Hi RES Extremity - (04/18/2011) CTDI: ~13 mGy per acquisition

Used for evaluation of:
- Ankle
- Elbow
- Hand
- Wrist
- Foot/Calcaneous
- Toes
- Fingers

PT Preparation: Place anatomy of interest in true anatomical position (Please note reason for protocol changes)

Billing:
1. CT Upper/Lower Extremity of concern without contrast, with contrast, or without and with contrast
2. IV Contrast if used

Setup:
1. AP and lateral scouts from above/below through above/below the anatomy of interest

DFOV:
1. Focused DFOV ~10 to 15cm; appropriate for anatomy of interest.

Scan Parameters:
1. IV Contrast:
   a. at the discretion of the Radiologist
   b. 80-150 ml of 300 mg/dl non-ionic contrast @ 2 ml/sec
2. 60 second delay
3. Scan from above above/below through above/below the anatomy of interest

Reconstructions:
1. Recon 1 is an axial bone data set
2. Recon 2 is for soft tissue evaluation
3. Recon 3 is for bone MPR’s
   - MPR’s should be reconstructed at 1 mm x 1 mm
4. IF 3D’s are requested an additional reconstruction with a thin increment with a 50% overlap and a smooth kernel/algorithm will be needed. (i.e. Recon 3 with a smooth kernel/algorithm)

PACS Series: Topogram, Axial Bone, Axial ST, Coronal, Sagittal, 3D (VRT) is needed
# HI-Res Extremity

<table>
<thead>
<tr>
<th>Scanner</th>
<th>Phillips 6</th>
<th>Emotion 16</th>
<th>Sensation 16</th>
<th>Definition 20</th>
<th>Sensation 64</th>
<th>GE 4</th>
<th>GE 16</th>
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## Reconstruction Parameters

### Recon 1 for bone

<table>
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<tr>
<th>DFOV</th>
<th>Algorithm/ Kernel</th>
<th>WW/WL</th>
<th>Slice thickness (mm)</th>
<th>Slice Increment (mm)</th>
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### Recon 2 for soft tissue

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<th>DFOV</th>
<th>Algorithm/ Kernel</th>
<th>WW/WC</th>
<th>Slice thickness (mm)</th>
<th>Slice Increment (mm)</th>
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### Recon 3 for 1x1 (1.25 x 1.25) MPR’s

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<tr>
<th>DFOV</th>
<th>Algorithm/ Kernel</th>
<th>WW/WC</th>
<th>Slice thickness (mm)</th>
<th>Slice Increment (mm)</th>
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<tr>
<td></td>
<td>D</td>
<td>B70</td>
<td>.75</td>
<td>.5</td>
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**Ankle**

**PT Preparation:** Place anatomy of interest in true anatomical position (Please note reason for protocol changes)

**Ankle Arthrogram:**
Scan range to include affected ankle

*If a patient presents with either a partial or total joint replacement it is necessary to provide a pre and a post arthrogram CT scan*

**Setup:**
1. Lateral scout to include distal tibia/fibula through entire calcaneus

**DFOV:**
1. Focused DFOV appropriate for anatomy of interest
2. Scan to include distal tibia/fibula through entire calcaneus
Elbow

PT Preparation: Place anatomy of interest in true anatomical position
(Please note reason for protocol changes)

Elbow Arthrogram:
Scan range to include affected ankle
If a patient presents with either a partial or total joint replacement it is necessary to provide a pre and a post arthrogram CT scan

Setup:
1. AP scout from distal Humerus through proximal forearm

DFOV:
1. Focused DFOV appropriate for anatomy of interest
2. Scan to include distal Humerus through proximal forearm

Proper alignment for MPR’s:

- Align axial into true coronal and sagittal planes
- Align coronal into true axial and sagittal
- Align sagittal into true coronal and axial planes
Hand

PT Preparation: Place anatomy of interest in true anatomical position
(Please note reason for protocol changes)

Setup:
1. AP scout to include entire carpals thru entire finger tips.

DFOV:
1. Focused DFOV appropriate for anatomy of interest
Scan to include entire carpals thru entire finger tips.
**Wrist**

PT Preparation: Place anatomy of interest in true anatomical position  
(Please note reason for protocol changes)

Setup:

1. AP scout to include entire wrist.

DFOV:

1. Focused DFOV appropriate for anatomy of interest
2. Scan to include entire wrist.
**Foot/Calcaneous**

**PT Preparation:** Place anatomy of interest in true anatomical position  
*Please note reason for protocol changes*

**Setup:**
Lateral scout to include above ankle joint through entire foot

**DFOV:**
1. Focused DFOV appropriate for anatomy of interest
2. Scan to include above ankle joint through entire foot
3. Limit the DFOV to the hind foot if only concerned about the calcaneous

![Image of foot anatomy](image-url)
Toes

PT Preparation: Place anatomy of interest in true anatomical position
(Please note reason for protocol changes)

Setup:
Lateral scout to include entire toes

DFOV:
1. Focused DFOV appropriate for anatomy of interest
2. Scan to include entire toes
3. Limit the DFOV to the digit of concern and the adjacent digits
**Fingers**

**PT Preparation:** Place anatomy of interest in true anatomical position  
(Please note reason for protocol changes)

**Setup:**
AP scout to include just below wrist through entire fingers

**DFOV:**
1. Focused DFOV appropriate for anatomy of interest
2. Scan to include entire fingers
3. Limit the DFOV to the digit of concern and the adjacent digits