CRANIAL ACCESSORIES

18390 | SOFTOUCH REGISTRATION POINTER
Wireless pointer for fast and reliable surface matching registration, as stand-alone registration method or in combination with Z-touch laser registration.
- No facemask, headset or markers needed for scan
- Eliminates need for registration rescans, potentially reducing costs and patient radiation exposure
- Surface point collection without skin shift and in areas not visible to navigation camera
- Unique skin sensing tool tip works through the hairline and even for dry skin conditions
- Multi-color LED for function display and battery level indication
- Exchangeable standard Lithium battery
- Cleaning and surface-disinfection possible
- Requires “Surface Matching Registration Software” (art.no. 21804)
- Requires minimum software versions VV Cranial/ENT 7.9.1, or Kolibri Cranial/ENT 2.7.1

41730 | REFERENCE CLAMP UNIVERSAL (WITH 2 ARRAYS)
Enables flexible and secure positioning of the patient reference array:
- Attachable to various head holders via adjustable screws
- Includes two arrays, for sterile and non-sterile use (registration)
- Wireless and autoclavable design
- Requires Reflective Marker Spheres

41798 | INSTRUMENT ADAPTER ARRAY SIZE M
Tracking array, connected to “Instrument Adapter Clamp”, enables navigation of virtually any pre-existing surg. instrument:
- Array-Clamp interface (STARLINK) allows exchange & integration of different sized instrument adapter clamps, enabling the user to select the best fit for existing surgical instruments
- Precision manufactured stainless steel for high durability
- Wireless and autoclavable design for fast sterilization
- Requires the "Reflective Marker Spheres" and "Instrument Adapter Clamp" for the wireless navigation
41799 | INSTRUMENT ADAPTER ARRAY SIZE ML
Tracking array, connected to "Instrument Adapter Clamp", enables navigation of virtually any pre-existing surg. instrument:
- Array-Clamp interface (STARLINK) allows exchange & integration of different sized instrument adapter clamps, enabling the user to select the best fit for existing surgical instruments
- Precision manufactured stainless steel for high durability
- Wireless and autoclavable design for fast sterilization
- Requires the "Reflective Marker Spheres" and "Instrument Adapter Clamp" for the wireless navigation

41801 | INSTRUMENT ADAPTER ARRAY SIZE L
Tracking array, connected to "Instrument Adapter Clamp", enables navigation of virtually any pre-existing surg. instrument:
- Array-Clamp interface (STARLINK) allows exchange & integration of different sized instrument adapter clamps, enabling the user to select the best fit for existing surgical instruments
- Precision manufactured stainless steel for high durability
- Wireless and autoclavable design for fast sterilization
- Requires the "Reflective Marker Spheres" and "Instrument Adapter Clamp" for the wireless navigation

41802 | INSTRUMENT ADAPTER ARRAY SIZE XL
Tracking array, connected to "Instrument Adapter Clamp", enables navigation of virtually any pre-existing surg. instrument:
- Array-Clamp interface (STARLINK) allows exchange & integration of different sized instrument adapter clamps, enabling the user to select the best fit for existing surgical instruments
- Precision manufactured stainless steel for high durability
- Wireless and autoclavable design for fast sterilization
- Requires the "Reflective Marker Spheres" and "Instrument Adapter Clamp" for the wireless navigation

41874 | INSTRUMENT CALIBRATION MATRIX (Rev.4)
Device for instant intra-operative calibration of the length, diameter and vector of any rigid surgical instrument:
- Precision manufactured stainless steel for high durability
- Wireless and autoclavable design for fast sterilization
- Requires Reflective Marker Spheres for wireless navigation
- Minimum SW version: VV cranial 6.01, -ENT 6.01, -Hip 2.0, -Knee 1.5, -Spine 5.1, Kolibri cranial / ENT 1.0
**41990 | Z-TOUCH LASER POINTER**

