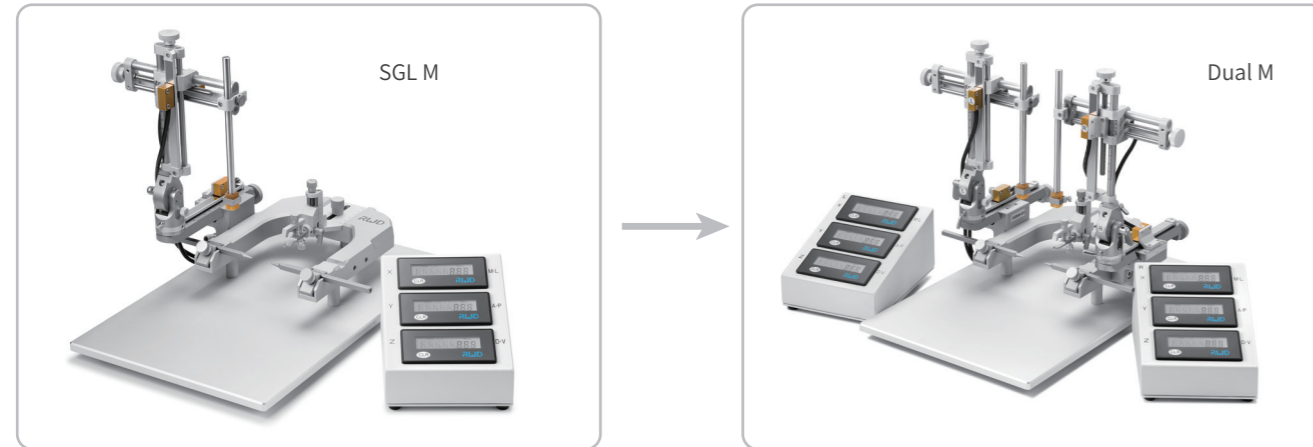
100μm

10μm

1μm

Step 3:

Select single or dual manipulators

The dual manipulators model can simultaneously inject, stimulate, and destroy the coordinates of two brain regions of the same animal, saving operating time.

SGL M

Dual M

Step 4:

Select Adaptor, Ear Bars and Holder

Choose the corresponding adaptor and ear bars according to the animal type, and choose the appropriate holder according to the experimental needs.

Step 5:

Select Anesthesia Nosecone Mask (optional for gas anesthesia)

When using an anesthesia machine connected to a stereotaxic instrument, it is necessary to select a suitable mask according to the model of the adaptor. Anesthesia nosecone masks are divided into active recovery and passive recovery types, of which active recovery masks need to be used together with a gas evacuation apparatus.
.

68663-S/68663/68665(Mouse)

68666/68667(Rat)

Gas Filter Canister +
Gas Evacuation Apparatus

Active Recovery System

68601(Mouse)

68602(Rat)

Gas Filter Canister only

Passive Recovery System

Small Animal Stereotaxic Instrument

▌71000 Series Automated Stereotaxic Instrument

71000 is an automated and intelligent stereotaxic instrument with high precision (1 μm). The software has built-in rat and mouse brain atlas and three automatic procedures (skull window, tissue removal and multi-point injection procedure), which can be observing the position of the probe relative to the brain area is convenient and efficient, and the operation is easy to use, greatly reducing the errors and damage caused by manual operation. In addition, it has an anti-collision function to prevent animal damage caused by wrong movement, which is safer.


Features：

Precise

- The 3-axis manipulator uses 3 stepping motors to control the movement, and the movement resolution is as high as 1 μm, which meets the needs of higher precision experiments;
- Anti-backlash function, which can eliminate the error caused by the gear gap of the motors when moving in reverse;
- Calibration function, which can synchronize the actual scale value on the manipulator with the software.

Convenient and efficient

- The software has built-in atlas, which can display the position and trajectory of the probe in real time;
- Multiple ways of movement: micro-manipulator, software, and computer keyboard direction keys, adjustable movement speed;
- Can set Bregma/Lambda as the origin with one key, and you can return to the origin with one key at any coordinate;
- Contains three automatic procedures of skull window, tissue removal, and multi-point injection, which can meet a variety of experimental needs, without hand-held operation, reducing damage and errors caused by manual operation, and easy to operate.


Skull Window Program

Tissue Removal Program

Multi-point Program
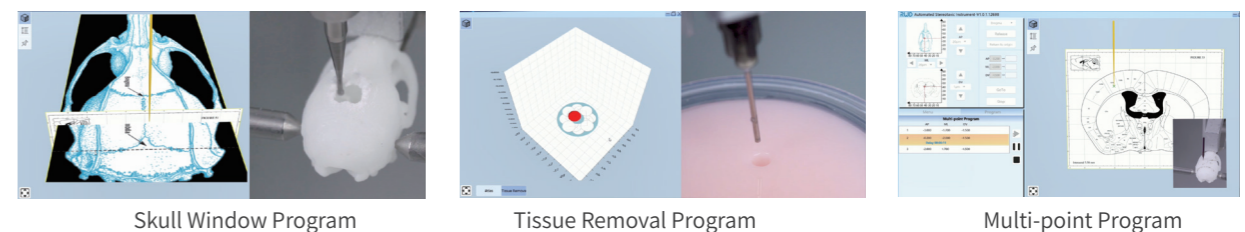
Safety

- Z-axis retraction function, when automatically moving from one coordinate to another, retracts the Z-axis first to prevent animal damage during the movement;
- The emergency stop button can immediately stop the running program to avoid animal damage caused by misoperation.

▌ Tissue Removal Optional Kit

Tissue removal Optional kit is used for tissue aspiration before implanting Lens in calcium imaging experiments. The kit includes a vacuum pump, reservoir, holder, needle connector, needle and tubing. Used together with the automated stereotaxic instrument, it can ensure that the end surface of the wound is smooth and reduce the damage caused by manual operation.

Holder
Tube
Needle connector
Needle
Tissue Removal Optional Kit
Liquid storage tank   **Vacuum pump**
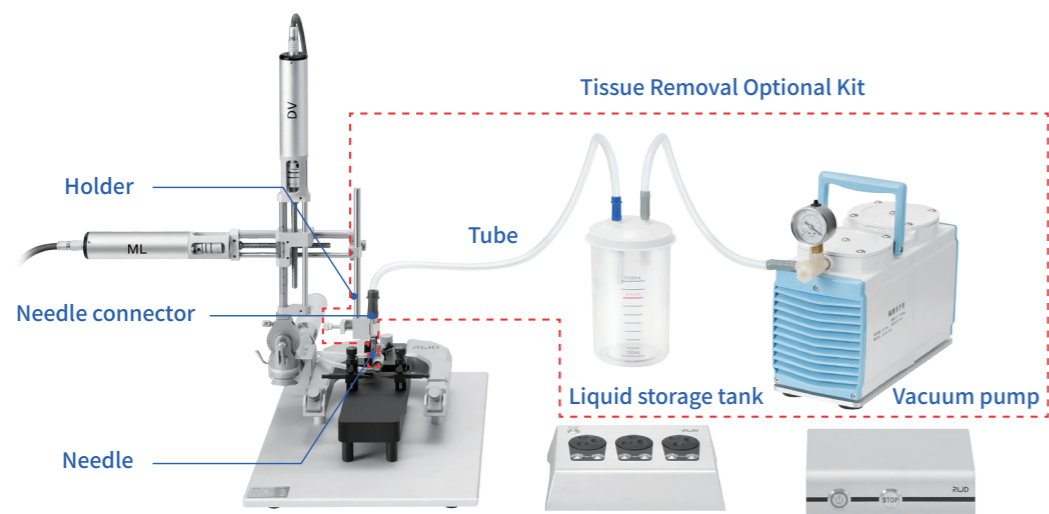
Features：

- Set the suction window size, shape, layer number and depth of each layer through the automatic software, and automatically and accurately remove brain tissue;
- The software can set the depth and speed of lens implantation, one-click implantation;
- Ensure the flatness of the wound end surface and reduce damage;
- Improve the survival of neurons per unit area and enhance the imaging effect;
- Reduce errors caused by traditional manual operations and improve experimental repeatability.

More smoothness, less damage   Improve neuron survival, better imaging
Auto ▶
Manual ▶
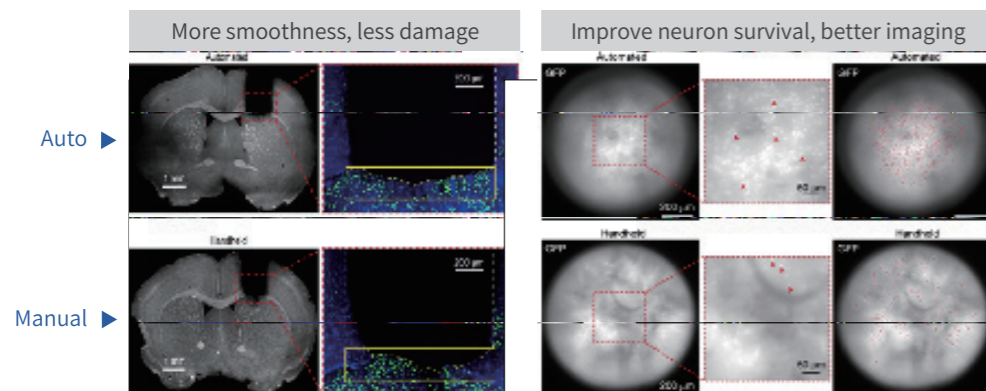
Product configuration

Model	Product Description	Remarks
71000-R	Atuomated Stereotaxic Instrument for Rats	Standard configuration, including stereotaxic, computer, control box, micromanipulator, 68021 rat adaptor, 68301 rat 18° ear bars, 68201 holder.
71000-M	Atuomated Stereotaxic Instrument for Mouse	Standard configuration, including stereotaxic, computer, control box, micromanipulator,68055 mouse adaptor, 68306 mouse 60° ear bars, 68201 holder.
TRA-110	Tissue Removal Optional Kit（110V）	Optional when using tissue removal procedure, including needle connector, holder (68202), vacuum pump-GM-0.5 II -110V-50HZ, liquid storage tank, connecting tube, needle.
TRA-220	Tissue Removal Optional Kit（220V）	Optional when using tissue removal procedure, including needle connector, holder (68202), vacuum pump-GM-0.5 II -220V-50HZ, liquid storage tank, connecting tube, needle.
LATITUDE 3420	Laptop for Automated Stereotaxic Instrument (software included)	i5-1145G7/8G/256G/Win10/Set display/14"

