

# CT Bony Pelvis

Updated  
5/5/2024

Indications - trauma, fracture, dislocation, pain, bone tumor, soft tissue mass, infection, abscess, soft tissue gas, osteomyelitis, pre/post surgical evaluation.

Bill under CT Pelvis charges.

## GENERAL SCAN NOTES

Move the patient's arms over his/her head if possible. Remove any metal from the imaging field of view.

Topogram - iliac crests through lesser trochanters (through prosthesis if present).

Craniocaudal scan coverage - iliac crests through lesser trochanters (through prosthesis if present).

Adjust FOV (field of view) on topogram to smallest without cropping anatomy.

IV Contrast: 100 mL Omnipaque-300, inject at 2.5 mL/sec, 60 secs scan delay.

If protocolled as sacrum/coccyx focus:

Coverage - L5 vertebra through bottom of coccyx (top/bottom coverage).

Include both SI joints (side/side coverage).

Technique/Recons - same as bony pelvis.

Bill under CT Pelvis charges.

For GE scanners, it is essential for the 1st recon thickness on the scanner to match the 1st recon thickness in this protocol book for the prescribed Noise Index to be valid. The 1st recon should generally be the thickest recon in the protocol.

## SIEMENS PARAMETERS & RECONS

	Scan Mode	kV	mAs	Care Dose	Care kV & Lvl	Pitch	Acq	Coll	Rot Time	Scan Time
Sensation 16	spiral	120	200	on	NA	0.80	16	1.5	0.5	5.2
Go Up 32	spiral	130	107	on	on 170	0.80	32	0.7	1.0	11.2
Sensation 64	spiral	120	200	on	NA	0.90	24	1.2	0.5	3.9
Definition 64	spiral	120	210	on	on	0.80	16	1.2	0.5	6.5
Go Top 64	spiral	120	131	on	on 170	0.80	64	0.6	1.0	6.5
Drive 128	spiral	120	147	on	on	0.80	32	1.2	0.5	3.3
Force 192	spiral	120	147	on	on	0.80	48	1.2	0.5	2.2

Name of Series	Thick	Interval	Kernel	Window	IR Lvl	Recon Direction
AX BONE	3.0	3.0	Br59 / B60f	bone/osteo	3	head/feet
COR BONE	3.0	3.0	Br59 / B60f	bone/osteo	3	front/back
SAG BONE	3.0	3.0	Br59 / B60f	bone/osteo	3	left/right
AX SOFT	3.0	3.0	Br40 / B31f	abdomen	3	head/feet

Send the above recons on the pre contrast scan (if without only) or on the post contrast scan (if IV given).

Send only the following recon on the pre contrast scan (if without and with).

AX SOFT PRE	3.0	3.0	Br40 / B31f	abdomen	3	head/feet
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# CT Bony Pelvis

## GE PARAMETERS & RECONS

	Scan Type	SFOV	kV	mA Range	Noise Index	Smart mA	Slice Thick	Beam Coll	Pitch	Speed	Rot Time	Dose Red	ASIR	Scan Time
LS 16	helical	large	120	100-440	19.09	on	2.5	20	1.375	27.50	0.5	NA	NA	3.6
Opt 540	helical	large	120	100-440	19.09	on	2.5	20	1.375	27.50	0.5	NA	NA	3.6
LS VCT 64	helical	large body	120	120-450	11.50	on	2.5	40	0.984	39.37	0.5	30	70	2.5
Disc VCT 64	helical	large body	120	100-700	14.14	on	2.5	40	0.984	39.37	0.8	NA	NA	4.1

Name of Series	Thickness	Interval	Recon Algorithm	Window Width/Level	Recon Direction
<b>AX BONE</b>	<b>2.5</b>	<b>2.5</b>	<b>bone full</b>	<b>2500/480</b>	<b>head/feet</b>
COR BONE	2.5	2.5	bone full	2500/480	front/back
SAG BONE	2.5	2.5	bone full	2500/480	left/right
AX SOFT	2.5	2.5	std full	400/40	head/feet

**Must be first recon.**

Send the above recons on the pre contrast scan (if without only) or on the post contrast scan (if IV given).

Send only the following recon on the pre contrast scan (if without and with).

AX SOFT PRE	2.5	2.5	std full	400/40	head/feet
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## PHILIPS PARAMETERS & RECONS

	Scan Mode	kV	Avg mAs	Dose Index	3D Dose	Pitch	Detect	Colli	Rot Time	Scan Time
Incisive 128	helical	120	103	20	on	0.80	64	0.625	0.75	4.7

Name of Series	Thick	Interval	Filter	Window	iDose	Recon Direction
AX BONE	3.0	3.0	YC	bone	3	head/feet
COR BONE	3.0	3.0	YC	bone	3	front/back
SAG BONE	3.0	3.0	YC	bone	3	left/right
AX SOFT	3.0	3.0	B	abdomen	3	head/feet

Send the above recons on the pre contrast scan (if without only) or on the post contrast scan (if IV given).

Send only the following recon on the pre contrast scan (if without and with).

AX SOFT PRE	3.0	3.0	B	abdomen	3	head/feet
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# CT Hip

Updated  
5/5/2024

Indications - trauma, fracture, dislocation, pain, bone tumor, soft tissue mass, infection, abscess, soft tissue gas, osteomyelitis, pre/post surgical evaluation.

Bill under CT Hip charges.

## GENERAL SCAN NOTES

Move the patient's arms over his/her head if possible. Remove any metal from the imaging field of view.

Topogram - iliac crests through lesser trochanters (through prosthesis if present).

Craniocaudal scan coverage - iliac crests through lesser trochanters (through prosthesis if present).

Include contralateral SI joint (side/side coverage).

Adjust FOV (field of view) on topogram to smallest without cropping anatomy.

IV Contrast: 100 mL Omnipaque-300, inject at 2.5 mL/sec, 60 secs scan delay.

For **GE scanners**, it is essential for the 1st recon thickness on the scanner to match the 1st recon thickness in this protocol book for the prescribed Noise Index to be valid. The 1st recon should generally be the thickest recon in the protocol.

## SIEMENS PARAMETERS & RECONS

	Scan Mode	kV	mAs	Care Dose	Care kV & Lvl	Pitch	Acq	Coll	Rot Time	Scan Time
Sensation 16	spiral	120	200	on	NA	0.80	16	1.5	0.5	2.6
Go Up 32	spiral	130	109	on	on 170	0.80	32	0.7	1.0	5.6
Sensation 64	spiral	120	200	on	NA	0.90	24	1.2	0.5	1.9
Definition 64	spiral	120	190	on	on	0.80	64	0.6	1.0	6.5
Go Top 64	spiral	120	131	on	on 170	0.80	64	0.6	1.0	3.3
Drive 128	spiral	120	133	on	on	0.80	128	0.6	1.0	3.3
Force 192	spiral	120	133	on	on	0.80	192	0.6	1.0	2.2

Name of Series	Thick	Interval	Kernel	Window	IR Lvl	Recon Direction
AX BONE	3.0	3.0	Br59 / B60f	bone/osteo	3	head/feet
COR BONE	3.0	3.0	Br59 / B60f	bone/osteo	3	front/back
SAG BONE	3.0	3.0	Br59 / B60f	bone/osteo	3	left/right
AX SOFT	3.0	3.0	Br40 / B31f	abdomen	3	head/feet

Send the above recons on the pre contrast scan (if without only) or on the post contrast scan (if IV given).

Send only the following recon on the pre contrast scan (if without and with).

AX SOFT PRE	3.0	3.0	Br40 / B31f	abdomen	3	head/feet
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Add the following recons for **arthrograms**:

COR SOFT	3.0	3.0	Br40 / B31f	abdomen	3	front/back
SAG SOFT	3.0	3.0	Br40 / B31f	abdomen	3	left/right

# CT Hip

## GE PARAMETERS & RECONS

	Scan Type	SFOV	kV	mA Range	Noise Index	Smart mA	Slice Thick	Beam Coll	Pitch	Speed	Rot Time	Dose Red	ASIR	Scan Time
LS 16	helical	large	120	100-440	19.09	on	2.5	20	1.375	27.50	0.5	NA	NA	1.8
Opt 540	helical	large	120	100-440	19.09	on	2.5	20	1.375	27.50	0.5	NA	NA	1.8
LS VCT 64	helical	large body	120	120-450	11.50	on	2.5	40	0.984	39.37	0.5	30	70	1.3
Disc VCT 64	helical	large body	120	100-700	14.14	on	2.5	40	0.984	39.37	0.8	NA	NA	2.0

Name of Series	Thickness	Interval	Recon Algorithm	Window Width/Level	Recon Direction
<b>AX BONE</b>	<b>2.5</b>	<b>2.5</b>	<b>bone full</b>	<b>2500/480</b>	<b>head/feet</b>
COR BONE	2.5	2.5	bone full	2500/480	front/back
SAG BONE	2.5	2.5	bone full	2500/480	left/right
AX SOFT	2.5	2.5	std full	400/40	head/feet

**Must be first recon.**

Send the above recons on the pre contrast scan (if without only) or on the post contrast scan (if IV given).

