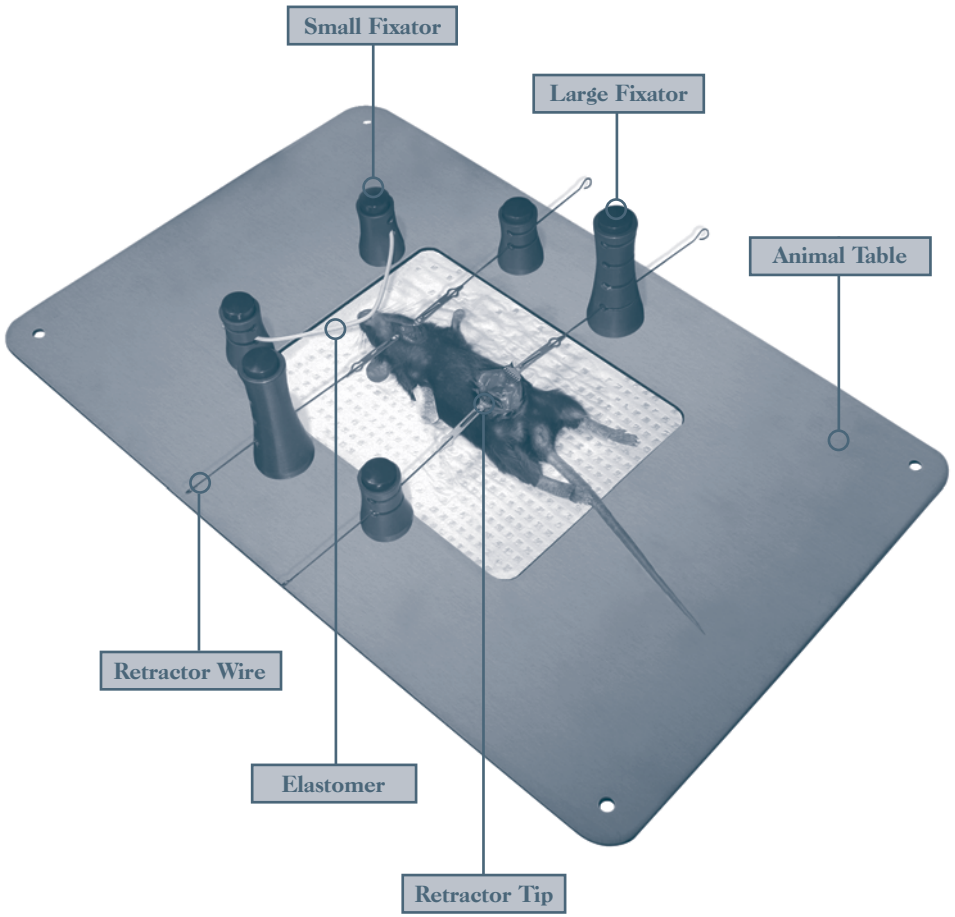
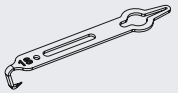
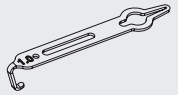
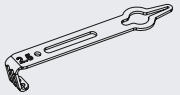
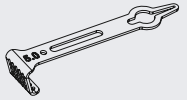
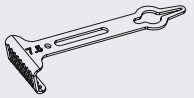
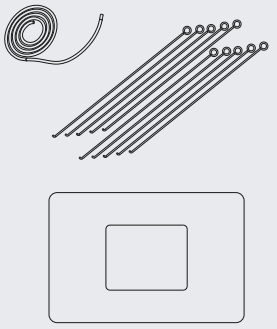
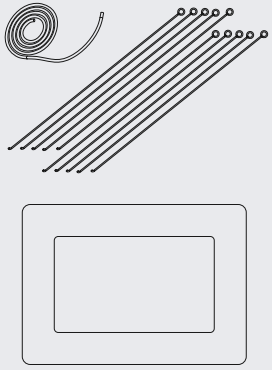
CD+LABS

The CD+Labs System sets a new standard of procedural control. The fully integrated procedural and stabilization system provides precisely controlled retraction at the operative site. The CD+Labs System allows researchers to operate independently, eliminating the requirement for an assistant or improvised assistive devices. The system removes the complexities and distractions of improvised set-ups, allowing the researcher to focus full attention on the surgical procedure.