▌ Rotational Digital Stereotaxic Instrument

The 69100 series Rotational Digital Stereotaxic can adjust skull level and align sagittal suture quickly and accurately, and the time of skull adjustment is greatly shortened without repeated fixation.
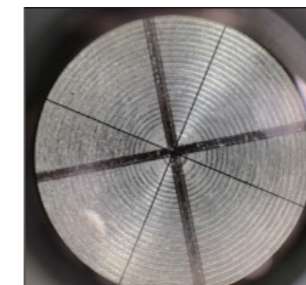
The crossover point of the Centering Height Gauge
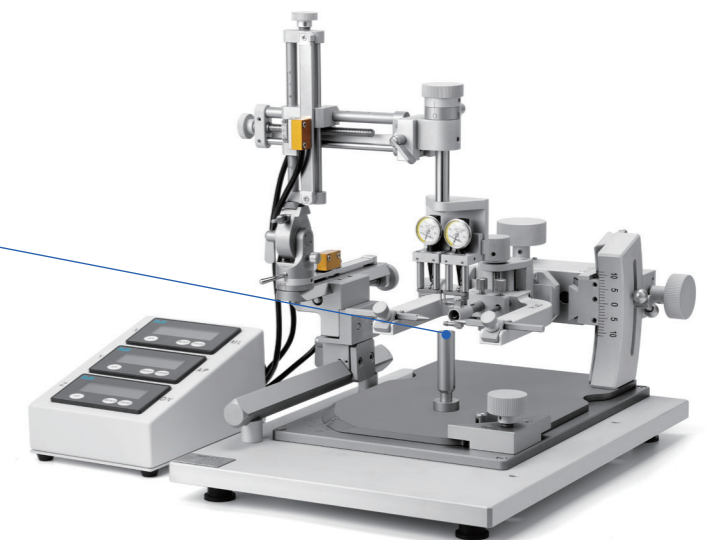
Features：

- Precise rotation adaptor can adjust skull position in 3 dimensional space, to maximize the adjustment of horizontal degree and the midline alignment.
- The axis of the rotation adaptor is focused on the crossover point of the Centering Height Gauge, the 40X Center Magnifier assists in adjusting the Bregma to coincide with this point and there is no need to set Bregma repeatedly.
- Improve the effciency of skull horizontal adjustment, and the adjustment process needs no repeated fixation.
- The 40X Centering Magnifier and the Alignment Indicator assist the skull adjustment, achieving high horizontal degree and good repeatability.
- Contain an anesthetic mask that can be used with inhaled anesthetics to reduce animal mortality.
- Easy realization of 3D multi-angle fixation, easy to tilt injection or other special experiment treatments.

Recommended Accessories:

40X Central Magnifier (69133)

- Assist in finding Bregma and Lambda, to ensure that the midline is parallel to the Y axis. Assist in adjusting the Bregma to coincide with the rotation axis, no need to set the Bregma repeatedly.

Alignment Indicator (69137)

- The deflection angle difference of the Alignment Indicator can feedback horizontal level with a 0.01mm accuracy.

15° Angle Adaptor (69113)

- Easy to adjust the skull level (front to back), to meet the needs of greater adjustment.

Operating Platform forStereotaxic (69136)
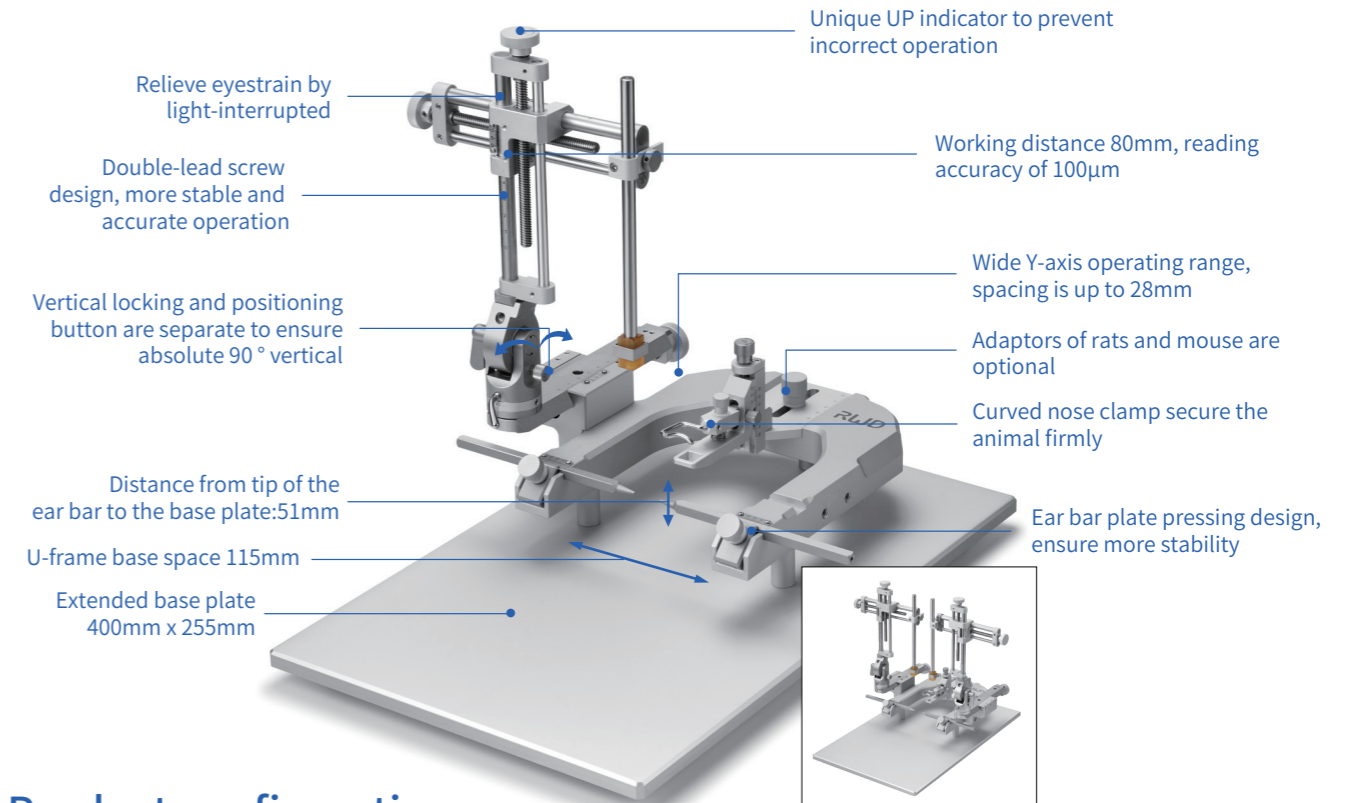
- 50mm height adjustable.

Technical parameters:

Item	Parameter
Sagittal triaxial displacement distance	30mm
Angle adjustment range (left to right)	±30°
Angle adjustment range (forth to back)	±10°
Angle adjustment range (central base plate)	±10°
X-, Y-, Z-axis operating range	80mm
Base plate	400mm X 325mm
Central Magnifier	40X
Alignment Indicator resolution	0.01mm

Order Information:

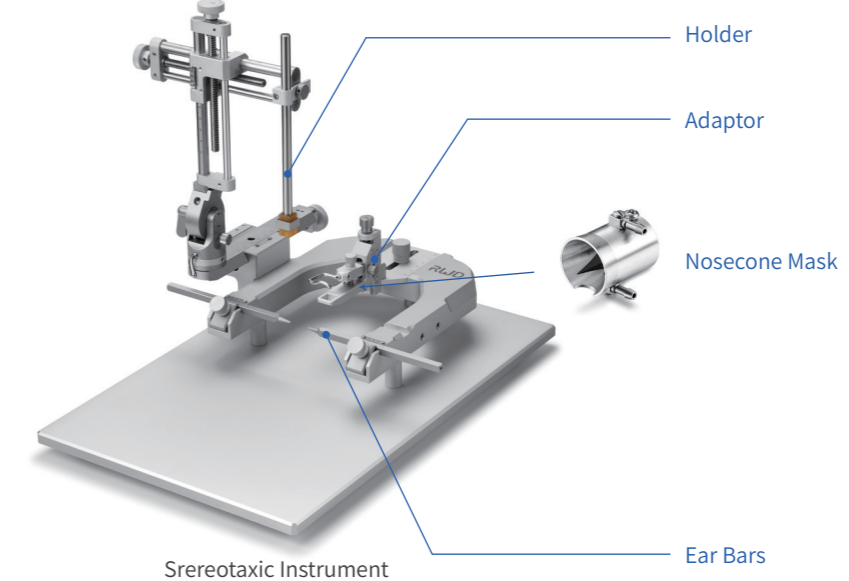| Cat No.	Product Description	Remark
69104	Rotational Digital Stereotaxic Instrument for mouse, SGL M, 69110 Adaptor Incl	Standard configuration, contains 69110 Mouse Anesthesia Adaptor with Tubing, 69113 15° Angle Adaptor, 69114 60°Ear Bars for Mouse.
69105	Rotational Digital Stereotaxic Instrument for mouse, Dual M, 69110 Adaptor Incl	
69106	Rotational Digital Stereotaxic Instrument for mouse, SGL Rat, 69112 Adaptor Incl	Standard configuration, contains 69112 Rat Anesthesia Adaptor with Tubing, 69113 15° Angle Adaptor, 69116 18° EarBars for Rat.
69107	Rotational digital Stereotaxic Instrument for mouse, Dual Rat, 69112 Adaptor Incl	
69133	40X Central Magnifier	
69137	Alignment Indicator	Optional configuration
69136	Operating Platform for Stereotaxic	

▌Standard Stereotaxic Instrument

Classical U-type base design, professional services in the laboratory for 20 years!
The displacement accuracy of the standard stereotaxic instrument is 100 μm, and the classic U-shaped frame can perform stereotaxic surgery on different types of small animals by replacing the adaptor and ear bars.