Send only the following recon on the pre contrast scan (if without and with).

AX SOFT PRE	2.5	2.5	std full	400/40	head/feet
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Add the following recons for **arthrograms**:

COR SOFT	2.5	2.5	std full	400/40	front/back
SAG SOFT	2.5	2.5	std full	400/40	left/right

## PHILIPS PARAMETERS & RECONS

	Scan Mode	kV	Avg mAs	Dose Index	3D Dose	Pitch	Detect	Colli	Rot Time	Scan Time
Incisive 128	helical	120	103	20	on	0.80	64	0.625	0.75	2.3

Name of Series	Thick	Interval	Filter	Window	iDose	Recon Direction
AX BONE	3.0	3.0	YC	bone	3	head/feet
COR BONE	3.0	3.0	YC	bone	3	front/back
SAG BONE	3.0	3.0	YC	bone	3	left/right
AX SOFT	3.0	3.0	B	abdomen	3	head/feet

Send the above recons on the pre contrast scan (if without only) or on the post contrast scan (if IV given).

Send only the following recon on the pre contrast scan (if without and with).

AX SOFT PRE	3.0	3.0	B	abdomen	3	head/feet
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Add the following recons for **arthrograms**:

COR SOFT	3.0	3.0	B	abdomen	3	front/back
SAG SOFT	3.0	3.0	B	abdomen	3	left/right

# CT Knee

Updated  
5/4/2024

Indications - trauma, fracture, dislocation, pain, bone tumor, soft tissue mass, infection, abscess, soft tissue gas, osteomyelitis, pre/post surgical evaluation.

Bill under CT Knee charges.

## GENERAL SCAN NOTES

Remove any metal from the imaging field of view.

Topogram - distal femur to proximal tibia/fibula (through prosthesis if present).

Craniocaudal scan coverage - distal femur to proximal tibia/fibula (through prosthesis if present).

Adjust FOV (field of view) on topogram to smallest without cropping anatomy.

IV Contrast: 100 mL Omnipaque-300, inject at 2.5 mL/sec, 60 secs scan delay.

For **GE scanners**, it is essential for the 1st recon thickness on the scanner to match the 1st recon thickness in this protocol book for the prescribed Noise Index to be valid. The 1st recon should generally be the thickest recon in the protocol.

## SIEMENS PARAMETERS & RECONS

	Scan Mode	kV	mAs	Care Dose	Care kV & Lvl	Pitch	Acq	Coll	Rot Time	Scan Time
Sensation 16	spiral	120	140	on	NA	0.55	16	0.75	1.0	22.7
Go Up 32	spiral	Sn 110	366	on	on 75	0.40	32	0.7	1.0	16.7
Sensation 64	spiral	120	140	on	NA	0.90	64	0.6	1.0	8.7
Definition 64	spiral	120	100	on	<b>off</b>	0.80	64	0.6	1.0	9.8
Go Top 64	spiral	Sn 110	898	on	on	0.40	64	0.6	1.0	9.8
Drive 128	spiral	120	70	on	<b>off</b>	0.80	128	0.6	1.0	4.9
Force 192	spiral	120	70	on	<b>off</b>	0.80	192	0.6	1.0	3.3

Name of Series	Thick	Interval	Kernel	Window	IR Lvl	Recon Direction
AX BONE	3.0	3.0	Br59 / B60f	bone/osteo	3	head/feet
COR BONE	3.0	3.0	Br59 / B60f	bone/osteo	3	front/back
SAG BONE	3.0	3.0	Br59 / B60f	bone/osteo	3	left/right
AX SOFT	3.0	3.0	Br40 / B31f	abdomen	3	head/feet

Send the above recons on the pre contrast scan (if without only) or on the post contrast scan (if IV given).

Send only the following recon on the pre contrast scan (if without and with).

AX SOFT PRE	3.0	3.0	Br40 / B31f	abdomen	3	head/feet
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Add the following recons for **arthrograms**:

COR SOFT	3.0	3.0	Br40 / B31f	abdomen	3	front/back
SAG SOFT	3.0	3.0	Br40 / B31f	abdomen	3	left/right

# CT Knee

## GE PARAMETERS & RECONS

	Scan Type	SFOV	kV	mA Range	Noise Index	Smart mA	Slice Thick	Beam Coll	Pitch	Speed	Rot Time	Dose Red	ASIR	Scan Time
LS 16	helical	large	120	100-440	12.50	on	2.5	10	0.938	9.37	0.5	NA	NA	8.0
Opt 540	helical	large	120	100-440	12.50	on	2.5	10	0.938	9.37	0.5	NA	NA	8.0
LS VCT 64	helical	large body	120	100-450	16.00	on	2.5	40	0.984	39.37	0.5	20	20	1.9
Disc VCT 64	helical	large body	120	100-450	16.00	on	2.5	40	0.984	39.37	0.5	20	20	1.9

Name of Series	Thickness	Interval	Recon Algorithm	Window Width/Level	Recon Direction
<b>AX BONE</b>	<b>2.5</b>	<b>2.5</b>	<b>bone full</b>	<b>2500/480</b>	<b>head/feet</b>
COR BONE	2.5	2.5	bone full	2500/480	front/back
SAG BONE	2.5	2.5	bone full	2500/480	left/right
AX SOFT	2.5	2.5	std full	400/40	head/feet

**Must be first recon.**

Send the above recons on the pre contrast scan (if without only) or on the post contrast scan (if IV given).

Send only the following recon on the pre contrast scan (if without and with).

AX SOFT PRE	2.5	2.5	std full	400/40	head/feet
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Add the following recons for **arthrograms**:

COR SOFT	2.5	2.5	std full	400/40	front/back
SAG SOFT	2.5	2.5	std full	400/40	left/right

## PHILIPS PARAMETERS & RECONS

	Scan Mode	kV	Avg mAs	Dose Index	3D Dose	Pitch	Detect	Colli	Rot Time	Scan Time
Incisive 128	helical	120	32	20	<b>off</b>	0.80	64	0.625	1.00	4.7

Name of Series	Thick	Interval	Filter	Window	iDose	Recon Direction
AX BONE	3.0	3.0	YB	bone	3	head/feet
COR BONE	3.0	3.0	YB	bone	3	front/back
SAG BONE	3.0	3.0	YB	bone	3	left/right
AX SOFT	3.0	3.0	B	abdomen	3	head/feet

Send the above recons on the pre contrast scan (if without only) or on the post contrast scan (if IV given).

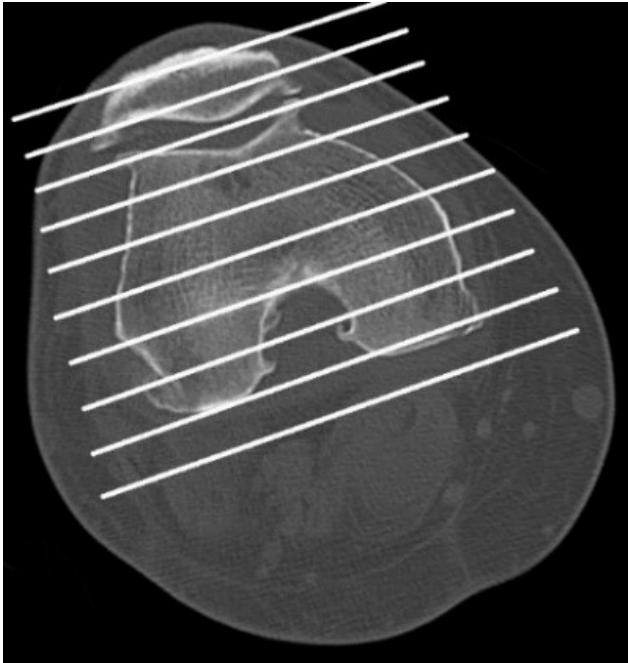
Send only the following recon on the pre contrast scan (if without and with).