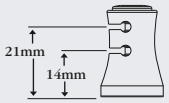
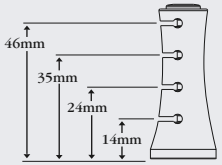
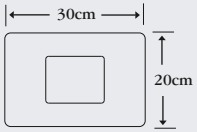
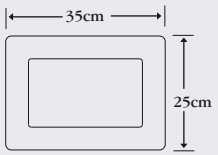
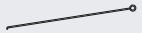
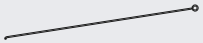
+ **Eliminates the need for an assistant**
+ **Reduces setup and procedure time**
+ **Provides superior control**
+ **Improves visualization**



Part #	Description
SMALL ANIMAL SURGERY SYSTEM :: COMPONENTS (Supplied Non-Sterile)	
ACD-009	**Retractor Tip Sharp - 1mm** (10 per pack) 
ACD-010	**Retractor Tip Blunt - 1mm** (10 per pack) 
ACD-011	**Retractor Tip Blunt - 2.5mm** (10 per pack) 
ACD-012	**Retractor Tip Blunt - 5mm** (10 per pack) 
ACD-013	**Retractor Tip Blunt - 7.5mm** (10 per pack) 
ACD-014	**Small Animal Set** *(e.g., mouse)* Contains: Qty.1 - 20cm x 30cm table - with window Qty.6 - 3cm fixators Qty.10 - 10cm wire retractor handles Qty.1 - 2 meter roll elastomer Qty.10 - assorted retractor tips - two of each style User documentation *(english)* 
ACD-015	**Mid Size Animal Set** *(e.g., rat)* Contains: Qty.1 - 25cm x 35cm table - with window Qty.6 - 6cm fixators Qty.10 - 14cm wire retractor handles Qty.1 - 2 meter roll elastomer Qty.10 - assorted retractor tips - two of each style User documentation *(english)* 

CD+LABS
Small Animal Surgery System

Components

Part #	Description	
SMALL ANIMAL SURGERY SYSTEM :: COMPONENTS (Supplied Non-Sterile)		
ACD-001	**Magnetic Fixator with Spring Lock** 3cm tall - Two locking jaws	
ACD-002	**Magnetic Fixator with Spring Lock** 6cm tall - Four locking jaws	
ACD-003	**Small Animal Table 20cm x 30cm** *(e.g., mouse)* With 13cm x 10cm Window	
ACD-004	**Mid Size Animal Table 25cm x 35cm** *(e.g., rat)* With 25cm x 15cm Window	
ACD-005	**Retractor Wire - 10cm** 10 per pack	
ACD-006	**Retractor Wire - 14cm** 10 per pack	
ACD-007	**System Elastomer** 2 meter roll	
ACD-008	**Retractor Tip - Sample Package** 2 each style, 5 sizes	

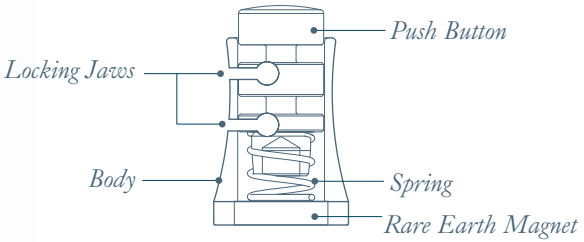
The CD+Labs System is unlike any other, providing glove-friendly, operative simplicity. With the touch of a finger, the system can be set, released and manipulated. This is made possible by patented mechanisms in the fixators which use rare earth magnets and push-button spring locks to form a fully integrated small-animal procedure system.

All system components are compatible with standard lab instrument cleaning systems.

THE SYSTEM COMPONENTS

Fixators - The Heart of the System

Fixators hold retractors. They contain rare earth magnets that attach anywhere on the animal table. A push-button top operates multi-level locking jaws that grip wires or elastomers firmly. They can be adjusted linearly or rotationally with finger-tip release. Complete depression of the push-button allows for insertion of the wires or elastomer while partial depression of the push-button allows for adjustment. Fixators can also lock onto other lab components that require stabilization in the surgical setting, such as neurological or rectal probes or anesthesia delivery systems. The magnetic field is well controlled within the fixator to minimize interference with sensitive instrumentation. In fact, at a distance of just a few centimeters the effects of these small but powerful magnets are completely masked by Earth's ever-present magnetic field.