- Unique UP indicator to prevent incorrect operation
- Relieve eyestrain by light-interrupted
- Working distance 80mm, reading accuracy of 100μm
- Double-lead screw design, more stable and accurate operation
- Wide Y-axis operating range, spacing is up to 28mm
- Vertical locking and positioning button are separate to ensure absolute 90 ° vertical
- Adaptors of rats and mouse are optional
- Curved nose clamp secure the animal firmly
- Distance from tip of the ear bar to the base plate:51mm
- Ear bar plate pressing design, ensure more stability
- U-frame base space 115mm
- Extended base plate 400mm x 255mm

Product configuration

A complete set of configurations consists of a standard stereotaxic instrument, adaptor (page 16), ear bars (page 21), holder(page 22), and nosecone mask (optional for gas anesthesia, page 20). The single manipulator type can be changed into a dual manipulator type by adding the right manipulator (68402), and you can also contact us to upgrade to a digital display type(accuracy is 10μm).
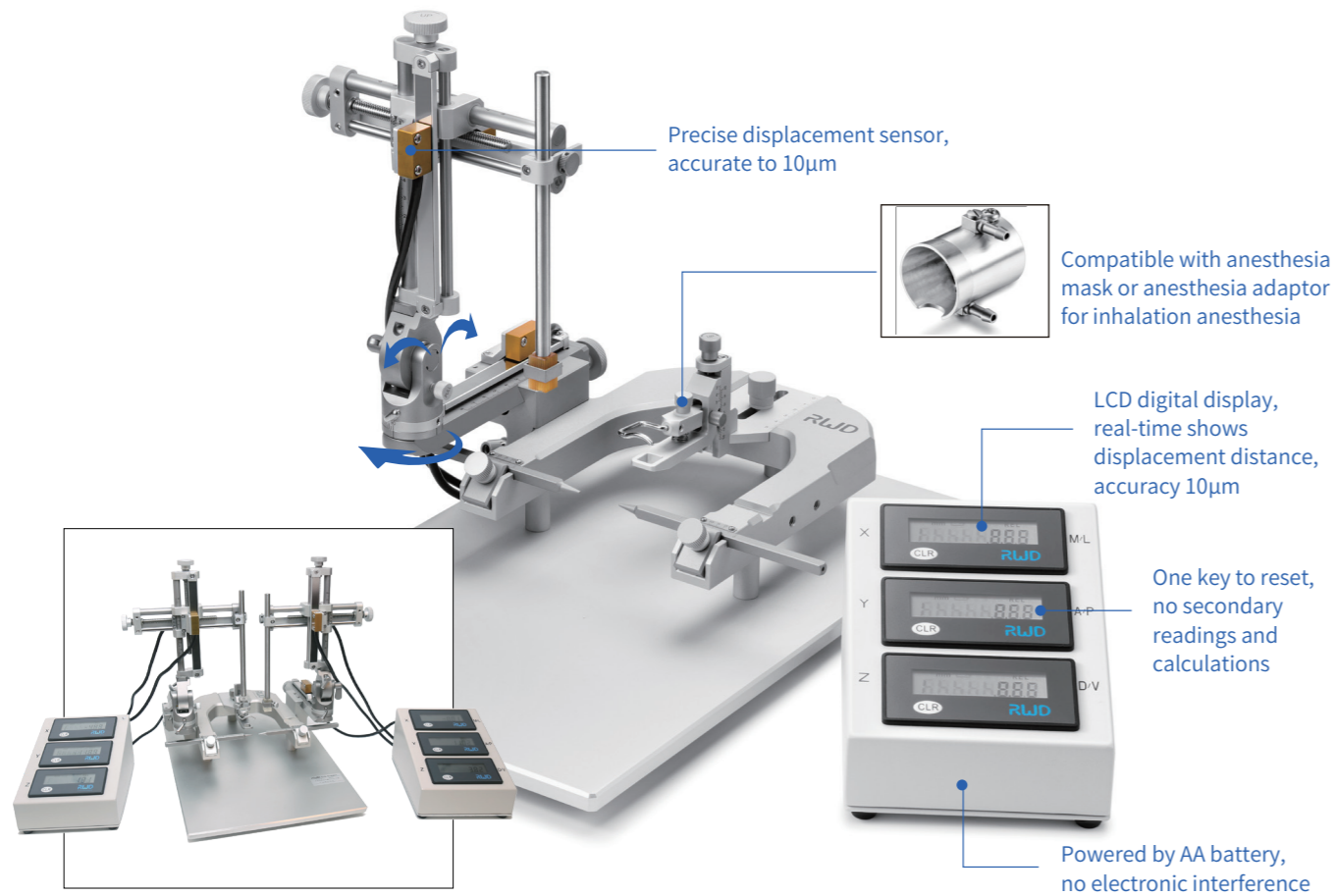
- Holder
- Adaptor
- Nosecone Mask
- Ear Bars

Srereotaxic Instrument

Complete Configuration=Stereotaxic Instrument+ Adaptor + Ear Bars + Holder + Nosecone Mask(optional for gas anesthesia)

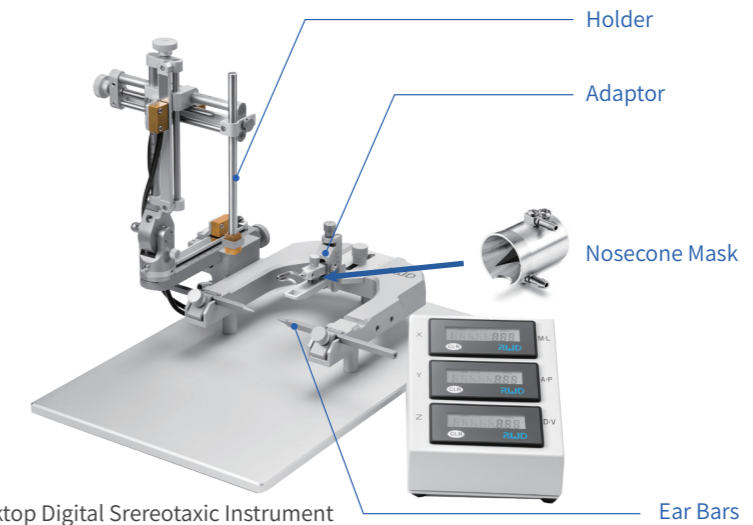| Model	Product Description	Remarks
68801	Standard Stereotaxic Instrument, SGL M	Standard configuration, contains 68861N base, 68401 3-axis manipulator-left, without adaptor, ear bars, holder and mask
68802	Standard Stereotaxic Instrument, Dual M	Standard configuration, contains 68861N base, 68401 3-axis man ipulator-left and 68402 3-axis manipulator- right, without adaptor, ear bars, holder and mask
68861N	Stereotaxic Base Plate, Standard	68801, 68802 include
68401	3-Axis Manipulator-Left	68801, 68802 include
68402	3-Axis Manipulator-Right	68802 include

Desktop Digital Stereotaxic Instrument

The desktop digital stereotaxic instrument adds a digital display module on the basis of the standard type. The displacement sensor can display the displacement more accurately, reducing the tedious steps of manual reading. The displacement accuracy reaches 10 μm, and the origin can be set arbitrarily within the range.

Precise displacement sensor, accurate to 10μm

Compatible with anesthesia mask or anesthesia adaptor for inhalation anesthesia

LCD digital display, real-time shows displacement distance, accuracy 10μm

One key to reset, no secondary readings and calculations

Powered by AA battery, no electronic interference

Product configuration

A complete set of configurations consists of a desktop digital stereotaxic instrument, adaptor (page 16), ear bars (page 21), holder (page 22) and anesthesia nosecone mask (optional for gas anesthesia, page 20). Single manipulator models can add the manipulator-right (68410) to become dual manipulator models.
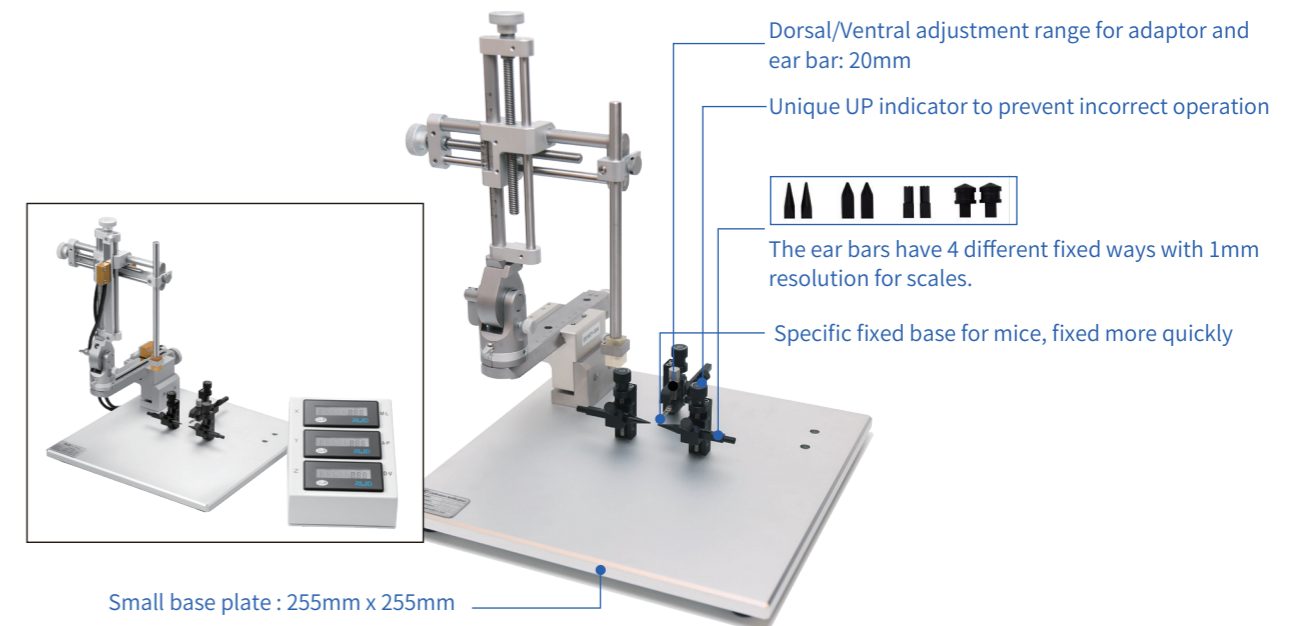
Holder
Adaptor
Nosecone Mask
Ear Bars

Desktop Digital Srereotaxic Instrument
Complete Configuration=Stereotaxic Instrument+ Adaptor + Ear Bars + Holder + Nosecone Mask(optional for gas anesthesia)

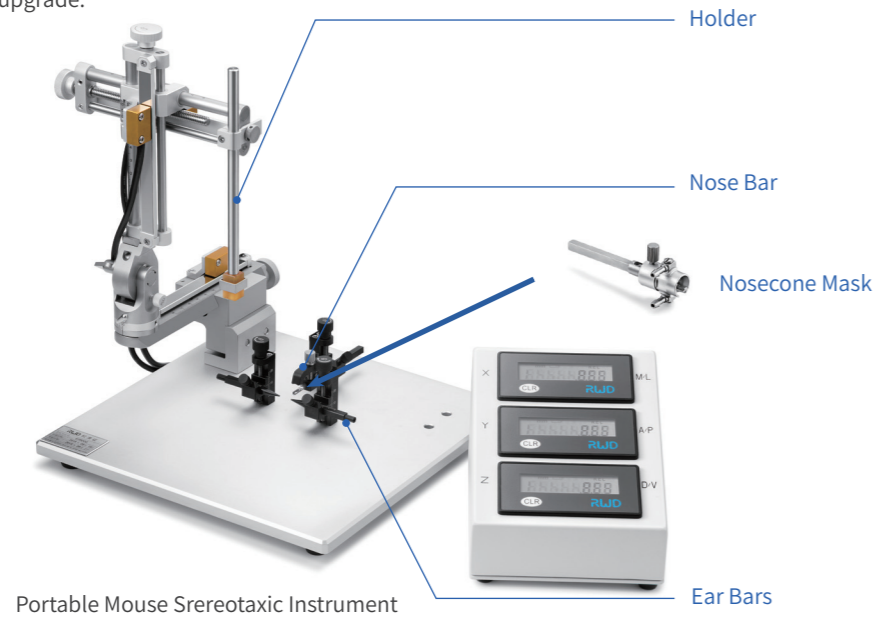| Model	Product Description	Remarks
68803	Desktop digital stereotaxic in strument, SGL M	Standard configuration, contains 68861N base, 68409 3-axis digital manipulator-left, without adaptor, ear bars, holder and mask.
68804	Desktop digital stereotaxic in strument, Dual M	Standard configuration, contains 68861N base, 68409 3-axis digital manipulator-left and 68410 3-axis digital manipulator-right, without adaptor, ear bars, holder and mask.
68861N	Stereotaxic Base Plate, Standard	68803B,68804B include
68409	3-Axis Digital Manipulator-Left	68803B,68804B include
68410	3-Axis Digital Manipulator-Right	68804B include

Portable Mouse Stereotaxic Instrument

- The portable stereotaxic instrument cancels the traditional U-shaped frame, and the operation space is larger;
- This type is specially designed for mouse. The height of the nose bar and ear bars can be adjusted from 0-20mm, which is convenient for adjusting the level of the skull;
- The accuracy of non-digital models is 100 μm, and the accuracy of digital models is 10 μm.