AX SOFT PRE	3.0	3.0	B	abdomen	3	head/feet
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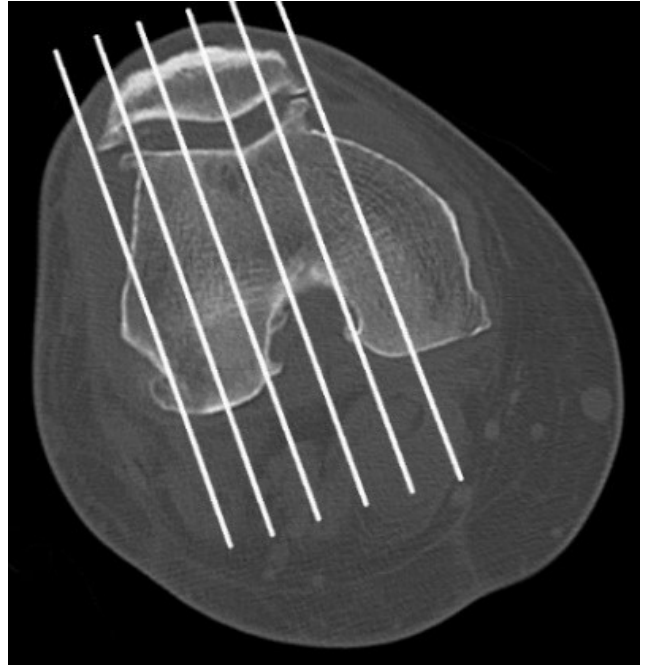
Add the following recons for **arthrograms**:

COR SOFT	3.0	3.0	B	abdomen	3	front/back
SAG SOFT	3.0	3.0	B	abdomen	3	left/right

# CT Knee



**Coronal Plane**



**Sagittal Plane**

# CT Ankle/Hindfoot

Updated  
5/5/2024

Indications - trauma, fracture, dislocation, pain, bone tumor, soft tissue mass, infection, abscess, soft tissue gas, osteomyelitis, pre/post surgical evaluation.

Bill under CT Ankle charges.

## GENERAL SCAN NOTES

Remove any metal from the imaging field of view.

Patient positioning:

Have opposite leg bent at knee with ankle/foot out of way of ankle of interest.

Foot must be dorsiflexed with foot perpendicular to tibia (see images at end of protocol).

Topogram - distal tibia through bottom of foot.

Craniocaudal scan coverage - 3 cm above ankle joint through skin of ball of foot.

Base of metatarsals through skin over Achilles tendon (front/back coverage).

Adjust FOV (field of view) on topogram to smallest without cropping anatomy.

IV Contrast: 100 mL Omnipaque-300, inject at 2.5 mL/sec, 60 secs scan delay.

For **GE scanners**, it is essential for the 1st recon thickness on the scanner to match the 1st recon thickness in this protocol book for the prescribed Noise Index to be valid. The 1st recon should generally be the thickest recon in the protocol.

## SIEMENS PARAMETERS & RECONS

	Scan Mode	kV	mAs	Care Dose	Care kV & Lvl	Pitch	Acq	Coll	Rot Time	Scan Time
Sensation 16	spiral	120	120	on	NA	0.55	16	0.75	1.0	5.3
Go Up 32	spiral	Sn 110	366	on	on 75	0.40	32	0.7	1.0	3.9
Sensation 64	spiral	120	120	on	NA	0.90	64	0.6	1.0	2.0
Definition 64	spiral	120	100	on	<b>off</b>	0.80	64	0.6	1.0	2.3
Go Top 64	spiral	Sn 100	898	on	on 75	0.40	64	0.6	1.0	2.3
Drive 128	spiral	120	70	on	<b>off</b>	0.80	128	0.6	1.0	1.1
Force 192	spiral	120	70	on	<b>off</b>	0.80	192	0.6	1.0	0.8

Name of Series	Thick	Interval	Kernel	Window	IR Lvl	Recon Direction
AX BONE	2.0	2.0	Br59 / B60f	bone/osteo	3	head/feet
COR BONE	2.0	2.0	Br59 / B60f	bone/osteo	3	front/back
SAG BONE	2.0	2.0	Br59 / B60f	bone/osteo	3	left/right
AX SOFT	2.0	2.0	Br40 / B31f	abdomen	3	head/feet

Send the above recons on the pre contrast scan (if without only) or on the post contrast scan (if IV given).

Send only the following recon on the pre contrast scan (if without and with).

AX SOFT PRE	2.0	2.0	Br40 / B31f	abdomen	3	head/feet
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# CT Ankle/Hindfoot

## GE PARAMETERS & RECONS

	Scan Type	SFOV	kV	mA Range	Noise Index	Smart mA	Slice Thick	Beam Coll	Pitch	Speed	Rot Time	Dose Red	ASIR	Scan Time
LS 16	helical	large	120	100-440	17.68	on	1.25	10	0.938	9.37	0.5	NA	NA	1.9
Opt 540	helical	large	120	100-440	17.68	on	1.25	10	0.938	9.37	0.5	NA	NA	1.9
LS VCT 64	helical	large body	120	100-450	22.63	on	1.25	40	0.984	39.37	0.5	20	20	0.4
Disc VCT 64	helical	large body	120	100-450	22.63	on	1.25	40	0.984	39.37	0.5	NA	NA	0.4

Name of Series	Thickness	Interval	Recon Algorithm	Window Width/Level	Recon Direction
AX BONE	1.25	1.25	bone full	2500/480	head/feet
COR BONE	1.25	1.25	bone full	2500/480	front/back
SAG BONE	1.25	1.25	bone full	2500/480	left/right
AX SOFT	1.25	1.25	std full	400/40	head/feet

**Must be first recon.**

Send the above recons on the pre contrast scan (if without only) or on the post contrast scan (if IV given).

Send only the following recon on the pre contrast scan (if without and with).

AX SOFT PRE	1.25	1.25	std full	400/40	head/feet
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## PHILIPS PARAMETERS & RECONS

	Scan Mode	kV	Avg mAs	Dose Index	3D Dose	Pitch	Detect	Colli	Rot Time	Scan Time
Incisive 128	helical	120	85	32	on	0.80	64	0.625	1.00	1.1

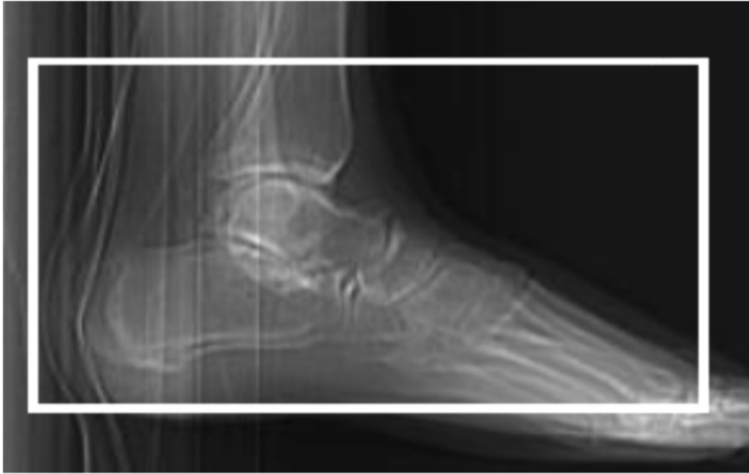
Name of Series	Thick	Interval	Filter	Window	iDose	Recon Direction
AX BONE	2.0	2.0	YC	bone	3	head/feet
COR BONE	2.0	2.0	YC	bone	3	front/back
SAG BONE	2.0	2.0	YC	bone	3	left/right
AX SOFT	2.0	2.0	B	abdomen	3	head/feet

Send the above recons on the pre contrast scan (if without only) or on the post contrast scan (if IV given).

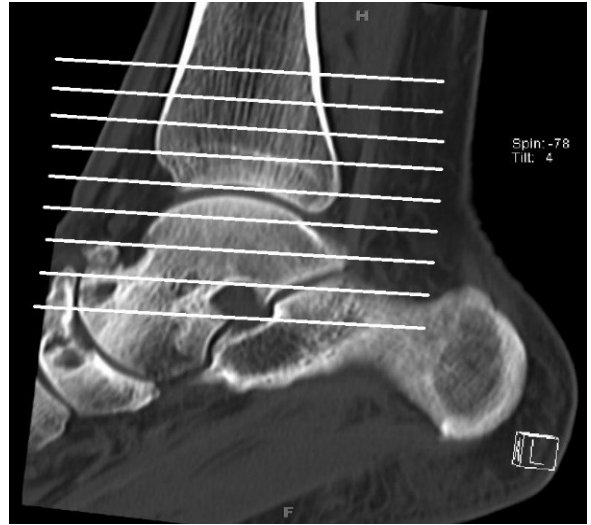
Send only the following recon on the pre contrast scan (if without and with).

