

Video Article

Leica Angle Two Computer-guided Stereotaxic Demonstration - ADVERTISEMENT

New Author ¹

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Abstract

Research neuroscientists, specifically those conducting brain or spinal research involving surgery, injury, measurement, or behavioral analysis in small animals (mouse, rat, hamster, songbird, non-human primate, chick, etc.) which requires precise, minimally invasive techniques (i.e. electrophysiology; injection of drugs, viruses, cells) within the skull, will have interest in this demonstration video.

Stereotaxic surgery in lab animals, specifically mice and rats, has long been used for precisely targeting a three dimensional coordinate in the brain to study localization of function.

This product demonstration video from Leica Microsystems and myNeuroLab.com illustrates usage of the innovative Leica Angle Two™ computer-guided stereotaxic instrument for mouse, rat and other lab animals. The Angle Two™ allows neuroscientists to be more precise, repeatable in targeting specific areas of the brain for their research studies. Charles Scouten, PhD, Product & Innovation Manager at Leica Microsystems, guides the viewer step-by-step through the usage of this unique stereotaxic instrument.

The Leica Angle Two™ offers the following features:

- Computer-guided stereotaxic apparatus
- Computer-calculated target acquisition from any angle
- Digital encoders on both Rotation and Tilt
- "Virtual Skull-Flat" feature measures and incorporates skull tilt (pitch) into target calculation
- Atlas incorporated into Angle Two™ software, rat, mouse, etc.
- Fine Drive on Dorsal-Ventral drive
- Optional Video Microscope - 70x magnification, mounts behind stereotaxic out-of-the-way
- Digital encoders on all three linear axes
- 10 micron resolution on linear axes
- Triple lead screws on all three axes for easy movement without slipping, regardless of angle or weight of probe attachment
- Dovetail on Anterior-Posterior for support during movement
- Compression Lock on rotational axes for superior slip prevention with no pin to lose

myNeuroLab.com, a Leica Microsystems company, is home to the largest selection of neuroscience instrumentation. myNeuroLab.com offers complete specifications on a significant array of tools: stereotaxic instruments, sacrifice perfusion apparatus, controlled cortical impactors, micromanipulators, ventilators, vibratory, radial and sliding microtomes, glass micropipette pullers, sterilizers, gas anesthesia, fiber optic illuminators, and other surgical and animal laboratory equipment used in neuroscience research applications.

[Click here to learn more about Leica's Neuroscience Solutions.](#)

Video Link

The video component of this article can be found at <http://www.jove.com/video/2217/>