Dorsal/Ventral adjustment range for adaptor and ear bar: 20mm

Unique UP indicator to prevent incorrect operation

The ear bars have 4 different fixed ways with 1mm resolution for scales.

Specific fixed base for mice, fixed more quickly

Small base plate : 255mm x 255mm

Product configuration

A complete set of configurations consists of a portable mouse stereotaxic instrument, nose bar, ear bars, holder (page 22) and anesthesia nosecone mask (optional for gas anesthesia, page 20). The single manipulator model cannot simply increase the right manipulator to become a dual manipulator model. If you already have a single manipulator model and need another manipulator, please contact us for an upgrade.
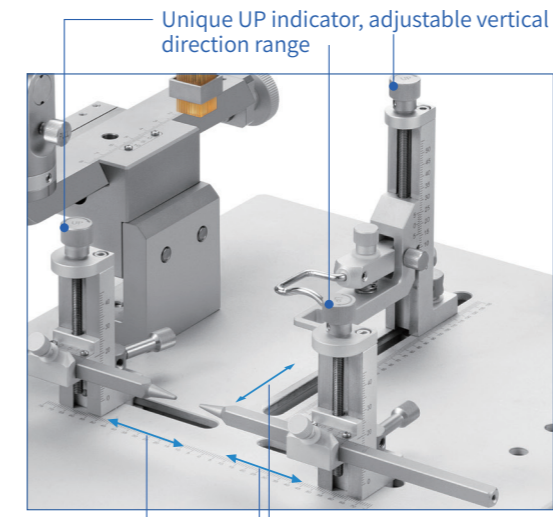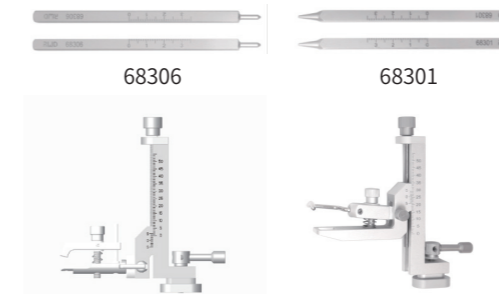
Holder

Nose Bar

Nosecone Mask

Portable Mouse Srereotaxic Instrument

Ear Bars

Complete Configuration=Stereotaxic Instrument+ Nose Bar + Ear Bars + Holder + Nosecone Mask(optional for gas anesthesia)

Model	Product Description	Remarks
68805	Portable Mouse Stereotaxic Instrument, SGL M	Standard configuration, non-digital model (accuracy is 100μm), including 68863S base, 68401 3-axis manipulator-left, without nose bar, ear bars, holder and mask.
68806	Portable Mouse Stereotaxic Instrument, Dual M	Standard configuration, non-digital model (accuracy is 100μm), including 68863D base, 68401 3-axis manipulator-left, 68402 3-axis manipulator-right, without nose bar, ear bars, holder and mask.
68807	Portable Mouse Stereotaxic Instrument, SGL M, Digital	Standard configuration, digital model (accuracy is 10μm), including 68863S base, 68409 3-axis digital manipulator-left, without nose bar, ear bars, holder and mask.
68808	Portable Mouse Stereotaxic Instrument, Dual M, Digital	Standard configuration, digital model (accuracy is 10μm), including 68863D base, 68409 3-axis digital manipulator-left, 68410 3-axis digital manipulator-right, without nose bar, ear bars, holder and mask.
68033	Nose Bar For 68030 Mouse Adaptor	Optional, the cross-sectional size of the nose bar is 5* 5mm.
68313	45°Ear Bars For 68030 Mouse Adaptor	Optional, including two tips of 45° and rubber, the cross-sectional size of the ear bars is 5*5mm.
68034	18°Ear Bars For 68030 Mouse Adaptor	Optional, including two tips of 18° and serrated, the cross-sectional size of the ear bars is 5*5mm.

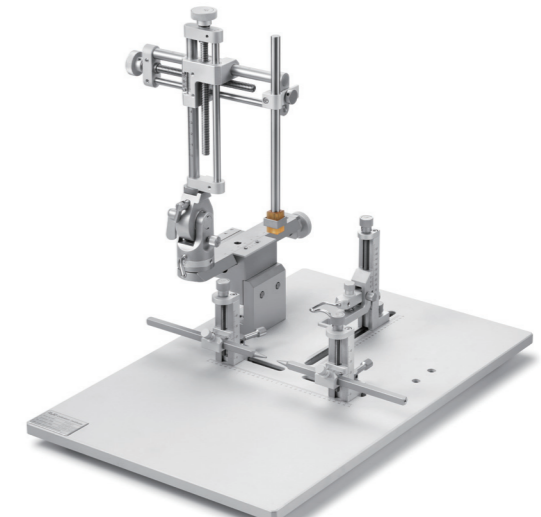## Portable Rat and Mouse Stereotaxic Instrument

- The portable stereotaxic instrument cancels the traditional U-shaped frame, and the operation space is larger;
- The adaptor and ear bars are removable for rodents of different weights;
- The height of the adaptor is adjustable from 0-55mm, and the height of the ear bars is adjustable from 0-45mm, which is convenient for adjusting the level of the skull;
- The accuracy of non-digital models is 100 μm, and the accuracy of digital display models is 10 μm.

Unique UP indicator, adjustable vertical direction range

Replace ear bar & adaptors, to hold different rodents

68306   68301

68087
Mouse adaptor and 60° ear bars

68088
Rat adaptor and 18° ear bars

Product configuration

A complete set of configurations consists of a portable rat and mouse stereotaxic instrument, adaptor, ear bars (page 21), holder (page 22) and anesthesia nosecone mask (optional for gas anesthesia, page 20) composition. The single manipulator model cannot simply increase the right manipulator to become a dual manipulator model. If you already have a single manipulator model and need another manipulator, please contact us for an upgrade.
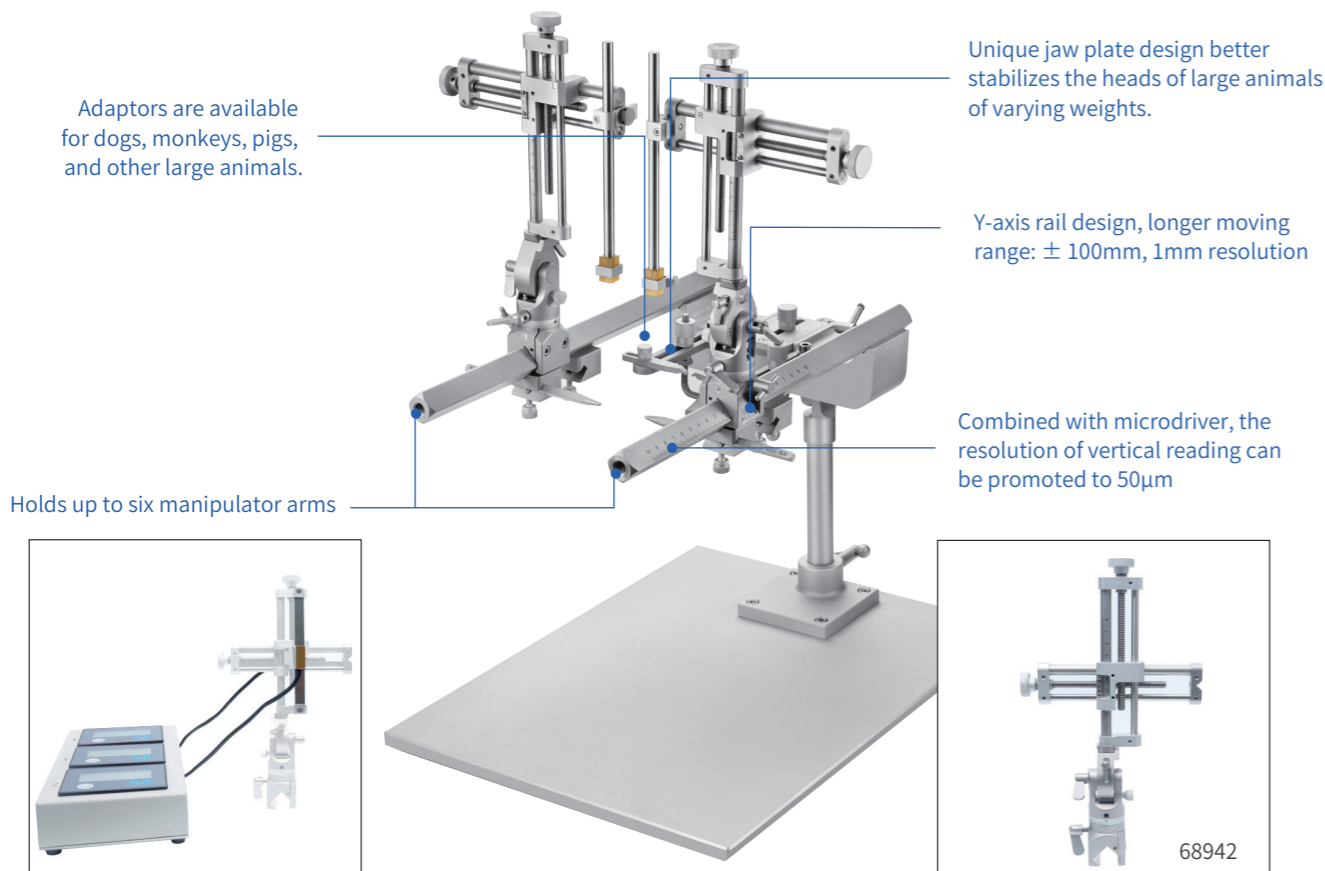
Holder