AX SOFT PRE	2.0	2.0	B	abdomen	3	head/feet
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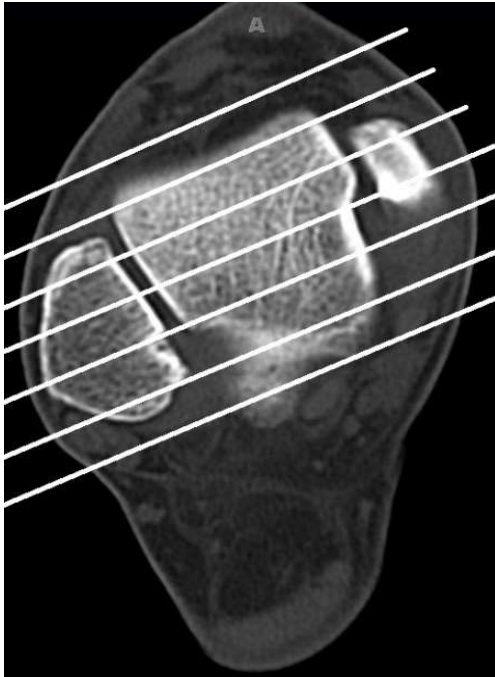
# CT Ankle/Hindfoot



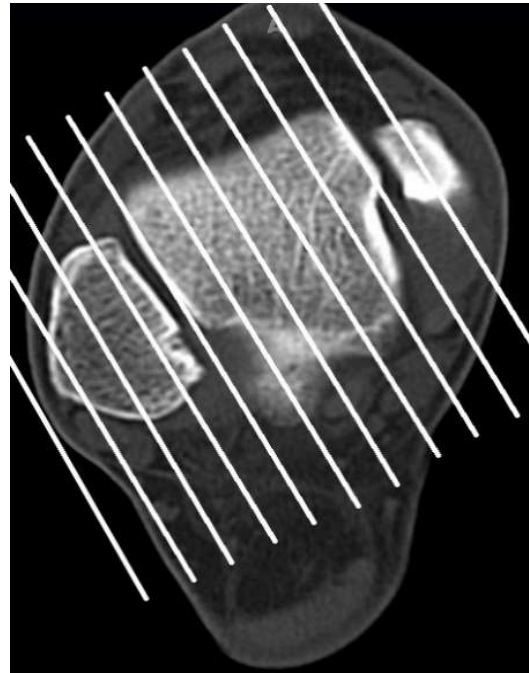
Foot must be dorsiflexed with foot perpendicular to tibia.



**Axial Plane**



**Coronal Plane**



**Sagittal Plane**

# CT Forefoot

Updated  
5/5/2024

Indications - trauma, fracture, dislocation, pain, bone tumor, soft tissue mass, infection, abscess, soft tissue gas, osteomyelitis, pre/post surgical evaluation.

Bill under CT Lower Extremity charges.

## GENERAL SCAN NOTES

Remove any metal from the imaging field of view.

Patient positioning - have opposite leg bent at knee with ankle/foot out of way of foot of interest.

Topogram - distal tibia through bottom of foot.

Craniocaudal scan coverage - skin of dorsum of forefoot/toes through skin of plantar aspect of forefoot/toes.

Skin of toes through 1 cm posterior to tarsometatarsal joints (front/back coverage).

Adjust FOV (field of view) on topogram to smallest without cropping anatomy.

IV Contrast: 100 mL Omnipaque-300, inject at 2.5 mL/sec, 60 secs scan delay.

For **GE scanners**, it is essential for the 1st recon thickness on the scanner to match the 1st recon thickness in this protocol book for the prescribed Noise Index to be valid. The 1st recon should generally be the thickest recon in the protocol.

## SIEMENS PARAMETERS & RECONS

	Scan Mode	kV	mAs	Care Dose	Care kV & Lvl	Pitch	Acq	Coll	Rot Time	Scan Time
Sensation 16	spiral	120	120	on	NA	0.55	16	0.75	1.0	5.3
Go Up 32	spiral	Sn 110	366	on	on 75	0.40	32	0.7	1.0	3.9
Sensation 64	spiral	120	120	on	NA	0.90	64	0.6	1.0	2.0
Definition 64	spiral	120	100	on	<b>off</b>	0.80	64	0.6	1.0	2.3
Go Top 64	spiral	Sn 100	898	on	on 75	0.40	64	0.6	1.0	2.3
Drive 128	spiral	120	70	on	<b>off</b>	0.80	128	0.6	1.0	1.1
Force 192	spiral	120	70	on	<b>off</b>	0.80	192	0.6	1.0	0.8

Name of Series	Thick	Interval	Kernel	Window	IR Lvl	Recon Direction
AX BONE	2.0	2.0	Br59 / B60f	bone/osteo	3	head/feet
COR BONE	2.0	2.0	Br59 / B60f	bone/osteo	3	front/back
SAG BONE	2.0	2.0	Br59 / B60f	bone/osteo	3	left/right
AX SOFT	2.0	2.0	Br40 / B31f	abdomen	3	head/feet

Send the above recons on the pre contrast scan (if without only) or on the post contrast scan (if IV given).

Send only the following recon on the pre contrast scan (if without and with).

AX SOFT PRE	2.0	2.0	Br40 / B31f	abdomen	3	head/feet
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# CT Forefoot

## GE PARAMETERS & RECONS

	Scan Type	SFOV	kV	mA Range	Noise Index	Smart mA	Slice Thick	Beam Coll	Pitch	Speed	Rot Time	Dose Red	ASIR	Scan Time
LS 16	helical	large	120	100-440	17.68	on	1.25	10	0.938	9.37	0.5	NA	NA	1.9
Opt 540	helical	large	120	100-440	17.68	on	1.25	10	0.938	9.37	0.5	NA	NA	1.9
LS VCT 64	helical	large body	120	100-450	22.63	on	1.25	40	0.984	39.37	0.5	20	20	0.4
Disc VCT 64	helical	large body	120	100-450	22.63	on	1.25	40	0.984	39.37	0.5	NA	NA	0.4

Name of Series	Thickness	Interval	Recon Algorithm	Window Width/Level	Recon Direction
<b>AX BONE</b>	<b>1.25</b>	<b>1.25</b>	<b>bone full</b>	<b>2500/480</b>	<b>head/feet</b>
COR BONE	1.25	1.25	bone full	2500/480	front/back
SAG BONE	1.25	1.25	bone full	2500/480	left/right
AX SOFT	1.25	1.25	std full	400/40	head/feet

**Must be first recon.**

Send the above recons on the pre contrast scan (if without only) or on the post contrast scan (if IV given).

Send only the following recon on the pre contrast scan (if without and with).

AX SOFT PRE	1.25	1.25	std full	400/40	head/feet
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## PHILIPS PARAMETERS & RECONS

	Scan Mode	kV	Avg mAs	Dose Index	3D Dose	Pitch	Detect	Colli	Rot Time	Scan Time
Incisive 128	helical	120	85	32	on	0.80	64	0.625	1.00	1.1

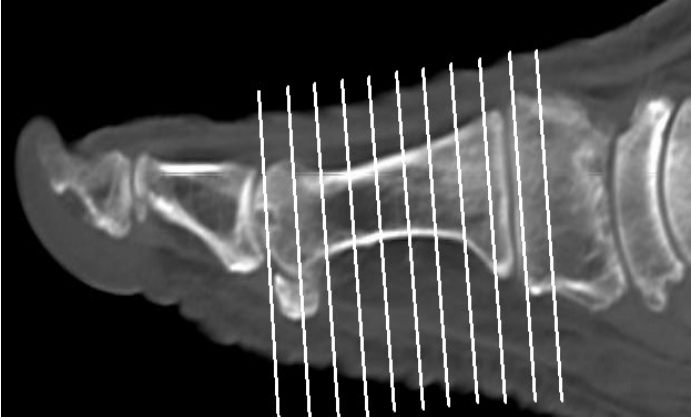
Name of Series	Thick	Interval	Filter	Window	iDose	Recon Direction
AX BONE	2.0	2.0	YC	bone	3	head/feet
COR BONE	2.0	2.0	YC	bone	3	front/back
SAG BONE	2.0	2.0	YC	bone	3	left/right
AX SOFT	2.0	2.0	B	abdomen	3	head/feet

Send the above recons on the pre contrast scan (if without only) or on the post contrast scan (if IV given).

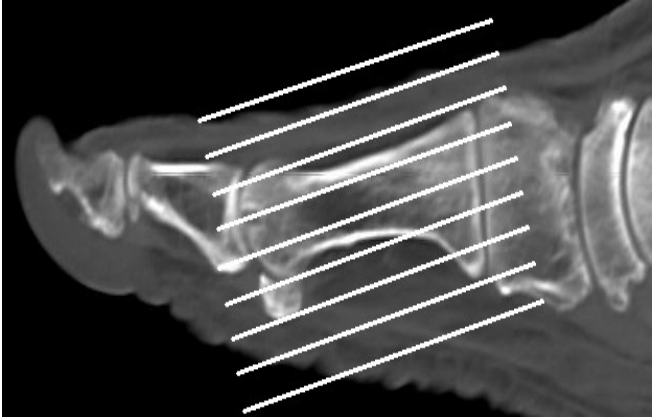
Send only the following recon on the pre contrast scan (if without and with).