Battery powered wireless laser pointer for quick and accurate markerless patient registration:
- No patient markers or fiducials and extra scans required
- Touchless registration eliminates patient skin-distortion
- Pilot laser beam for selective and easy acquisition of optimal anatomical features at the patient’s surface
- Only system to acquire projected 3D laser points directly in the patient coordinate system, maximizing accuracy
- Z-touch comes in a 3-in-one storage case for the Z-touch pointer, Softouch pointer, Brainlab Pointer (sharp or blunt tip), and all related accessories
- Requires "Surface Matching Registration Software" (art.no. 21804)

**52001 | REFERENCE ARM FOR MAYFIELD HEADHOLDER**

Enables flexible, fast and secure positioning of the Reference Array via an multi-articulated arm with 3 joints:
- Single screw attachment direct onto the Mayfield™ Headrest
- Reference Array Connector for dynamic patient tracking
- Wireless and autoclavable design
- Reference Arrays not included

**52122 | SKULL REFERENCE ARRAY**

Reference star for the Skull Reference Array:
- Exact repositioning of star through predefined interface
- Integrated calibration point for instant instrument calibration
- Wireless and autoclavable design
- Requires Reflective Marker Spheres

**52127 | HANDLE FOR BLADES KLS MARTIN**

Handle for screwdriver blades or drill bits
- Used in combination with Skull Reference Array
- Requires article 52126 (Drill Bit 1.1mm) or article 52171 (Screwdriver Blade KLS MARTIN)
52129 | SKULL REFERENCE BASE
Provides headrest free reference basis and dynamic tracking:
- Enables flexible patient re-positioning and head movement
- Free positioning & variable fixation direct to bone structures
- Allows access to virtually any desired cranial site
- Stable fixation based on 3 cantilevers equipped with spikes
- Single screw fixation
- Precision manufactured stainless steel for high durability
- Wireless & autoclavable design for quick & easy sterilization
- Includes one base-plate
- Requires “Reflective Marker Spheres” for wireless tracking
- Requires two “Skull Reference Arrays”
- Requires 52170 Disposable KLS Martin Self-drilling Screw (recommended) with 52171 Screwdriver Blade and 52127 Handle for Blades
- Alternative: Requires 52128 Disposable KLS Martin Self-tapping Screw (compatible) with 52124 Screwdriver, 52127 Handle for Blades and 52126 Drill Bit

52171 | SCREWDRIVER BLADE KLS MARTIN
Insert for screwdriver handle to be used for Disposable KLS MARTIN Self-drilling Screw (52170) for fixation of the Skull Reference Array

52303 | STERILIZATION TRAY FOR VARIOGUIDE
Sterilization tray for safe, efficient autoclaving and storage of all components of “VarioGuide”

52305 | STERILIZATION TRAY CRANIAL
<table>
<thead>
<tr>
<th>Material</th>
<th>Stainless Steel, Silicone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Characteristics</td>
<td>Height</td>
</tr>
<tr>
<td></td>
<td>129 mm</td>
</tr>
</tbody>
</table>

Storage Capability: Pan and Inset Customized according to cranial application instruments
Sterilization: Autoclavable
53106 | POINTER WITH BLUNT TIP (WITH GAUGE)
Standard instrument for the intra-operative registration of anatomical landmarks and surface point acquisition:
• Rounded tip for sliding and continuous point acquisition
• Wireless and autoclavable design for fast sterilization
• Requires Reflective Marker Spheres for wireless navigation
• Contains a blunt tip pointer and the corresponding gauge to be stored in sterilization tray

55001 | INSTRUMENT ADAPTER CLAMP SIZE S
Used in conjunction with an "Instrument Adapter Array", the instrument adaptor clamp easily integrates a wide range S (small) sized surgical instruments into surgical navigation:
• Adjustable width jaws are sized via adjustment screw
• Clamp-Array interface (STARLINK) for fast attachment and exchange of different sized "Instrument Adapter Arrays"
• Interchangeable Clamp-Array combination enables to select the best fit for existing surgical instruments
• Precision manufactured stainless steel for high durability
• Wireless and autoclavable design for fast sterilisation

