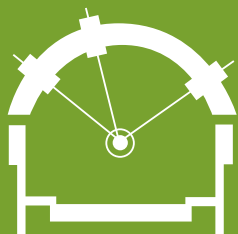


CRW Precision™ Arc

stereotactic system



- Trusted Accuracy
- Simplified Setup
- Unrivalled Support

STEREOTAXY

SIMPLIFIED

The CRW Precision™ Arc system was developed in direct response to feedback from stereotactic and functional clinicians throughout the world. The end result is a simpler, easier to use system for stereotactic procedures.

CRW Precision™ system enhancements include:

- Four steps to setup the system
- Captured screws to decrease inadvertent losses and potential need to re-sterilize if dropped during a procedure
- New finish process to increase legibility and durability under repeated sterilization and cleaning cycles
- Knurled tri-wing thumbscrews to increase grip at each screw to secure coordinate settings
- Calibrated fixed system pointer to confirm target settings with CRW® Phantom base
- Serial number identification of all components calibrated to the individual CRW Precision™ Arc
- Captured thumbscrews to remove and attach the anterior sector plate
- No tools are required to assemble or disassemble the system for the procedure, sterilization or cleaning



Sterilization case with:

- Diagrams depicting 4 steps to setup the system
- Integrated base to setup the system
- Shadow printing of each item in the sterilization to easily identify where it should be placed for sterilization and storage
- Sterilization via EtO, Steam or STERRAD®



TRUSTED ACCURACY

Since the introduction of the CRW® system in 1988 the CRW® name has been synonymous with accuracy, reliability, simplicity and versatility for stereotactic procedures.

The introduction of the CRW Precision™ Arc refines these principles while maintaining the core design and functionality of previous CRW® systems.

CRW Precision™ Arc systems allows clinicians to repeatedly target with sub-millimeter accuracy. Rigid patient stability is maintained throughout the stereotactic procedure. The CRW Precision™ Systems all utilize:

- Secure four-pin fixation of the head ring to the patient
- Secure fixation to the Integra MAYFIELD® head holder
- High tensile strength aircraft grade aluminum construction
- Dual lock, tri-wing screws to secure coordinate settings
- A unique phantom base (CRWPBS) to provide additional quality assurance through an independent target setting verification
- Rigorous error checking within the software planning system to assure proper setup and orientation



*CRW Precision™ Arc mounted on
CRW® Phantom Base*



VERSATILE

The CRW Precision™ Arc system is unique in that it allows the clinician to place the arc in a variety of orientations without having to change the orientation of the head ring. Its target-centered arc principle means that all arc trajectories pass to the target, including transphenoidal, lateral, posterior fossa and standard approaches.



Standard Approach



Lateral Approach



Transphenoidal Approach

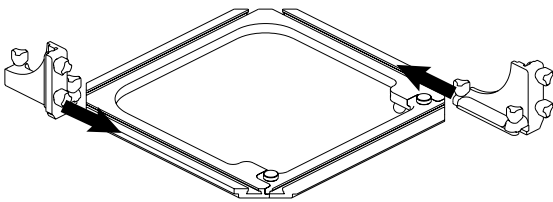


Posterior Fossa Approach

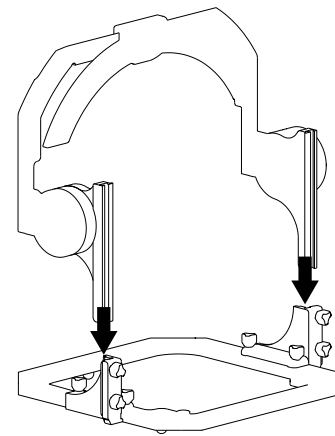


SIMPLICITY

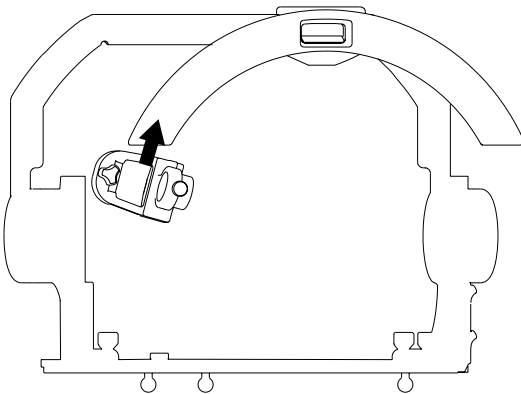
Four Simple steps to setup. The goal of the design team was to create an easier to use CRW® system while maintaining its versatility and accuracy. The result is a system that can be setup and ready to use in four steps, while being accurate to 0.5mm at all its settings.