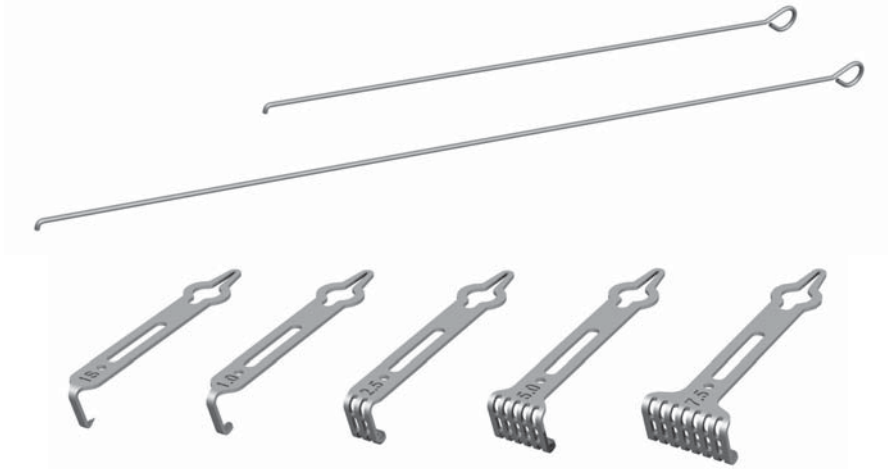


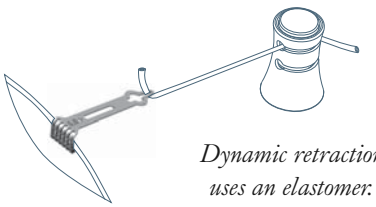
Animal Tables

Animal tables are made of ferro-magnetic stainless steel and incorporate a window for compatibility with body temperature maintenance systems. Tables are available in a variety of sizes and shapes to suit a range of animals.

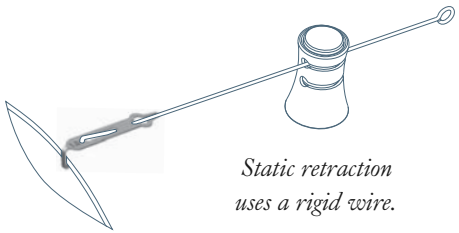
Retractors

CD+Labs System retractor wires are formed from light, flexible stainless steel. This simple approach produces an economical instrument that performs its job with minimal clutter, while providing superb control and feel. Retractor wires can either be used on their own to retract or manipulate tissue or retractor tips can be fitted to provide a wide range of retractor styles. Retractor wires engage and lock into the fixator jaws at the desired elevation allowing both linear and rotational adjustment over the entire length of the wire. One end of the wire is formed in a loop to provide grip for a gloved hand, and the business end is formed into a right angle hook that can retract on its own or lock to a range of retractor tips. The wires can also be re-formed to create restraints or engage other lab apparatus that need to be secured in the surgical field. Wires are available in 10 and 14 cm lengths for mouse and rat procedures. Retractor tip widths range from 1 mm to 7.5 mm, plus a single point, sharp tissue hook. Each tip can be locked onto a wire for static retraction, or affixed to an elastomer to form a dynamic retractor.





Dynamic retraction uses an elastomer.



Static retraction uses a rigid wire.

CD+LABS INNOVATION

Sometimes an innovation is so intuitive it quickly displaces all predecessors. The eyewear industry's discovery of rare earth magnets created the magnetic clip-on sunglasses that are quickly replacing their mechanical predecessors. The innovation is so intuitive to use that it requires no complex instruction.

The CD+Labs System is just such an innovation. Intuitive and purposeful, once adopted it leaves researchers reluctant to consider procedures without it. The reduced set-up time, superb control and the improved visualization eliminate the awkwardness of earlier methods, allowing researchers to focus their full attention on the delicate procedure at hand.

ORIGINS OF RARE EARTH MAGNETS

The use of rare earths in magnets grew out of the nuclear fission testing done at the Oak Ridge National Laboratories in the early 1940s. Very pure rare earths (the elements from 57 to 71 on the atomic scale) were a by-product of the testing. General Electric found that combining rare earths with cobalt and iron resulted in magnets with strength-to-weight ratios 10 times that of the most advanced ceramic magnets of the day and 200 times that of traditional carbon steel magnets. Rare earths earned their name from their uncommon similarity to each other rather than actual rarity in nature, although the only country with adequate, easily mined sources is China, the source of most such magnets today. The feature that makes rare earths so effective in magnets is the fact that they have a very pronounced unbalanced electron spin. It is by orienting their unfulfilled yearnings in one direction that we can make such great magnets of them.