55002 | INSTRUMENT ADAPTER CLAMP SIZE M
Used in conjunction with an "Instrument Adapter Array", the instrument adaptor clamp easily integrates a wide range M (medium) sized surgical instruments into surgical navigation:
• Adjustable width jaws are sized via adjustment screw
• Clamp-Array interface (STARLINK) for fast attachment and exchange of different sized "Instrument Adapter Arrays"
• Interchangeable Clamp-Array combination enables to select the best fit for existing surgical instruments
• Precision manufactured stainless steel for high durability
• Wireless and autoclavable design for fast sterilisation

55003 | INSTRUMENT ADAPTER CLAMP SIZE L
Used in conjunction with an "Instrument Adapter Array", the instrument adaptor clamp easily integrates a wide range L (large) sized surgical instruments into surgical navigation:
• Adjustable width jaws are sized via adjustment screw
• Clamp-Array interface (STARLINK) for fast attachment and exchange of different sized "Instrument Adapter Arrays"
• Interchangeable Clamp-Array combination enables to select the best fit for existing surgical instruments
• Precision manufactured stainless steel for high durability
• Wireless and autoclavable design for fast sterilisation
**55004 | INSTRUMENT ADAPTER CLAMP SIZE XL**
Used in conjunction with Instrument Adapter Array, the instrument adaptor clamp easily integrates a wide range XL (extra large) sized surgical instruments into surgical navigation:
- Adjustable width jaws are sized via adjustment screw
- Clamp-Array interface (STARLINK) for fast attachment and exchange of different sized “Instrument Adapter Arrays”
- Interchangeable Clamp-Array combination enables to select the best fit for existing surgical instruments
- Precision manufactured stainless steel for high durability
- Wireless and autoclavable design for fast sterilisation

**55061 | TOOL FOR INSTRUMENT ADAPTER**
Allen key for fixation of Instrument Adapter Array

**55950 | VARIOGUIDE**
Fine-adjustment for navigated frameless biopsies, shunt placements & endoscopic examination guided by the navigation system:
- Allows precise online tracking according to the pre-planned trajectory
- Directly attachable to Mayfield™ Headrest Screw interface
- V-connector adds 2nd Mayfield™ interface for simultaneous use of “Vario Reference Clamp” & “VarioGuide”
- Adapts to fit cylindric instruments of 1.8mm - 8.0mm and up to 300g
- Holds instruments with a length of up to 35 cm
- Not suitable for vibrating tools such as drills
- Includes sterilizable, wireless and pre-calibrated alignment array
- Requires VectorVision cranial/ENT 7.6 or higher or Kolibri cranial/ENT 2.1 or higher
- Requires VectorVision cranial/ENT 7.8 or higher or Kolibri cranial/ENT 2.6 or higher for wizard-guided trajectory alignment with “VARIOGUIDE ALIGNMENT SOFTWARE”
- Requires article 21900 "VARIOGUIDE ALIGNMENT SOFTWARE" for wizard-guided trajectory alignment
- Not compatible with customized "Mayfield Head Clamp" supplied by Maquet

**IGS DISPOSABLES**

**16123 | CAMERA HANDLE DRAPE (200 PCS.)**
Sterile drape for the camera handle enables sterile re-positioning of the camera
- sterile
- single use only
- double packed to allow easy sterile handling
- Compatible with VV² and VVc and Curve
41774 | DISPOSABLE REFLECTIVE MARKER SPHERE (270 PCS)
From NDI, the authorized Brainlab partner for disposable reflective marker spheres. Approved by Brainlab, for use with all Brainlab IGS systems. Localization sphere coated with IR-light, retro-reflective foil:
- Single use, ethylene oxide (ETO) pre-sterilized
- 90 units with 3 spheres per unit
- Increased OR efficiency due to omission of sterilization

