

# ACORN3D® CT SCAN PROTOCOL



The resolution and quality of this CT scan are critical for ensuring a high-quality 3D reconstructions used for pre-operative planning or 3D printing. Please review the following information before proceeding with the scanning process.

## QUESTIONS/CONTACT

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[support@mightyoakmedical.com](mailto:support@mightyoakmedical.com) or (720) 398-9703

## IMPORTANT INSTRUCTIONS

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- Expert clinical judgement should be used on a case by case basis to ensure quality of the scan for intended diagnosis when selecting CT Parameters.
- Parameters listed below are minimum requirements for generating an Acorn 3DP Model.
- Single continuous CT scan with contiguous slices
- Minimize metal artifacts and noise by adjusting dose parameter

## SCAN PARAMETERS

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Localizer	As necessary to identify anatomy and prevent bone cutoff
Scan Acquisition	One continuous axial acquisition of entire region of interest (ROI)
Scan Type	Helical / Spiral
Slice Thickness	Do not exceed 3.00 mm <i>1.25 mm recommended for high quality models</i>
Slice Spacing	≤ Slice Thickness
Display Field of View (DFOV)	≤ 50 cm (500 mm)
Scan Matrix	≥ 512 x 512
Helical Pitch	≤ 1
Gantry Tilt	0°
Recommended kVp	As suitable for body habitus
Recommended mA/mAs	Per automated exposure control or as suitable for body habitus
Recommended Kernel	Soft Tissue, B40s, or equivalent

## RECONSTRUCTION CHECKLIST

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- ✓ Uncompressed DICOM file type
- ✗ **Lossy compression of DICOM images is NOT acceptable**

## UPLOAD INSTRUCTIONS

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1. Archive in uncompressed DICOM format – Do not include viewing software
2. Upload via secure, HIPAA-compliant portal: [mightyoakmedical.com/secureupload](https://mightyoakmedical.com/secureupload)
3. Alternate method – Ship via overnight delivery to:

Mighty Oak Medical  
750 W. Hampden Avenue, Suite 120  
Englewood, CO 80110  
(720) 398-9703