AX SOFT PRE	2.0	2.0	B	abdomen	3	head/feet
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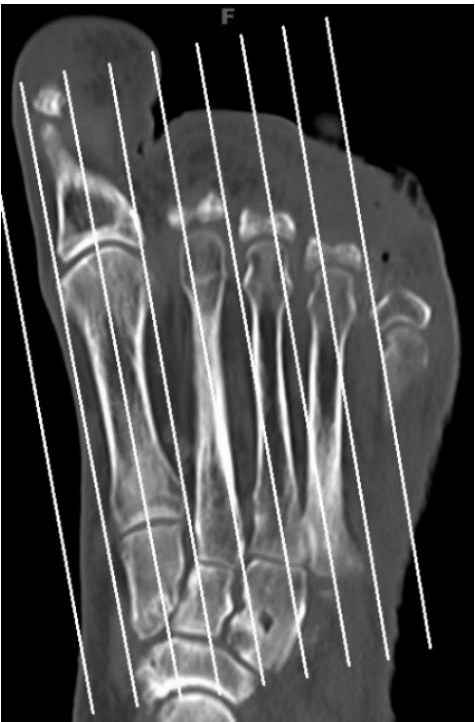
**CT Forefoot**



**Axial Plane**



**Coronal Plane**



**Sagittal Plane**

# CT Shoulder

Updated  
5/5/2024

Indications - trauma, fracture, dislocation, pain, bone tumor, soft tissue mass, infection, abscess, soft tissue gas, osteomyelitis, pre/post surgical evaluation.

Bill under CT Shoulder charges.

## GENERAL SCAN NOTES

Remove any metal from the imaging field of view.

Topogram - from above top of shoulder to proximal humerus.

Craniocaudal scan coverage - from above top of shoulder to proximal humerus (through prosthesis if present).

Include entire ipsilateral scapula in FOV.

Adjust FOV (field of view) on topogram to smallest without cropping anatomy.

IV Contrast: 100 mL Omnipaque-300, inject at 2.5 mL/sec, 60 secs scan delay.

For **GE scanners**, it is essential for the 1st recon thickness on the scanner to match the 1st recon thickness in this protocol book for the prescribed Noise Index to be valid. The 1st recon should generally be the thickest recon in the protocol.

## SIEMENS PARAMETERS & RECONS

	Scan Mode	kV	mAs	Care Dose	Care kV & Lvl	Pitch	Acq	Coll	Rot Time	Scan Time
Sensation 16	spiral	120	150	on	NA	0.80	16	0.75	1.0	10.4
Go Up 32	spiral	130	84	on	on 130	0.80	32	0.7	1.0	5.6
Sensation 64	spiral	120	150	on	NA	0.90	64	0.6	1.0	5.8
Definition 64	spiral	120	165	on	on	0.80	64	0.6	1.0	6.5
Go Top 64	spiral	130	100	on	on 130	0.80	64	0.6	1.0	3.3
Drive 128	spiral	120	116	on	on	0.80	128	0.6	1.0	3.3
Force 192	spiral	120	116	on	on	0.80	192	0.6	1.0	2.2

Name of Series	Thick	Interval	Kernel	Window	IR Lvl	Recon Direction
AX BONE	3.0	3.0	Br59 / B60f	bone/osteo	3	head/feet
COR BONE	3.0	3.0	Br59 / B60f	bone/osteo	3	front/back
SAG BONE	3.0	3.0	Br59 / B60f	bone/osteo	3	left/right
AX SOFT	3.0	3.0	Br40 / B31f	abdomen	3	head/feet

Send the above recons on the pre contrast scan (if without only) or on the post contrast scan (if IV given).

Send only the following recon on the pre contrast scan (if without and with).

AX SOFT PRE	3.0	3.0	Br40 / B31f	abdomen	3	head/feet
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Add the following recons for **arthrograms**:

COR SOFT	3.0	3.0	Br40 / B31f	abdomen	3	front/back
SAG SOFT	3.0	3.0	Br40 / B31f	abdomen	3	left/right

# CT Shoulder

## GE PARAMETERS & RECONS

	Scan Type	SFOV	kV	mA Range	Noise Index	Smart mA	Slice Thick	Beam Coll	Pitch	Speed	Rot Time	Dose Red	ASIR	Scan Time
LS 16	helical	large	120	100-440	12.50	on	2.5	10	0.938	9.37	0.5	NA	NA	5.3
Opt 540	helical	large	120	100-440	12.50	on	2.5	10	0.938	9.37	0.5	NA	NA	5.3
LS VCT 64	helical	large body	120	100-450	16.00	on	2.5	40	0.984	39.37	0.5	20	20	1.3
Disc VCT 64	helical	large body	140	100-610	14.14	on	2.5	40	0.516	20.625	0.6	NA	NA	2.9

Name of Series	Thickness	Interval	Recon Algorithm	Window Width/Level	Recon Direction
<b>AX BONE</b>	<b>2.5</b>	<b>2.5</b>	<b>bone full</b>	<b>2500/480</b>	<b>head/feet</b>
COR BONE	2.5	2.5	bone full	2500/480	front/back
SAG BONE	2.5	2.5	bone full	2500/480	left/right
AX SOFT	2.5	2.5	std full	400/40	head/feet

**Must be first recon.**

Send the above recons on the pre contrast scan (if without only) or on the post contrast scan (if IV given).

Send only the following recon on the pre contrast scan (if without and with).

AX SOFT PRE	2.5	2.5	std full	400/40	head/feet
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Add the following recons for **arthrograms**:

COR SOFT	2.5	2.5	std full	400/40	front/back
SAG SOFT	2.5	2.5	std full	400/40	left/right

## PHILIPS PARAMETERS & RECONS

	Scan Mode	kV	Avg mAs	Dose Index	3D Dose	Pitch	Detect	Colli	Rot Time	Scan Time
Incisive 128	helical	120	129	22	on	0.80	64	0.625	1.00	3.1

Name of Series	Thick	Interval	Filter	Window	iDose	Recon Direction
AX BONE	3.0	3.0	YC	bone	3	head/feet
COR BONE	3.0	3.0	YC	bone	3	front/back
SAG BONE	3.0	3.0	YC	bone	3	left/right
AX SOFT	3.0	3.0	B	abdomen	3	head/feet

Send the above recons on the pre contrast scan (if without only) or on the post contrast scan (if IV given).

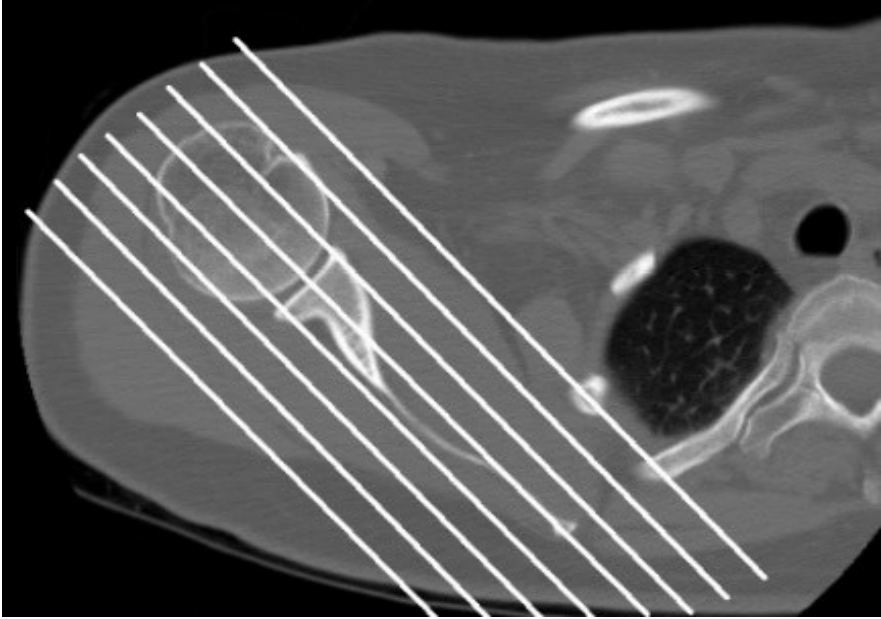
Send only the following recon on the pre contrast scan (if without and with).