41779 | DISPOSABLE BIOPSY NEEDLE 1.8MM / 235MM (5 PCS)
Includes 5 disposable, sterile, pre-calibrated needles for cranial biopsies:
- Outer needle diameter: 1.8mm
- Usable biopsy length: up to 150mm
- Cutting window length: 10mm
- Packaging contains a metal ruler, syringe and syringe adapter in hard blister packaging and 'instructions for use' leaflet
- For use with the Brainlab "Frameless Biopsy System" or Brainlab "VarioGuide"
- Requires minimum VV cranial 7.6 for use with the "Frameless Biopsy System" or Brainlab "VarioGuide" hardware
- Requires minimum VV cranial 7.8 for use with the Brainlab "VarioGuide Alignment Software"

52160 | MULTI-MODALITY DONUT REGISTRATION MARKER (100 PCS)
Multi-Modality Fiducial Markers (donut shape) for Image Guided Surgery to correlate images to patients
- Self-adhesive, lightweight markers avoid tissue indent and provide high wearing comfort
- Marker localization on CT and MR images
- Manual marker detection with iPlan planning software
- Semi-automatic marker detection with iPlan and navigation software (requires minimum version iPlan 3.0 and/or Cranial/ENT 2.1)
- Enables marker-based registration of image data in the OR
- For combined use with Brainlab pointer (blunt tip) or Softouch pointer

54270 | DISPOSABLE STERILE TOUCHPENS (24 PACKS A 5 PCS)
Disposable sterile touchpens to control touchscreen displays.
- Quantity: 24 packs a 5 pcs
- Disposable item
55797 | DISPOSABLE STYLET (10 PCS, PRE-CALIBRATED)
Guiding stylet for navigated placements of shunts or ventricular catheters in neurosurgery. Does not include a shunt or ventricular catheter.
• Enables quick freehand navigated placements of shunts or ventricular catheters
• Compatible with 3rd party (non Brainlab) neurosurgery shunts or ventricular catheters with inner diameter of at least 1.3mm and a length up to 160mm
• Incorporated passive marker plates
• Marker geometry automatically recognized by navigation camera for quick calibration
• Minimum requirements: VectorVision Cranial / ENT 7.9 or Kolibri Cranial / ENT 2.7

MICROSCOPE INTEGRATION
41767-16 | MICROSCOPE INTEGRATION HARDWARE ZEISS
Microscope Integration Kit for Zeiss including cables, interface boards, tracking array and adapters.
Supports following Zeiss microscopes:
1. Zeiss OPMI® Pentero® C Ceiling Unit
2. Zeiss OPMI® Pentero® Floor Stand
3. Zeiss OPMI® Neuro MultiVision™ with NC4 Floor Stand / NC4 CM Ceiling Unit
4. Zeiss OPMI® Neuro CRT with NC4 Floor Stand / NC4 CM Ceiling Unit
5. Zeiss OPMI® Vario with S88, S8 or NC33 Floor Stand
6. Zeiss OPMI® ES with NC31 or NC2 Floor Stand / NC2 CM Ceiling Unit

ULTRASOUND INTEGRATION
22520 | EXTERNAL ULTRASOUND INTEGRATION HARDWARE
Hardware components to integrate existing ultrasound systems with Brainlab navigation platform for image guided surgery:
• Framegrabber board for import of ultrasound video image
• Video cable
• Requires:
  • BNC plug (for Composite signal) with bayonet lock - for integration with VectorVision platforms
  • BNC plug (for Composite signal) with bayonet lock or S-Video plug and signal - for integration with Curve & Kolibri platforms

22531 | ULTRASOUND REGISTRATION PHANTOM DRAPE (20 PCS)
22630 | ULTRASOUND REGISTRATION PHANTOM
ULTRASOUND REGISTRATION PHANTOM
Precision machined device for ultrasound localization:
• Enables the registration of existing US-probes

22520-0 | ADAPTER FOR ULTRASOUND PROBE
Specific adapter designed for integration of a third party ultrasound transducer:
• Wireless design and autoclavable for quick sterilization
• Requires "Reflective Marker Spheres"
• Up to 3 months processing time for existing adapters
• Up to 6 months processing time for new adapters (please provide transducer sample or specify 3D shape & type)