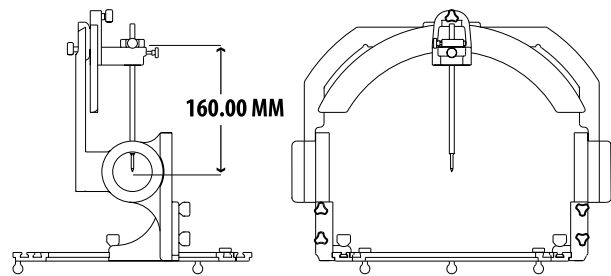
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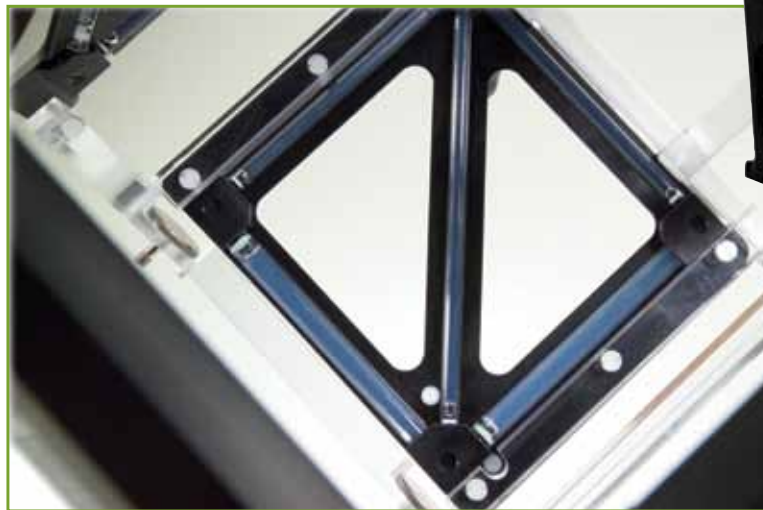
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The CRW Precision™ is calibrated to be accurate to $\pm 0.5\text{mm}$ for all new systems as well as all repairs and calibrations.

INNOVATIVE

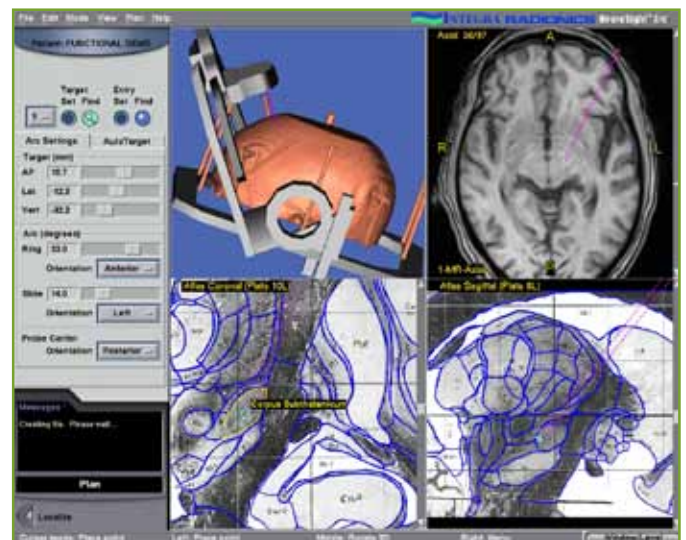
The Luminant® MR/CT Localizer represents the only MR/CT localizer with pre-filled rods and does not require daily servicing. The Luminant® localizer is a fast and reliable way to obtain clear and distinct fiducial points in both MR and CT scanners.

- Easy attachment to head ring via captured thumbscrews
- Open lightweight design, with removable posterior plate
- MR and CT compatible
- Scanner independent—No need to clamp to CT or MR to scanner table



NeuroSight® Arc anatomical planning software generates precise computer images of target structures enabling the surgeon to select the optimal approach. The versatile software is ideal for planning biopsies, stereotactic craniotomies, and placing electrodes during functional procedures. Its features include:

- Simple intuitive interface
- Midline correction to correct for head ring tilt
- Preplanning on non-localized images
- Auto Targeting based on orthogonal calculations from IC line
- Integrate the Atlas software directly into the plan and overlay the trajectory
- Universal “MagViewer”. Click and hold for quick and easy magnification of any scan. Makes choosing points quick, easy, and accurate
- Image Smoothing is automatically performed on all scans making the images and structures clear and easy to see even at a high zoom level



CUSTOMIZATION

The CRW™ Precision stereotactic system represents a single planning and delivery platform allowing surgeons to embrace a constantly expanding range of neurosurgical therapies and techniques.