AX SOFT PRE	3.0	3.0	B	abdomen	3	head/feet
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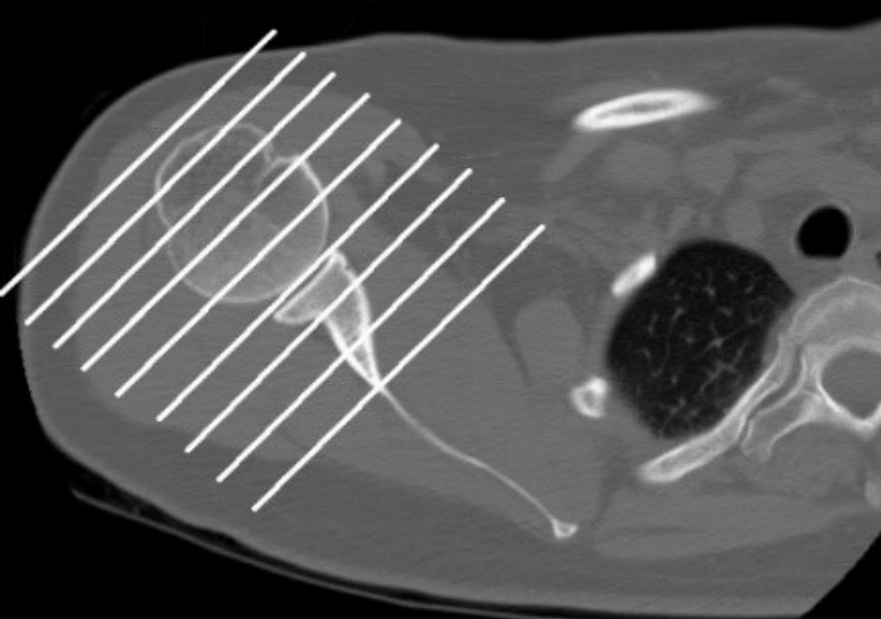
Add the following recons for **arthrograms**:

COR SOFT	3.0	3.0	B	abdomen	3	front/back
SAG SOFT	3.0	3.0	B	abdomen	3	left/right

**CT Shoulder**



**Coronal Plane**



**Sagittal Plane**



# CT Elbow

Updated  
5/5/2024

Indications - trauma, fracture, dislocation, pain, bone tumor, soft tissue mass, infection, abscess, soft tissue gas, osteomyelitis, pre/post surgical evaluation.

Bill under CT Elbow charges.

## GENERAL SCAN NOTES

Remove any metal from the imaging field of view.

Patient positioning:

Preferred - Patient lateral decubitus position with affected arm extended over head with palm up.

Option 2 - Patient supine head first position with arm over head.

Option 3 - Patient supine with elbow off to side of chest. Instruct patient there will be a breath hold.

Topogram - distal humerus through proximal radius and ulna.

Craniocaudal scan coverage - distal humerus through proximal radius and ulna (through prosthesis if present).

Adjust FOV (field of view) on topogram to smallest without cropping anatomy.

IV Contrast: 100 mL Omnipaque-300, inject at 2.5 mL/sec, 60 secs scan delay.

IV should be in the opposite arm.

For **GE scanners**, it is essential for the 1st recon thickness on the scanner to match the 1st recon thickness in this protocol book for the prescribed Noise Index to be valid. The 1st recon should generally be the thickest recon in the protocol.

## SIEMENS PARAMETERS & RECONS

	Scan Mode	kV	mAs	Care Dose	Care kV & Lvl	Pitch	Acq	Coll	Rot Time	Scan Time
Sensation 16	spiral	120	150	on	NA	0.80	16	0.75	1.0	15.6
Go Up 32	spiral	Sn 110	366	on	on 75	0.40	32	0.7	1.0	16.7
Sensation 64	spiral	120	150	on	NA	0.90	64	0.6	1.0	8.7
Definition 64	spiral	120	100	on	<b>off</b>	0.80	64	0.6	1.0	9.8
Go Top 64	spiral	Sn 100	898	on	on 75	0.40	64	0.6	1.0	9.8
Drive 128	spiral	120	70	on	<b>off</b>	0.80	128	0.6	1.0	4.9
Force 192	spiral	120	70	on	<b>off</b>	0.80	192	0.6	1.0	3.3

Name of Series	Thick	Interval	Kernel	Window	IR Lvl	Recon Direction
AX BONE	2.0	2.0	Br59 / B60f	bone/osteo	3	head/feet
COR BONE	2.0	2.0	Br59 / B60f	bone/osteo	3	front/back
SAG BONE	2.0	2.0	Br59 / B60f	bone/osteo	3	left/right
AX SOFT	2.0	2.0	Br40 / B31f	abdomen	3	head/feet

Send the above recons on the pre contrast scan (if without only) or on the post contrast scan (if IV given).

Send only the following recon on the pre contrast scan (if without and with).

AX SOFT PRE	2.0	2.0	Br40 / B31f	abdomen	3	head/feet
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# CT Elbow

## GE PARAMETERS & RECONS

	Scan Type	SFOV	kV	mA Range	Noise Index	Smart mA	Slice Thick	Beam Coll	Pitch	Speed	Rot Time	Dose Red	ASIR	Scan Time
LS 16	helical	large	120	100-440	17.68	on	1.25	10	0.938	9.37	0.5	NA	NA	8.0
Opt 540	helical	large	120	100-440	17.68	on	1.25	10	0.938	9.37	0.5	NA	NA	8.0
LS VCT 64	helical	large body	120	100-450	22.63	on	1.25	40	0.984	39.37	0.5	20	20	1.9
Disc VCT 64	helical	large body	120	100-450	22.63	on	1.25	40	0.984	39.37	0.5	NA	NA	1.9

Name of Series	Thickness	Interval	Recon Algorithm	Window Width/Level	Recon Direction
<b>AX BONE</b>	<b>1.25</b>	<b>1.25</b>	<b>bone full</b>	<b>2500/480</b>	<b>head/feet</b>
COR BONE	1.25	1.25	bone full	2500/480	front/back
SAG BONE	1.25	1.25	bone full	2500/480	left/right
AX SOFT	1.25	1.25	std full	400/40	head/feet

**Must be first recon.**

Send the above recons on the pre contrast scan (if without only) or on the post contrast scan (if IV given).

Send only the following recon on the pre contrast scan (if without and with).

AX SOFT PRE	1.25	1.25	std full	400/40	head/feet
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## PHILIPS PARAMETERS & RECONS

	Scan Mode	kV	Avg mAs	Dose Index	3D Dose	Pitch	Detect	Colli	Rot Time	Scan Time
Incisive 128	helical	120	129	22	on	0.80	64	0.625	1.00	4.7

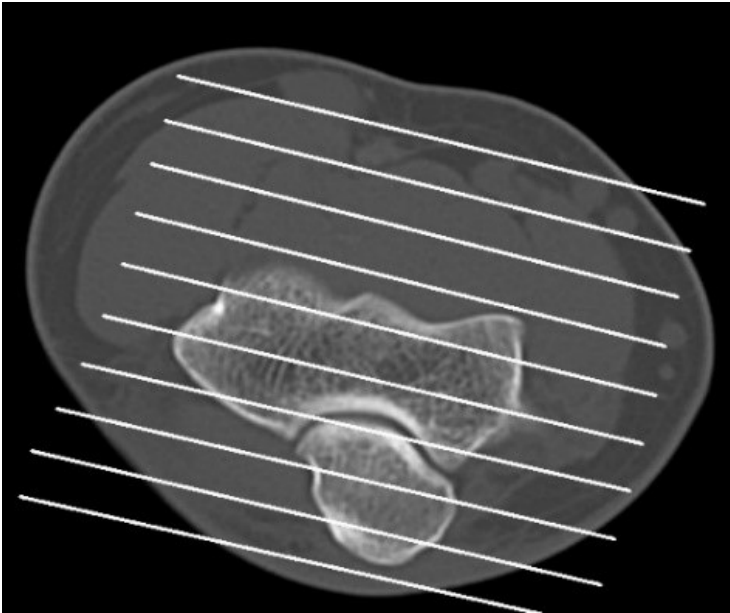
Name of Series	Thick	Interval	Filter	Window	iDose	Recon Direction
AX BONE	2.0	2.0	YC	bone	3	head/feet
COR BONE	2.0	2.0	YC	bone	3	front/back
SAG BONE	2.0	2.0	YC	bone	3	left/right
AX SOFT	2.0	2.0	B	abdomen	3	head/feet

Send the above recons on the pre contrast scan (if without only) or on the post contrast scan (if IV given).