Adaptor

Protable Rat and Mouse Stereotaxic Instrument

Nosecone Mask
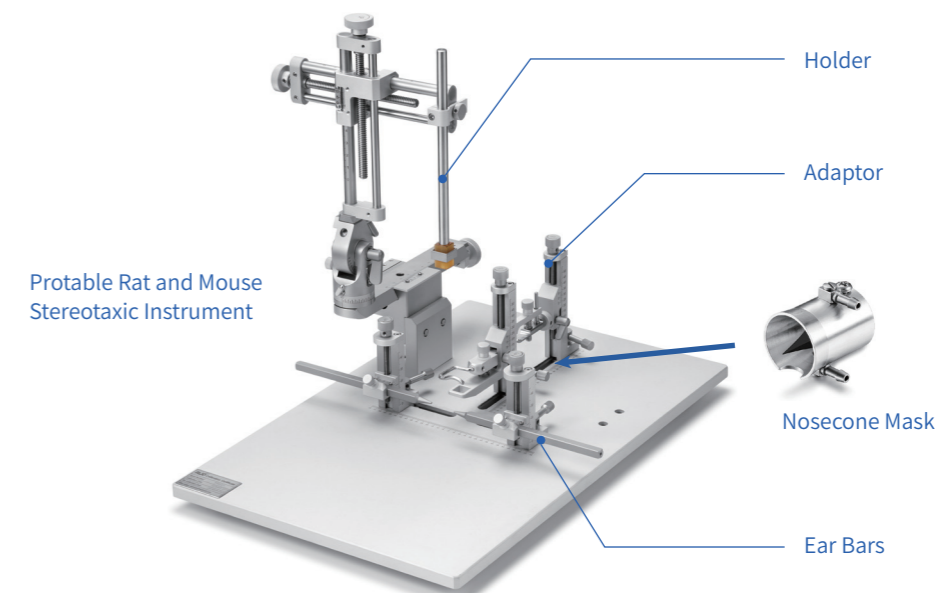
Ear Bars

Complete Configuration=Stereotaxic Instrument+ Adaptor + Ear Bars + Holder + Nosecone Mask(optional for gas anesthesia)

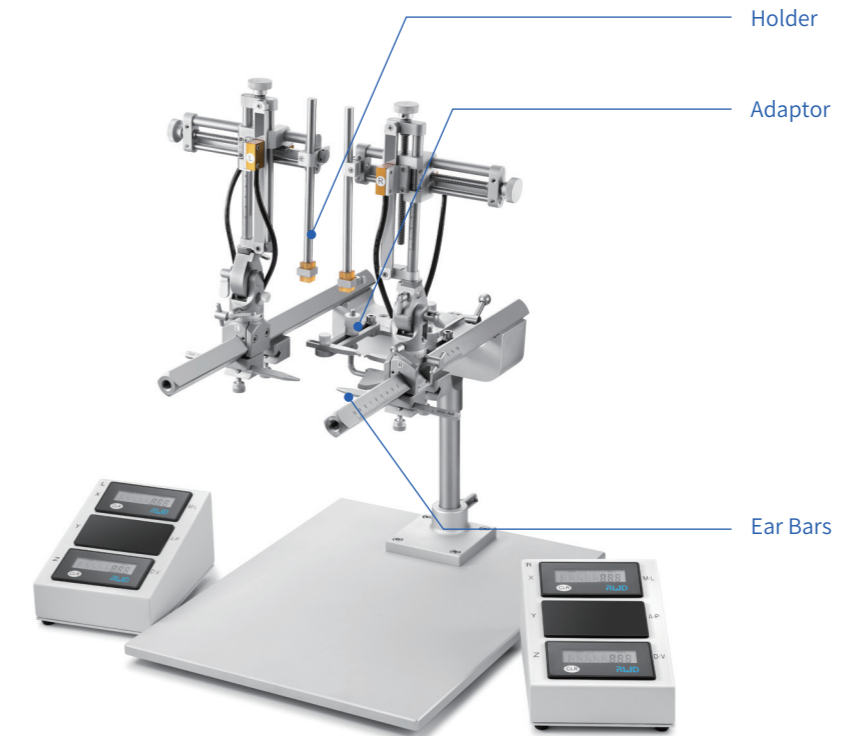| Model	Product Description	Remarks
68809	Portable Rat and Mouse Stereotaxic Instrument, SGL M	Standard configuration, non-digital model (accuracy is 100μm), including 68867S base, 68401 3-axis manipulator-left, without adaptor, ear bars, holder and mask.
68810	Portable Rat and Mouse Stereotaxic Instrument, Dual M	Standard configuration, non-digital model (accuracy is 100μm), including 68867D base, 684013-axis manipulator-left, 68402 3-axis manipulator-right, without adaptor, ear bars, holder and mask.
68811	Portable Rat and Mouse Stereotaxic Instrument, SGL M, Digital	Standard configuration, digital model (accuracy is 10μm), including 68867S base, 68409 3-axis digital manipulator-left, without adaptor, ear bars, holder and mask.
68812	Portable Rat and Mouse Stereotaxic Instrument, Dual M, Digital	Standard configuration, digital model (accuracy is 10μm), including 68867D base, 68409 3-axis digital manipulator-left, 684103-axis digital manipulator-right, without adaptor, ear bars, holder and mask.
68087	Mouse Adaptor	Only used for portable rat and mouse stereotaxic instrument
68088	Rat Adaptor	Only used for portable rat and mouse stereotaxic instrument

▍Large Animal Stereotaxic Instrument

- Large animal stereotaxic instrument is suitable for cats, dogs, monkeys, pigs, etc.;
- It contains a two-dimensional manipulator (X, Z axis). The accuracy of the non-digital model is 100 μm, and the accuracy of the digital model is 10 μm;
- Two kinds of adaptors are optional, the 68081 monkey adaptor is generally suitable for large animals of 10-30kg, and the 68041 is generally suitable for large animals below 10kg.

Adaptors are available for dogs, monkeys, pigs, and other large animals.

Unique jaw plate design better stabilizes the heads of large animals of varying weights.

Y-axis rail design, longer moving range: ± 100mm, 1mm resolution

Combined with microdriver, the resolution of vertical reading can be promoted to 50μm

Holds up to six manipulator arms

68942

Product configuration

A complete set of configurations consists of a large animal stereotaxic instrument, an adaptor (page 16), ear bars (page 21), holder (page 22). A single manipulator model can add the right manipulator to become a dual manipulator model.

Holder

Adaptor

Ear Bars

Large Animal Srereotaxic Instrument

Complete Configuration=Stereotaxic Instrument+ Adaptor + Ear Bars + Holder

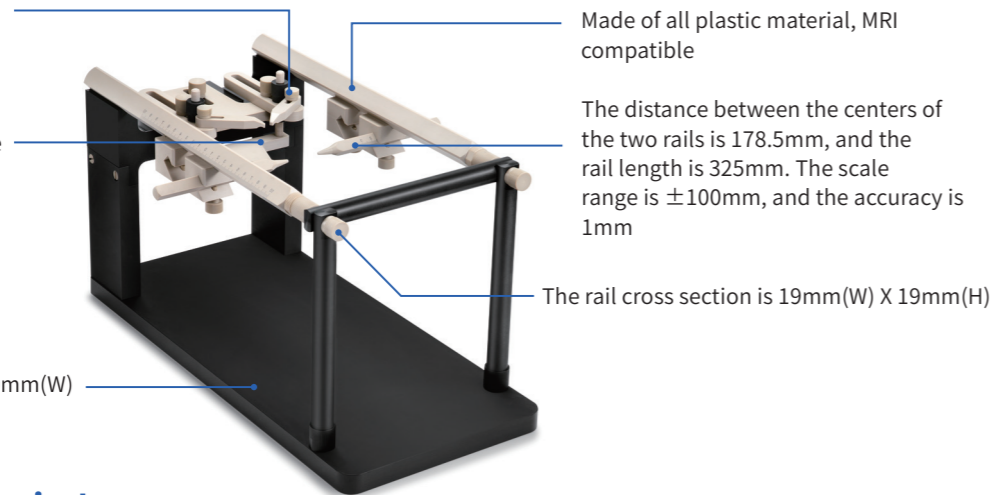| Model	Product Description	Remarks
68813	Stereotaxic for Large Animals, SGL M.	Standard configuration, non-digital display model (accuracy 100μm), including 68868N base, 689412-axis manipulator-left, without adaptor, ear bars, holder.
68814	Stereotaxic for Large Animals, Dual M.	Standard configuration, non-digital display model (accuracy 100μm), including 68868N base, 689412-axis manipulator-left, 68942 2-axis manipulator-right, without adaptor, ear bars and holder.
68815	Stereotaxic for Large Animals, SGL M, Digital	Standard configuration, digital display model (accuracy 10μm), including 68868N base, 68944 2-axis digital manipulator-left, without adaptor, ear bars, holder.
68816	Stereotaxic for Large Animals, Dual M, Digital	Standard configuration, digital display model (accuracy 10μm), including 68868N base, 68944 2-axis digital manipulator-left, 68945 2-axis digital manipulator-right, without adaptor, ear bars and holder.
68941	2-axis Manip for Dog/Monkey Stereotaxic, Left	68813, 68814 include
68942	2-axis Manip for Dog/Monkey Stereotaxic, Right	68814 includes
68944	2-axis Digital Manip for Dog/Monkey Stereotaxic, Left	68815, 68816 include
68945	2-axis Digital Manip for Dog/Monkey Stereotaxic, Right	68816 includes

MRI Large Animal Stereotaxic Instrument Base

MRI Large Animal Stereotaxic Instrument Base (68915) is generally used to perform intracranial imaging in the MRI environment after fixing the craniocerebral of 10-30kg animals, and then locate the brain region according to the images obtained by the MRI scan (The positioning of the brain region needs to purchase the manipulator shown in P 14 separately, and the manipulator is not made of MRI-compatible material).

Front and rear adjustment range of eye pressure bar: 95mm

The front and back adjustment range of the upper jaw fixed plate is 80mm, and the up and down adjustment range is 35mm

Base plate size is 420mm(L) X 200mm(W)

Made of all plastic material, MRI compatible

The distance between the centers of the two rails is 178.5mm, and the rail length is 325mm. The scale range is ±100mm, and the accuracy is 1mm

The rail cross section is 19mm(W) X 19mm(H)

Rabbit Stereotaxic Instrument

Rabbit Stereotaxic Instrument has a heightened base on the basis of the Standard Stereotaxic Instrument to adapt to the size of the rabbit. The following models include the base, the manipulator, the rabbit adaptor (no additional ear bars are required) and the holder .