IMAGING

- Localization: CT (BRWLF) and MR/CT (Luminant® localizer)
- Head Rings: CT (HRAIM) and MR/CT (Universal Compact Head Ring)
- ImageFusion™ : CT and MR correlation software

SURGICAL TOOLS

- Nashold Disposable Biopsy Needle
- Radionics® CRW® BiopsyPlus Kit
- Standard and Salzman Drill Kits
- Standard and Digital Probe Microdrives
- Guide Tubes, Cannulas, Stylets

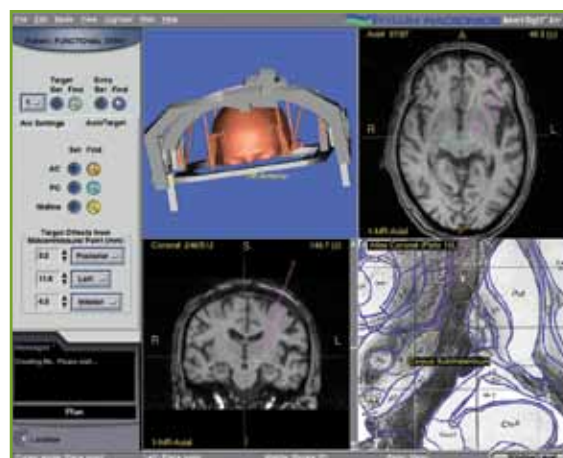
PLANNING SOFTWARE

- NeuroSight® Arc planning software streamlines and optimizes target and trajectory selection for precise anatomical planning
- ImageFusion™ software automatically correlates thousand of points from two image sets, providing true volumetric fusion of anatomical data sets
- AtlasPlan™ software is seamlessly integrated into the planning process, correlating user defined target and trajectory settings with the Schaltenbrand & Wahren* atlas
- StereoCalc™ software is an easy-to-use Windows® based solution for target and trajectory coordinates

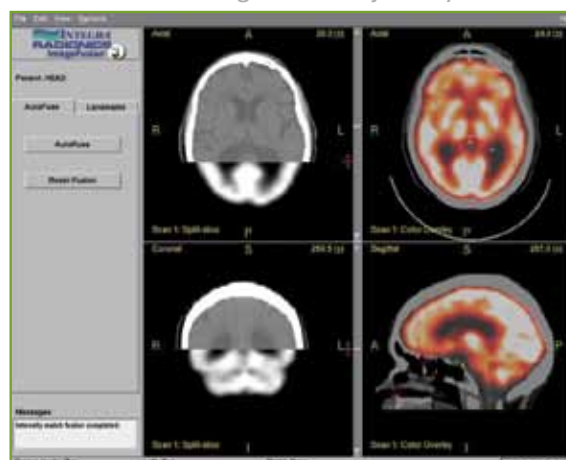
PATIENT ACCESS

- Head Ring Positioner
- Ear Bar Positioners
- Head Ring Extenders
- Standard and Flat MAYFIELD® Adapters
- 30° Probe Holder Offset
- Removable Anterior Plate
- Lateral and A/P Reticles

* © George Thieme Verlag, Stuttgart/New York



NeuroSight® Arc with AtlasPlan™ Module



ImageFusion™ Software

EFFICIENT

From start to finish, the features of the CRW Precision™ stereotactic system are designed to reduce time in the operating room.

Frame fixation to the patient is done quickly using local anesthetic and four self-penetrating screws which create an immobile and stable platform for scanning, planning and treatment.

Scanning is simplified because no fixation to the scanner table is necessary. Neither StereoCalc™ nor NeuroSight® Arc planning software require orthogonal placement of the localizer within the scanner to generate accurate target and trajectory coordinates.

Together, NeuroSight® Arc and ImageFusion™ software allow trajectory and target planning prior to the day of surgery. The software can be used to acquire a non-localized MR, CT or PET scan and plan a target and trajectory, days before the surgery. That plan is then fused with a localized CT or MR scan taken the day of the surgery to obtain stereotactic coordinates.

Quality assurance is simplified with a variety of tools. A 30 degree offset probe holder gives unobstructed access to the surgical site, head ring extenders shift the scanable volume for deep tumors, a removable anterior plate provides patient comfort and airway access, and ear bar positioners enable anatomical alignment of the head ring.

The unique design of the CRW® Arc allows the head ring to be sterilely draped independently of the arc. This ensures that the sterile field remains uncompromised when the arc is placed on the head ring and when arc target, trajectory, or orientation adjustments are made during the procedure.

The CRW® system includes the surgical tools needed to ensure an efficient and safe procedure. Tissue sampling is efficient and straightforward with the disposable Nashold biopsy needle, or the CRW® BiopsyPlus Kit. The biopsy needles for both are designed with high seal strength between the cannula and needle, and hub and syringe luer.