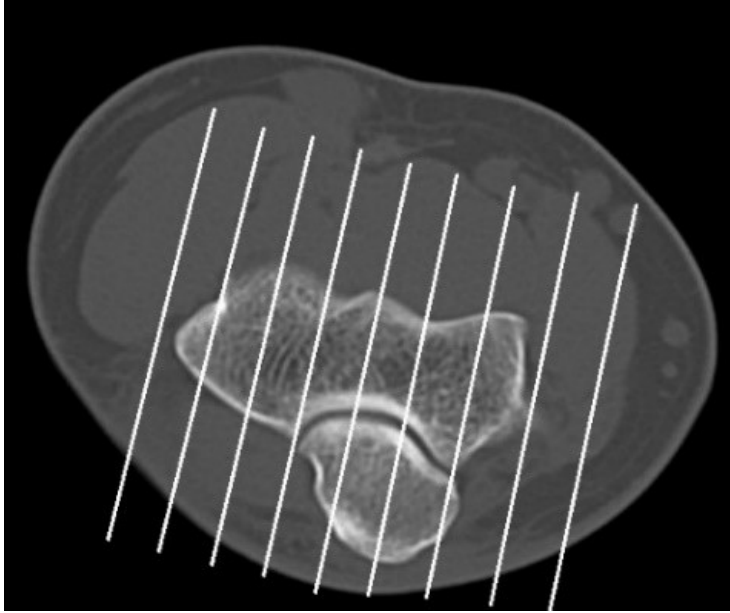
Send only the following recon on the pre contrast scan (if without and with).

AX SOFT PRE	2.0	2.0	B	abdomen	3	head/feet
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**CT Elbow**



**Coronal Plane**



**Sagittal Plane**

# CT Wrist

Updated  
5/5/2024

Indications - trauma, fracture, dislocation, pain, bone tumor, soft tissue mass, infection, abscess, soft tissue gas, osteomyelitis, pre/post surgical evaluation.

Bill under CT Wrist charges.

## GENERAL SCAN NOTES

Remove any metal from the imaging field of view.

Patient positioning:

Preferred - Patient prone with arm over head in center of scanner, palm down with fingers straight and close together.

Option 1 - Patient lateral decubitus position with affected arm extended over head with palm up.

Topogram - base of the metacarpals through distal radioulnar joint.

Craniocaudal scan coverage - base of the metacarpals through distal radioulnar joint.

Adjust FOV (field of view) on topogram to smallest without cropping anatomy.

IV Contrast: 100 mL Omnipaque-300, inject at 2.5 mL/sec, 60 secs scan delay.

For **GE scanners**, it is essential for the 1st recon thickness on the scanner to match the 1st recon thickness in this protocol book for the prescribed Noise Index to be valid. The 1st recon should generally be the thickest recon in the protocol.

## SIEMENS PARAMETERS & RECONS

	Scan Mode	kV	mAs	Care Dose	Care kV & Lvl	Pitch	Acq	Coll	Rot Time	Scan Time
Sensation 16	spiral	120	120	on	NA	0.55	16	0.75	1.0	9.1
Go Up 32	spiral	Sn 110	366	on	on 75	0.40	32	0.7	1.0	6.7
Sensation 64	spiral	120	120	on	NA	0.90	64	0.6	1.0	3.5
Definition 64	spiral	120	100	on	<b>off</b>	0.80	64	0.6	1.0	3.9
Go Top 64	spiral	Sn 100	898	on	on 75	0.40	64	0.6	1.0	3.9
Drive 128	spiral	120	70	on	<b>off</b>	0.80	128	0.6	1.0	2.0
Force 192	spiral	120	70	on	<b>off</b>	0.80	192	0.6	1.0	1.3

Name of Series	Thick	Interval	Kernel	Window	IR Lvl	Recon Direction
AX BONE	2.0	2.0	Br59 / B60f	bone/osteo	3	head/feet
COR BONE	2.0	2.0	Br59 / B60f	bone/osteo	3	front/back
SAG BONE	2.0	2.0	Br59 / B60f	bone/osteo	3	left/right
AX SOFT	2.0	2.0	Br40 / B31f	abdomen	3	head/feet

Send the above recons on the pre contrast scan (if without only) or on the post contrast scan (if IV given).

Send only the following recon on the pre contrast scan (if without and with).

AX SOFT PRE	2.0	2.0	Br40 / B31f	abdomen	3	head/feet
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# CT Wrist

## GE PARAMETERS & RECONS

	Scan Type	SFOV	kV	mA Range	Noise Index	Smart mA	Slice Thick	Beam Coll	Pitch	Speed	Rot Time	Dose Red	ASIR	Scan Time
LS 16	helical	large	120	100-440	17.68	on	1.25	10	0.938	9.37	0.5	NA	NA	3.2
Opt 540	helical	large	120	100-440	17.68	on	1.25	10	0.938	9.37	0.5	NA	NA	3.2
LS VCT 64	helical	large body	120	100-450	16.00	on	1.25	40	0.984	39.37	0.5	20	20	0.8
Disc VCT 64	helical	large body	120	100-450	16.00	on	1.25	40	0.984	39.37	0.5	NA	NA	0.8

Name of Series	Thickness	Interval	Recon Algorithm	Window Width/Level	Recon Direction
<b>AX BONE</b>	<b>1.25</b>	<b>1.25</b>	<b>bone full</b>	<b>2500/480</b>	<b>head/feet</b>
COR BONE	1.25	1.25	bone full	2500/480	front/back
SAG BONE	1.25	1.25	bone full	2500/480	left/right
AX SOFT	1.25	1.25	std full	400/40	head/feet

**Must be first recon.**

Send the above recons on the pre contrast scan (if without only) or on the post contrast scan (if IV given).

Send only the following recon on the pre contrast scan (if without and with).

AX SOFT PRE	1.25	1.25	std full	400/40	head/feet
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## PHILIPS PARAMETERS & RECONS

	Scan Mode	kV	Avg mAs	Dose Index	3D Dose	Pitch	Detect	Colli	Rot Time	Scan Time
Incisive 128	helical	120	32	20	<b>off</b>	0.80	64	0.625	1.00	1.9

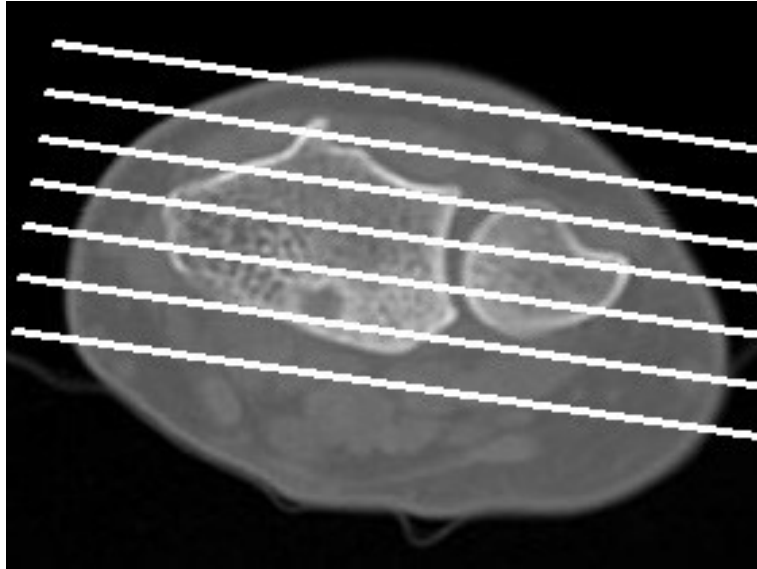
Name of Series	Thick	Interval	Filter	Window	iDose	Recon Direction
AX BONE	2.0	2.0	YC	bone	3	head/feet
COR BONE	2.0	2.0	YC	bone	3	front/back
SAG BONE	2.0	2.0	YC	bone	3	left/right
AX SOFT	2.0	2.0	B	abdomen	3	head/feet

Send the above recons on the pre contrast scan (if without only) or on the post contrast scan (if IV given).

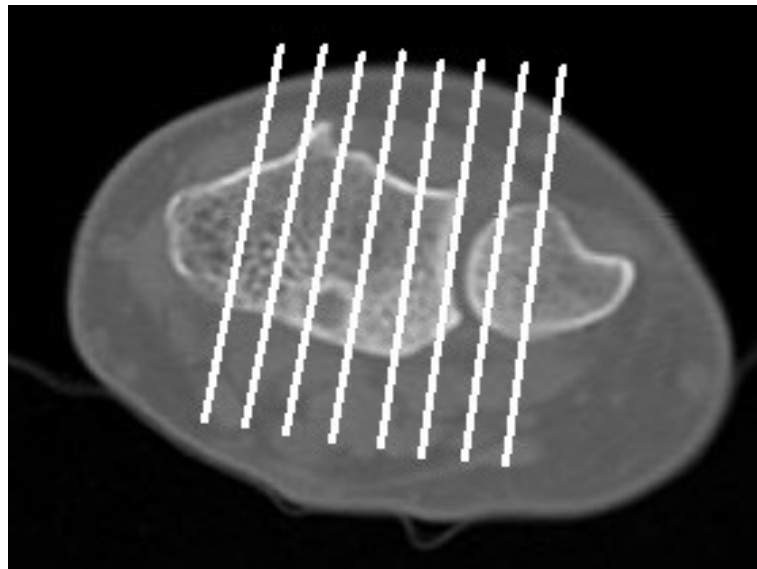
Send only the following recon on the pre contrast scan (if without and with).