Model	Product Description	Remarks
68930	Standard Stereotaxic Instrument for Rabbit, SGL M	Standard configuration, non-digital model (accuracy is 100μm), including base, 68401 3-axis manipulator-left, 68084 rabbit adaptor and 68201 holder.
68931	Standard Stereotaxic Instrument for Rabbit, Dual M	Standard configuration, non-digital model (accuracy is 100μm), including base, 68401 3-axis manipulator-left, , 68402 3-axis manipulator-right, 68084 rabbit adaptor and 68201 holder.
68932	Standard Stereotaxic Instrument for Rabbit, SGL M, Digital	Standard configuration, digital model (accuracy is 10μm), including base, 68409 3-axis digital manipulator-left, 68084 rabbit adaptor and 68201 holder.
68933	Standard Stereotaxic Instrument for Rabbit, Dual M, Digital	Standard configuration, digital model (accuracy is 10μm), including base, 68409 3-axis digital manipulator-left, , 68410 3-axis digital manipulator-right, 68084 rabbit adaptor and 68201 holder.

Customized Stereotaxic Instrument

The following stereotaxic instruments are customizable, please confirm the size with us.

| Model	Product Description	Remarks
68040C	Stereotaxic Instrument for Pigeon, SGL M, Digital, Customized	
68042C	Stereotaxic Instrument for Pigeon, Dual M, Digital, Customized	
68047C	Stereotaxic Instrument for Pigeon, SGL M, Customized	
68048C	Stereotaxic Instrument for Pigeon, Dual M, Customized	
68914C	Stereotaxic Instrument for Pig, Dual M, Customized	Suitable for large animals over 50kg
68918C	Stereotaxic Instrument for Pig, Dual M, Digital, Customized	
68919C	Stereotaxic Instrument for Pig, Four M, Customized	
68910C	Stereotaxic Instrument for Pig, SGL M, Customized	

Adaptor

Brain Adaptor List

| Model	Product Description	Remarks
68055	Mouse Adaptor	It can be used in standard, desktop digital and automated stereotaxic instruments. 68601, 68663-S, 68663, 68665 masks can be selected.
68030	Mouse/Neonatal Rat Adaptor, 18°and 45°Ear Bars Incl.	It can be used in standard, desktop digital and automated stereotaxic instruments. 68601, 68663-S, 68663, 68665 masks can be selected. It comes with two pairs of ear bars (68034, 6831 3).
68057	Anesthesia Adaptor for 20-30g Mouse, Tube, Angle-adjustible Anesthesia	It can be used in standard, desktop digital and automated stereotaxic instruments. No additional mask is required. It is generally used for 20-30g mouse. Compared with 68077, the nose bar of 68057 can swing up and down 70° (±35°), which is beneficial to adjust the skull level.
68057-S	Adaptor for 10-20g Mouse, Tube, Angle-adjustible	It can be used in standard, desktop digital and automated stereotaxic instruments. No additional mask is required. It is generally used for 10-20g mouse. Compared with 68077-S, the nose bar of 68057-S can swing up and down 70° (±35°), which is beneficial to adjust the skull level.
68077	Anesthesia Adaptor for 20-30g Mouse, Tube	It can be used in standard, desktop digital and automated stereotaxic instruments. No additional mask is required. It is generally used for 20-30g mouse.
68077-S	Anesthesia Adaptor for 10-20g Mouse, Tube	It can be used in standard, desktop digital and automated stereotaxic instruments. No additional mask is required. It is generally used for 10-20g mouse.
68065	Rotational Mouse Adaptor, 60°Ear Bars Incl.	It can be used in standard, desktop digital, automated stereoaxic instruments and 68099 II precise impactor. 68601, 68663 -S, 68663, 68665 anesthesia masks can be selected. It comes with 60° ear bars.
68036	Mouse Warm Water Adaptor with 18°and 4 5°Ear Bars	It can be used in standard, desktop digital and automated stereotaxic instruments. 68601, 68663-S, 68663, 68665 masks can be selected. On the basis of 68030, the water bath heat preservation function is added, and it needs to be used together with the water circulation pump (68662) to achieve the heat preservation effect.
68014	Neonatal Mouse Adaptor, 20°and 45°Ear Bars Incl.	It can be used in standard, desktop digital, portable rat and mouse, automated stereotaxic instruments, directly placed on the base plate of the stereotaxic. Suitable for mouse over 3 weeks old, the anesthesia mask is recommended to choose 68663-S.
68072	Neonatal Mouse Anesthesia Adaptor Kit	It can be used in standard, desktop digital, portable rat and mouse, automated stereotaxic instruments, directly placed on the base plate of the stereotaxic. Suitable for mouse within one week.
68069	MRI Compatible Mouse Adaptor	It can be used in standard, desktop digital, portable rat and mouse, automated stereotaxic instruments, directly placed on the base plate of the stereotaxic. The MRI type is generally use d for MRI imaging of the brain of animals, and then placed on the stereotxic for positioning after imaging.
68021	Rat Adaptor	It can be used in standard, desktop digital and automated stereotaxic instruments. 68602, 68666, 68667 masks can be selected.
68053	Rat Anesthesia Adaptor for rats less than 3 00g, Tube, Angle-adjustible	It can be used in standard, desktop digital and automated stereotaxic instruments. No additional mask is required. It is generally used for rats less than 300g. Compared with 68078, the nose bar of 68053 can swing up and down 70° (±35°), which is beneficial to adjust the skull level.
68078	Rat Anesthesia Adaptor for rats less than 3 00g, Tube	It can be used in standard, desktop digital and automated stereotaxic instruments. No additional mask is required. It is generally used for rats less than 300g.
68063	Rotational Mouse Adaptor, 60°Ear Bars Incl.	It can be used in standard, desktop digital and automated stereotaxic instruments. 68602, 68666, 68667 masks can be selected.
68011	MRI Compatible Rat Adaptor	It can be used in standard, desktop digital, portable rat and mouse, automated stereotaxic instruments, directly placed on the base plate of the stereotaxic. The MRI type is generally use d for MRI imaging of the brain of animals, and then placed on the stereotaxic for positioning after imaging.
68022	Rat Aural Adaptor	It can be used in standard, desktop digital and automated stereotaxic instruments.
68041	Cat/Monkey Adaptor	It is suitable for large animal stereotaxic, and is generally used for cats, dogs, monkeys, etc. under 10kg. Before purchasing, please confirm the animal's head width, distance from nose to eyes, mouth width and other information with RWD.
68081	Dog/Monkey/Pig Adaptor	It is suitable for large animal stereotaxic, and is generally used for 10-30 kg cats, dogs, monkeys, etc. Before purchasing, ple se confirm the animal's head width, distance from nose to eyes, mouth width and other information with RWD.

Model	Product Description	Remarks
68084	Rabbit Adaptor	It is suitable for rabbit stereotaxic instrument.
68076	Tree Shrew Anesthesi a Adaptor Kit	It can be used in standard, desktop digital and automated stereotaxic instruments. No additional mask is required.
68075	MRI Compatible Tree Shrew Adaptor Kit	It can be used in standard, desktop digital, portable rat and mouse, automated stereotaxic instruments, directly placed on the base plate of the stereotaxic instrument.

Spinal Cord Adaptor List

Model	Product Description	Remarks
68091	Rat and Mouse Spinal Cord Adaptor	Universal for rats and mouse, within 500 g.
68094	Mouse Spinal Cord Adaptor	It is suitable for 20-30g mouse.
68095	Rat Spinal Cord Adaptor	It is suitable for 200-300g rats.

Mouse Adaptor
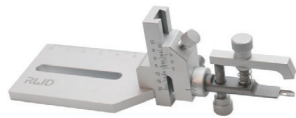
68055 Mouse Adaptor

The vertical adjustment range of the adaptor is 30mm (-20mm~ +10mm), and the adjustment accuracy is 100um; the front and rear adjustment range of the adaptor is 43.5mm; the rotatable angle range of the head is 35°. 68601, 68663S, 68663, 68665 anesthesia masks can be selected.
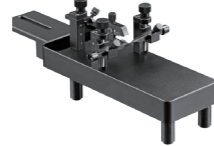
68030 Mouse/Neonatal Rat Adaptor

Including 18°ear bars (68034) and 45° ear bars (68313), four kinds of ear bars tips are available, serrated and rubber tips can not only fix the head of neonatal rats, but also avoid damage to the skull of neonatal rats, the height of the incisors and ear bars are adjustable , the height adjustable range is 20mm. Nose clip model is 68033.Compatible with 68601, 68663-S, 68663, 68665 anesthesia masks.
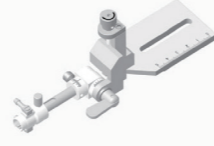
68057-S/68057 Mouse Anesthesia Adaptor

68057-S is for 10-20g mouse and 68057 is for 20-30g mouse. Both contain an anesthesia mask. The vertical adjustment range is 30mm (-20mm ~ +10mm), and the adjustment accuracy is 100um; the vertical rotatable angle range is 70° (-35°~+35°), and the adjustment accuracy is 5°; the horizontal rotatable angle range is 70° (-35°~+35°),and the adjustment accuracy is 5°; the front and rear adjustment range is 43.5mm. The inlet and outlet of the gas anesthesia mask use a 3mm inner diameter tube.

68077-S/68077 Mouse Anesthesia Adaptor

68077-S is for 10-20g mouse and 68077 is for 20-30g mouse. Both contain an anesthesia mask. The vertical adjustment range is 30mm (-20mm ~ +10mm), and the adjustment accuracy is 100um; the front and rear adjustment range is 43.5mm. The inlet and outlet of the gas anesthesia mask use a 3mm inner diameter tube.
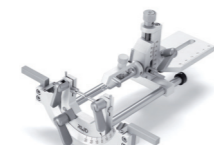
68065 Rotational Mouse Adaptor

The head of the mouse can be rotated according to the experimental requirements, so that it is convenient to operate the various angles of the mouse head. The adjustment range of the adaptor is 30mm up and down, and the adjustment accuracy is 100um. The adjustment range of the adaptor is 43.5mm, and the head can be rotated at an angle of 60°, and the tip of the ear bars is 60°. Compatible with 68601, 68663-S, 68663, 68665 anesthesia masks.