Repeatable sub-millimetric targeting accuracy with a rigid stereotactic system is essential for patient safety in functional neurosurgery. The CRW® system maintains unparalleled patient stability and frame rigidity during the most demanding procedures.



ENHANCEMENTS

Today's CRW Precision™ Arc stereotactic system incorporates materials, designs, and over 40 years of stereotactic engineering expertise and improvements that greatly enhance its usability and functionality.

Repeatable sub-millimetric targeting accuracy with rigid stereotactic system is essential for patient safety in functional neurosurgery. The CRW® system maintains unparalleled patient stability and frame rigidity during the most demanding procedures.

- CT localizer scoops ensure fit over extended head ring screws and patient nose
- Anodized aircraft grade aluminum to withstand operating room and central processing environments
- Slides, posts, and rings move smoothly ensuring that the target and trajectory coordinates are easily set
- Sub-millimeter settings are achieved with vernier scales at each target setting
- Titanium double locking thumb screws secure all coordinate settings
- A removable anterior sector plate on the arc allows for unrestricted access to the patient's airway and to allow extremely low target frontal approaches
- Lateral and A/P reticules for intraoperative x-rays to visualize device placement at target during procedure



CT scanning setup

Operational setup

MR/CT scanning setup

UNRIVALED SUPPORT

Integra NeuroSciences stands behind the quality and accuracy of every CRW® stereotactic system component delivered to our customers.

Far beyond the delivery of product to your operating room, Integra NeuroSciences provides the quality assurance tools, training, and service to ensure continuous reliability and safety. Service agreements for the CRW Precision™ stereotactic system and software are a key part of the system and are key to maintaining the accuracy and reliability of the system and components. Service programs benefits may include:

- Extended warranty on the CRW Precision™ system and accessories
- Annual calibration, preventative maintenance and refurbishment of the CRW Precision™ system and Phantom Base
- Factory trained technicians providing all support, repairs, preventative maintenance and calibrations
- Genuine Integra parts for all repairs
- 24/7 Technical Support
- Priority loaner equipment and repair status at Integra service centers
- Software upgrades and updates for NeuroSight® Arc, ImageFusion™, AtlasPlan™, and StereoCalc™
- On-site service and support
- In-service training by Integra NeuroSciences representative



CRW PRECISION ARC

Catalog Number	Description	Specification (Items in () are catalog re-order numbers)
CRWPRECISE	CRW Precision Arc System	CRW Precision Arc System Including:

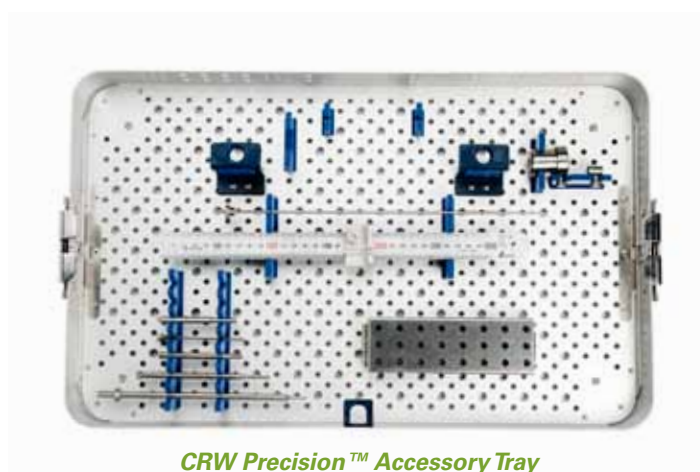


CRW Precision™ Arc

- 1 ea. CRW Precision™ Arc
- 2 ea. Operator's Manual (CRWPMAN)
- 1 ea. Guide Block (CRWPGB)
- 1 ea. Arc System Pointer (CRWFASP)
- 1 ea. 2.7 mm x 76 mm Guide Tube (GT2776)
- 1 ea. 2.7 mm x 116 mm Guide Tube (GT27116)
- 1 ea. 2.7 mm Reducing Bushing (RB27)
- 1 ea. 1.9 mm x 116 mm Reducing Tube (RTNBND116)
- 1 ea. 2.7 Drill Assembly (DA27)
- 1 ea. Keller Depth Gauge (KDG)
- 1 ea. Steel Ruler (SR)
- 1 ea. Sterilization Case Lid (CRWPLCASE)
- 1 ea. Sterilization Case Accessory Tray (CRWACCASE)
- 1 ea. Sterilization Case Component Tray (CRWARCCASE)



CRW Precision™ Component Case



CRW Precision™ Accessory Tray



OPERATE WITH CONFIDENCE™



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MAYFIELD®
Stabilization

Auragen™
Brain Mapping

Ruggles™
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CUSA®
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