

Scan Protocol - Cranial

How to Scan Cranial Data for the Brainlab RT Elements:

- Brain Metastases 1.x and higher
- Multiple Brain Mets SRS 1.5 and higher
- Cranial SRS 1.0 and higher

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| FOV (Field of View) / Scan Range | <p>All scans</p> <ul style="list-style-type: none"> • Recommended: Restrict scan range (total table movement) to necessary length <p>CT</p> <ul style="list-style-type: none"> • Range from top of the head down to include all critical regions • Table top must be included <p>All Other Scans (additional MRI...)</p> <ul style="list-style-type: none"> • No restrictions except must include outer contour |
| Slice Distance | <ul style="list-style-type: none"> • Sequential or Spiral/Helical scans are allowed • Max. 3 mm slice distance, complete scan. Recommended: 1 mm scans |
| Number of CT Slices | <ul style="list-style-type: none"> • Maximum 399 slices for positioning with ExacTrac |
| Scan Properties | <p>CT</p> <ul style="list-style-type: none"> • Axial only • Scan for soft tissue windowing (with kernel of about 40) <p>MRI</p> <ul style="list-style-type: none"> • Axial, sagittal, coronal • T1, T2 • Contrast agent allowed |
| Gantry Tilt / Angulation | <p>CT</p> <ul style="list-style-type: none"> • Oblique slices are not supported <p>All other scans (additional MRI...)</p> <ul style="list-style-type: none"> • Any kind of gantry angle can be used • Positive and negative values are allowed, but must remain the same during scanning |
| Patient Setup | <ul style="list-style-type: none"> • Strict supine position, head first position only |
| Scan Direction | <ul style="list-style-type: none"> • Cranial to caudal or caudal to cranial |
| Image / Pixel Size | <ul style="list-style-type: none"> • Must remain the same during the scan • Only squared pixels are supported |
| Table Height | <ul style="list-style-type: none"> • Must remain the same during the scan |
| Image Compression | <ul style="list-style-type: none"> • Save images in uncompressed format |
| Matrix Size | <p>Squared recommended, e.g.:</p> <ul style="list-style-type: none"> • 512 x 512 • 1024 x 1024 |

If you need additional information, please contact your local Brainlab support.