68036 Mouse Warm Water Adaptor

On the basis of 68030, the water bath heat preservation function is added, and it needs to be used together with the water circulation pump (68662) to achieve the heat preservation effect. Compatible with 68601, 68663-S, 68663, 68665 anesthesia masks.
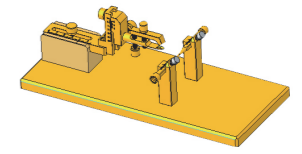

68014 Neonatal Mouse Adaptor

Suitable for mouse over 3 weeks old. Including 20° ear bars （68315）and 45° ear bars（68316）. The height adjustable range of incisors and ear bars is 20mm.
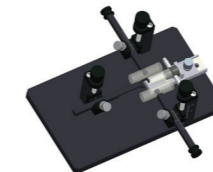
### 68072 Neonatal Mouse Adaptor

Suitable for newborn mice (within 1 week), the ear bars are made of flexible tubes, which can not only fix the newborn mouse well but also minimize the damage.


68069 MRI Compatible Mouse Adaptor

It is suitable for the MRI environment and does not generate electromagnetic interference; the adjustment range of the adaptor is 30mm (-20mm ~ +10mm) up and down, and the adjustment accuracy is 0.1mm; the front and rear movement range is 45mm; the ear bars have two head fixing methods to prevent damage to the skull. Dimensions: 280mm(L)x 120mm(W)x 93mm(H).
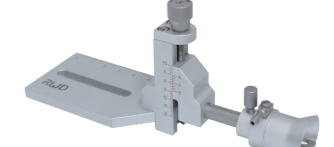
Rat Adaptor
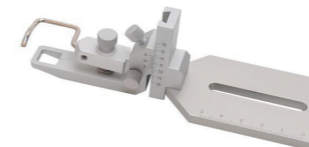
68021 Rat Adaptor

The up and down movement is 30mm (movement accuracy is 100um), and the horizontal movement range is 43.5mm, which can meet the immobilization of rats of different weights. Compatible with 68602, 68666, 68667 anesthesia masks.
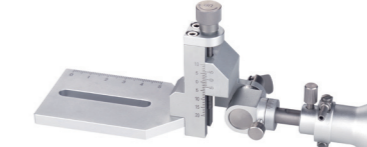

68053 Rat Anesthesia Adaptor

It contains an anesthesia mask; the vertical adjustment range is 30mm (-20mm ~ +10mm), and the adjustment accuracy is 100um; the vertical rotatable angle range is 70°(-35° ~ +35°), and the adjustment accuracy is 5°; the horizontal rotatable angle range is 70° (-35°~+35°), and the adjustment accuracy is 5°; the front and rear adjustment range is 43.5mm. The inlet and outlet of the gas anesthesia mask use a 3mm inner diameter tube.

68078 Rat Anesthesia Adaptor

It contains an anesthesia mask; the vertical adjustment range is 30mm (-20mm ~ +10mm), and the adjustment accuracy is 100um; the front and rear adjustment range is 43.5mm. The inlet and outlet of the gas anesthesia mask use a 3mm inner diameter tube.
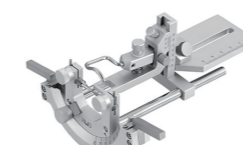

68063 Rotational Rat Adaptor

The head of the rat can be rotated according to the experimental requirements, so that it is convenient to operate the various angles of the rat head. The adjustment range of the adaptor is 30mm up and down, and the adjustment accuracy is 100um. The adjustment range of the adaptor is 43.5mm, and the head can be rotated at an angle of 60°, and the tip of the ear bars is 18°. Compatible with 68602, 68666, 68667 anesthesia masks.

68011 MRI Compatible Rat Adaptor

It is suitable for the MRI environment and does not generate electromagnetic interference. Dimensions: 360mm(L)x125mm (W)x 96mm(H).
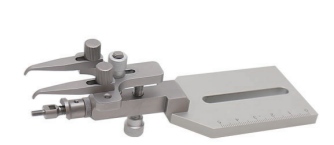
68022 Rat Aural Adaptor

The head fixation method of rats does not use the commonly used ear bars, but fixes the eye sockets, which does not cause any obstacles to the animal's hearing.

# Large Animals and Other Adaptors

68041 Cat/Monkey Adaptor
This cat/monkey adaptor provides head fixation through the eye sockets and palate for use with large animal stereotaxic instrument. It is generally suitable for cats and monkeys weighing less than 10 kg.

68081 Dog/Monkey/Pig Adaptor
This dog/monkey/pig adaptor is suitable for large animal stereotaxic instruments. The extended upper jaw fixing plate is easy to operate and the head is more stable. It is generally suitable for dogs, monkeys, and pigs with a weight of 10-30 kg.
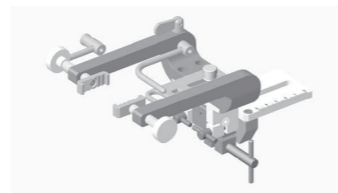
68084 Rabbit Adaptor
The Rabbit Adaptor secures the head with specialized zygomatic clamps, an adjustable incisor plate and a nose bar. The distance between the two zygomatic clamps can be precisely adjusted through the screw knob. The front and rear adjustment range of the adult rabbit incisor plate is 43.5mm; the front and rear adjustment range of the baby rabbit incisor plate is 26.5mm; the front and rear adjustment range of the adaptor plate is 40mm.

68076 Tree Shrew Anesthesia Adaptor
For tree shrews, with inhalation anesthesia mask.
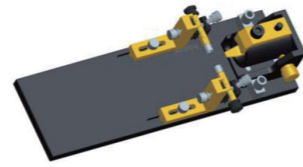
68075 MRI Compatible Tree Shrew Adaptor Kit
Suitable for MRI environment, with inhalation anesthesia mask.

Spinal Cord Adaptor
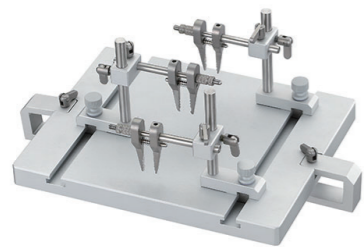
68091 Rat and Mouse Spinal Cord Adaptor
Universal for rats and mice, it can be fixed on the base plate of the 68000 series stereotaxic instrument, used for spinal cord injection, stimulation, impact, etc. It includes 3 spinal cord clamps, the clamps can be adjusted up and down by 56mm, and can be slid back and forth and locked at any time.
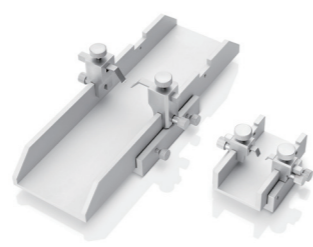
68094/68095 Spinal Cord Adaptor
The rat spinal cord adaptor (68095) and the mouse spinal cord adaptor (68094) can be applied to the 68099 II spinal cord precise impactor. The width of the rat groove is 54mm, and the width of the mouse groove is 29mm. A pair of fixed teeth are fixed in opposite directions, which is more stable. The method of supporting the spinal cord from below the bilateral transverse processes can avoid the depth measurement error caused by the animal's breathing, and avoid tthe sagging of the spinal cord during impact.

Stereotaxic Anesthesia Nosecone Masks

First understand what is an active and a passive mask.
Active and passive masks are constructed differently. Active masks must be equipped with a gas evacuation apparatus to prevent exhaust gas leakage into the air, while passive masks do not need to be equipped with a gas evacuation apparatus, otherwise the animals were not anesthetized deeply.
● Active recovery means that the exhaust gas is actively sucked into the filter canister by the gas evacuation apparatus to avoid leakage of anesthetic gas into the environment.
● Passive recovery means that no gas evacuation apparatus is used for suction, and the exhaust gas flows naturally into the filter canister.
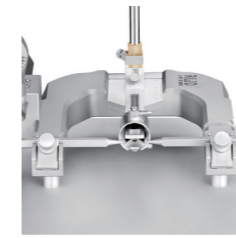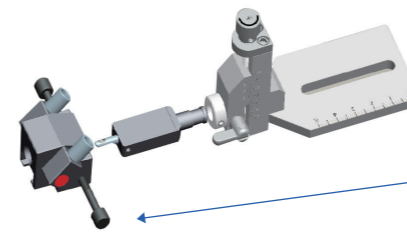
68665
68663
68663-S

68666
68667

The mask contains round and square tooth bars for use with 68030,68036, 68055,68065,68087

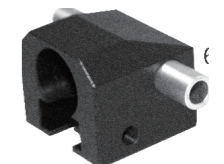The mask can be used with 68021,68063,68088

68005

68601

The mask contains round and square tooth bars for use with 68030,68036, 68055,68065,68087

68602
The mask can be used with 68021, 68063,68088
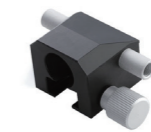
68663-S/68663/68665(Mouse)

68666/68667(Rat)

Gas Filter Canister + Gas Evacuation Apparatus

Active Recovery System

68601(Mouse)

68602(Rat)

Gas Filter Canister only

Passive Recovery System

Stereotaxic Active Nosecone Masks

The active masks contain inlet and outlet tubes, and the mouse masks contain round and square nose bars (incisor bars).
The cross-sectional size of the square bar is 5*5mm.

Model	Product Description	Compatible Adaptor
68663-S	Stereotaxic Anesthesia/Evacuation Mask-mice or neonatal rats(10-20g)	68055,68030,68065,68036,68014,68087
68663	Stereotaxic Anesthesia/Evacuation Mask-mice or neonatal rats(20-30g)	68055,68030,68065,68036,68087
68665	Stereotaxic Anesthesia/Evacuation Mask-mice or neonatal rats(30-70g)	68055,68030,68065,68036,68087
68666	Stereotaxic Anesthesia/Evacuation Mask-rats(<300g)	68021,68063,68088
68667	Stereotaxic Anesthesia/Evacuation Mask-rats(>300g)	68021,68063,68088

Stereotaxic Passive Nosecone Masks

The mouse masks contain round and square nose bars (incisor bars). The cross-sectional size of the square bar is 5*5mm.

Model	Product Description	Compatible Adaptor
68601	Stereotaxic Anesthesia Mask Kit-mice or neonatal rats (<70g, Canister&Tubing included)	68055,68030,68065,68036,68087
68602	Stereotaxic Anesthesia Mask Kit-rats (<300g, Canister&Tubing included)	68021,68063,68088

Ear Bars

The ear bars of classic and automated stereotaxic instrument

68301 Rat 18° Ear Bars
Rat 18°ear bars with a tip radius of 0.8 mm, easy to enter the rat ear canal and fix the skull easily.
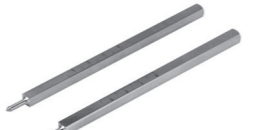
68302 Rat 45° Ear Bars
Rat 45°ear bars with a tip radius of 0.8 mm.

68305 Rat 45° Hollow Ear Bars
The diameter of the front hole is 1.0mm, and the diameter of the rear hole is 3.0mm. The hole through for auditory stimulation.

68060 Rat Ear Bars Adaptor
It can be used with the 68301 to immobilize animals in a stereotaxic frame.

68306 Mouse 60° Ear Bars
The tip is at an obtuse angle of 60° to avoid damage to the skull of the mouse.

68307 Mouse Serrated Ear Bars
The ear bars adopt the hollow serrated, which have a large contact area with the animal's head, will not puncture the mouse's skull and cause damage, and can stably hold the animal's head.

68308 Mouse O-shaped Ear Bars
The O-shaped rubber ring is used as the fixed contact surface of the mouse to ensure that the head is fixed while avoiding damage to the skull of the animal.

68314 Mouse Height Adjustable Serrated Ear Bars
The tip of the ear bars is serrated, and the height of one of the ear bars is adjustable. The adjustment range is -5~+5mm.

68303 Cat/Monkey 18° Ear Bars
Suitable for cats, dogs, monkeys, pigs, etc., the tip of the ear bars is 18°.

68304 Cat/Monkey 45° Ear Bars
Suitable for cats, dogs, monkeys, pigs, etc., the tip of the ear bars is 45°.

68413 Elevated Ear Bars
Elevated ear bars can raise the animal's head by 50mm, and the square rods are marked with 55mm engraved lines with an accuracy of 1mm.

The ear bars of rotational digital stereotaxic instrument

The ear bars cross-section of the rotational digital stereotaxic instrument is 5mm*5mm, which cannot be used for the classic stereotaxic instrument.

69116 Rat 18° Ear Bars
Cross section 5*5mm, only suitable for rotational digital stereotaxic instrument.

69114 Mouse 60° Ear Bars
Cross section 5*5mm, only suitable for rotational digital stereotaxic instrument.

Holder

All RWD holders (except the rotational digital stereotaxic instrument) are connected to the stereotaxic instrument with a Vattachment (68207) that is included in each holder. The diameter of the rod of the holder is 8mm. The special holder attachment (69207) is connected to the rotational digital stereotaxic instrument. Ordinary holders are used on the rotational digital stereotaxic instrument, only need to replace the connector. The holder (except the rotational digital stereotaxic instrument) can be used with standard stereotaxic instruments of major brands on the market.

Can the syringe pump be connected to the stereotaxic instrument?

Syringe pumps that can be fixed on the stereotaxic instrument generally have a fixing rod. You can confirm whether the diameter of the fixing rod is 8mm. If so, you can use the connector to connect to the stereotaxic instrument (select 68207 for the stereotaxic instrument, and 69207 for the rotational digital stereotaxic instrument).

68207 V attachment

69207 attachment

Attachment
OD:8mm

Attachment included with each holder
OD:8mm

How to choose a holder?

Each holder is marked with the range of objects that can be gripped, so it is necessary to confirm the diameter of the gripped object before selecting a suitable holder. For example, the clamping range of 68201 is 0.3-1.5mm, then electrodes or needles within this range can be clamped.

Electrode Holder

68201 Standard Probe HolderCorner
Widely used for clamping injection needles or electrodes,clamping range: 0.3-1.5mm.

68213 Standard Probe HolderSide
The design structure is similar to the 68201 standard holder, but it is applicable to a wider range of electrodes or micro-injection needles, with a clamping range of 0.4-4.0mm.

68210/68211 Electrode Holder
The clamping range of 68210 is 0.7-2.5mm, and the clamping range of 68211 is 2.1-5.0mm. Using two 68210 or two 68211 (dual manipulators) can make the cannula or electrode close to 0.3mm.

68216 Electrode Holder
The clamping range is 0.4-1.5mm. Using two 68216 (dual manipulators) can make the cannula or electrode close to 0.2mm.

Cannula Holder

68217 Cannula Holder
The clamping part is made of plastic, suitable for clamping single or double cannulas with an external diameter (E value) of 3.5mm (fixed value) of the cylindrical plastic base.

68205 Cannula Holder
The clamping part is made of metal, suitable for clamping single or double cannulas with an external diameter (E value) of 3.5mm (fixed value) of the cylindrical plastic base.

68214/68215 Ceramic Ferrule Holder
Designed for optogenetic experiments, compatible with ceramic ferrules and metal ferrules, can be easily removed after implantation, 68214 is suitable for cannula or ceramic ferrule with a diameter of 1.25mm, 68215 is suitable for cannula or ceramic ferrule with a diameter of 2.5mm ferrule. Note that the clamping diameter is a fixed value.

68221 Cannula Holder
Suitable for clamping single or double cannulas with an external diameter (E value) of 3.5mm (fixed value) of the cylindrical plastic base.

Multi-function Holder

68202/68206 General Probe Holder
Using lateral fixation, it can hold micro-syringe barrels, large-diameter electrodes and microdrill handles, etc. The clamping range of 68202 is 6mm-12mm, and the clamping range of 68206 is 3mm-12mm.

68218 Syringe Holder
It is mainly used for micro injection drug administration experiments. It can fix the syringe barrel and needle at the same time. The syringe clamping is more stable. The syringe barrel clamping range is 6mm-12mm, and the syringe needle clamping range is 0.3mm-1.5mm.

68605 Microdrill Holder
The microdrill holder fixes the microdrill (78001) to the manipulator of the stereotaxic instrument, and controls the drilling depth through the lifting of the stereotaxic. The operation is convenient and precise, and avoids damage to the animal brain tissue. The clamping diameter is 14.5mm (Fixed value).

68228 Cordless Microdrill Holder
The microdrill holder fixes the cordless microdrill (87001) to the manipulator of the stereotaxic instrument, and controls the drilling depth through the lifting of the stereotaxic. The operation is convenient and precise, and avoids damage to the animal brain tissue. The clamping diameter is 19.5mm (Fixed value).

68606 Manual Syringe Pump
Precise control of micro-injection and withdrawal, compatible with 1-1000μL syringes of different specifications, the recommended displacement accuracy is 10μm, and the displacement distance is 25mm. The clamping range of the syringe barrel is 6mm-12mm, and the clamping range of the syringe needle is 0.3mm-1.5mm.

68106 Headstage Holder
It adopts C-shaped design with side opening, which is convenient for fixing micro-amplifiers or headstage (such as TBSI headstage, Plexon microelectrode amplifiers), and the clamping range is 0.1-7.0mm.

68397 Rat Level Calibrator
The 68397 rat level calibrator refers to the atlas of rats (compiled by Paxinos and Watson, 5th edition), with Bregma and Lambda as reference points, corresponding to two points B(0) and L(0) respectively. The distance between the two points is about 7.67mm. When the rat skull is in a horizontal state, these two points should be in the same horizontal plane. After rotating the calibrator 180 degrees, the tip of the B(2.25) is positioned 2.25mm above the tip of the L(0).

Animal Ventilator

VentStar Small Animal Ventilator

Animal ventilator is the most commonly used equipment to assist animal respiration. It is widely used in basic medicine, clinical medicine, animal medicine and other scientific research experiments (such as myocardial ischemia model making, lung function evaluation), respiratory management, animal first aid and respiratory treatment in clinical surgery. Small animal ventilator suitable for 10g-1kg mice, rats and guinea pigs and other small animal.

Suitable for mice, rats and guinea pigs and other animals weighing 10g-1kg

Input power range: 100 ~ 240V, 50/60Hz, 24V, 40W, 1.67A adapter DC power supply, safe and effective

Small size, compact layout, flexible operation

Provide safe and effective intermittent positive pressure ventilation (IPPV), volume and pressure modes are available.

7 inches LCD touch screen, wide-angle visual

The pressure-time graph can be displayed in real time in volume and pressure modes

Sound, intelligent text, error code and other fault alarm alerts

10 groups of different respiratory parameters can be stored and called, which is convenient and efficient

R415-AP

Set the respiratory parameters such as PIP/PEEP/Sigh/INSP.Hold/EXP. Hold

The breathing frequency can be switched between 10 ~ 300bpm

Tidal volume range:0.05ml ~ 5ml

After sumitting the animal weight, and the device automatically sets the reference breathing parameters

Airway pressure range: 1~50cmH₂O, the accuracy range: ±0.7 cmH₂O; positive end expiratory pressure (PEEP) range is 0~10cmH₂O

The adjustable range of I : E ratio is from 20% to 80%; the sigh increases the tidal volume from 0 to 20%, and can set auto–sigh once after every 10 to 999 breaths or manual control

Model	Product Description
R415	Small Animal Ventilator
R415-AP	Accessory package for Anesthesia and Ventilator

RE20 Animal Endotracheal Intubation Kit

Noninvasive endotracheal intubation kit for animals guided by cordless optic fiber to support mouse, rat and other similar small rodents in a stable and comfortable position for experimenters to perform endotracheal intubation, drug infusion and other operations, effectively reducing animal damage, and enhancing the experimental efficiency and precision of the experiment results.

Features:

● PU material, moderate soft and hard, comfortable and not harmful to animals;

● The cordless portable optic fiber lighting system, which has been patented for an invention, improves the visibility of the airway and facilitates users to quickly and accurately finish endotracheal intubation;

● The stand angle can be adjusted, including: 45°, 60°, 90°, to meet the requirements of users with different operation habits;

● An endotracheal magnifier with auxiliary positioning function and a tracheoscope mirror that helps to confirm intubation result are more user-friendly.

Order Information:

Model	Product Description
RE20-R	Endotracheal intubation tube for rat (length 50mm)
RE20-M	Endotracheal intubation tube for mouse (length 25mm)

R420 Veterinary Electric Turbo Ventilator

With high-performance turbine drive, R420 ventilator no drive gas needed! It's more cost-effective and more convenient. In addition, its easy-to-use working modes and comprehensive monitoring of animal ventilation state can ensure safe ventilation. There are 3 modes of operation, including VCV, PCV and APNEA.

Two bellows: 0-300ml & 300-1500ml.

Turbo Drive: No Drive gas needed, More Cost-effective and Convenient.

Sidestream EtCO₂ monitoring function (optional).

Remote control of inspiratory hold (Optional): During a CT scan of the chest or abdomen, help the animal to hold the inspiration and complete the CT scan.

Smart preset: Once inputting animal weight, smart respiratory parameters can be called up.

R420

● Precise ventilation: Minimum tidal volume down to 4 mL.
● Multiple alarms: Multiple alarms and clear handling prompts.
● PEEP function: Help veterinarians solve low SpO₂ problems during surgery.
● Auto system leak test: Graphical guidance for quick start.
● Guard "breathing" safety: Accurate and continuous monitoring of respiratory status, such as airway pressure - time chart, minute volume, EtCO₂, and etc.

Order Information:

Model	Product Description
R420	Veterinary Electric Turbo Ventilator
R420-Plus	Veterinary Electric Turbo Ventilator ,Including EtCO₂
R420-Pro	Veterinary Electric Turbo Ventilator ,Including EtCO₂, Wireless Hold