AX SOFT PRE	2.0	2.0	B	abdomen	3	head/feet
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## CT Wrist



**Coronal Plane**  
(line through radial and ulnar styloids)



**Sagittal Plane**  
(perpendicular to coronal plane)

# CT Hand

Updated  
5/5/2024

Indications - trauma, fracture, dislocation, pain, bone tumor, soft tissue mass, infection, abscess, soft tissue gas, osteomyelitis, pre/post surgical evaluation.

Bill under CT Upper Extremity charges.

## GENERAL SCAN NOTES

Remove any metal from the imaging field of view.

Patient positioning:

Preferred - Patient prone with arm over head in center of scanner, palm down in line with forearm and wrist and with fingers straight and close together.

Option 1 - Patient lateral decubitus position with affected arm extended over head with palm up.

Topogram - from distal radioulnar joint through fingertips.

Craniocaudal scan coverage - from distal radioulnar joint through fingertips if no specific anatomy requested.

Adjust FOV (field of view) on topogram to smallest without cropping anatomy.

IV Contrast: 100 mL Omnipaque-300, inject at 2.5 mL/sec, 60 secs scan delay.

For **GE scanners**, it is essential for the 1st recon thickness on the scanner to match the 1st recon thickness in this protocol book for the prescribed Noise Index to be valid. The 1st recon should generally be the thickest recon in the protocol.

## SIEMENS PARAMETERS & RECONS

	Scan Mode	kV	mAs	Care Dose	Care kV & Lvl	Pitch	Acq	Coll	Rot Time	Scan Time
Sensation 16	spiral	120	120	on	NA	0.55	16	0.75	1.0	9.1
Go Up 32	spiral	Sn 110	366	on	on 75	0.40	32	0.7	1.0	6.7
Sensation 64	spiral	120	120	on	NA	0.90	64	0.6	1.0	3.5
Definition 64	spiral	120	100	on	<b>off</b>	0.80	64	0.6	1.0	3.9
Go Top 64	spiral	Sn 100	898	on	on 75	0.40	64	0.6	1.0	3.9
Drive 128	spiral	120	70	on	<b>off</b>	0.80	128	0.6	1.0	2.0
Force 192	spiral	120	70	on	<b>off</b>	0.80	192	0.6	1.0	1.3

Name of Series	Thick	Interval	Kernel	Window	IR Lvl	Recon Direction
AX BONE	2.0	2.0	Br59 / B60f	bone/osteo	3	head/feet
COR BONE	2.0	2.0	Br59 / B60f	bone/osteo	3	front/back
SAG BONE	2.0	2.0	Br59 / B60f	bone/osteo	3	left/right
AX SOFT	2.0	2.0	Br40 / B31f	abdomen	3	head/feet

Send the above recons on the pre contrast scan (if without only) or on the post contrast scan (if IV given).

Send only the following recon on the pre contrast scan (if without and with).

AX SOFT PRE	2.0	2.0	Br40 / B31f	abdomen	3	head/feet
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# CT Hand

## GE PARAMETERS & RECONS

	Scan Type	SFOV	kV	mA Range	Noise Index	Smart mA	Slice Thick	Beam Coll	Pitch	Speed	Rot Time	Dose Red	ASIR	Scan Time
LS 16	helical	large	120	100-440	17.68	on	1.25	10	0.938	9.37	0.5	NA	NA	3.2
Opt 540	helical	large	120	100-440	17.68	on	1.25	10	0.938	9.37	0.5	NA	NA	3.2
LS VCT 64	helical	large body	120	100-450	16.00	on	1.25	40	0.984	39.37	0.5	20	20	0.8
Disc VCT 64	helical	large body	120	100-450	16.00	on	1.25	40	0.984	39.37	0.5	NA	NA	0.8

Name of Series	Thickness	Interval	Recon Algorithm	Window Width/Level	Recon Direction
<b>AX BONE</b>	<b>1.25</b>	<b>1.25</b>	<b>bone full</b>	<b>2500/480</b>	<b>head/feet</b>
COR BONE	1.25	1.25	bone full	2500/480	front/back
SAG BONE	1.25	1.25	bone full	2500/480	left/right
AX SOFT	1.25	1.25	std full	400/40	head/feet

**Must be first recon.**

Send the above recons on the pre contrast scan (if without only) or on the post contrast scan (if IV given).

Send only the following recon on the pre contrast scan (if without and with).

AX SOFT PRE	1.25	1.25	std full	400/40	head/feet
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## PHILIPS PARAMETERS & RECONS

	Scan Mode	kV	Avg mAs	Dose Index	3D Dose	Pitch	Detect	Colli	Rot Time	Scan Time
Incisive 128	helical	120	32	20	<b>off</b>	0.80	64	0.625	1.00	1.9

Name of Series	Thick	Interval	Filter	Window	iDose	Recon Direction
AX BONE	2.0	2.0	YC	bone	3	head/feet
COR BONE	2.0	2.0	YC	bone	3	front/back
SAG BONE	2.0	2.0	YC	bone	3	left/right
AX SOFT	2.0	2.0	B	abdomen	3	head/feet

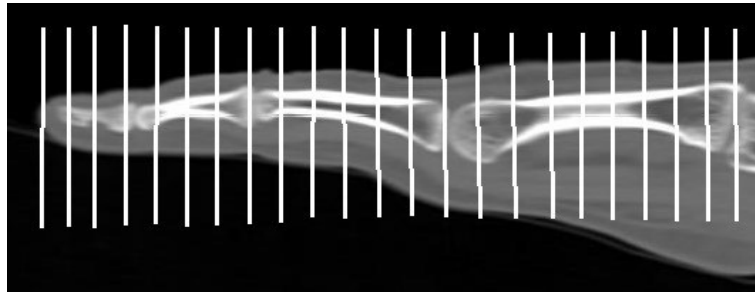
Send the above recons on the pre contrast scan (if without only) or on the post contrast scan (if IV given).

Send only the following recon on the pre contrast scan (if without and with).

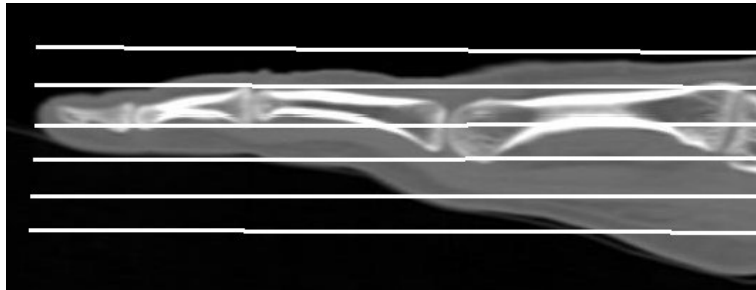
AX SOFT PRE	2.0	2.0	B	abdomen	3	head/feet
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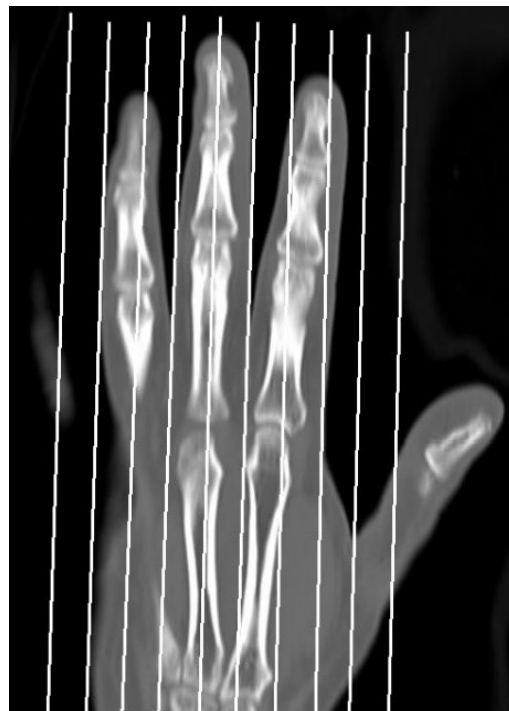
# CT Hand



**Axial Plane**



**Coronal Plane**



**Sagittal Plane**

# **CT Long Bones**

Updated  
5/5/2024

Indications - trauma, fracture, dislocation, pain, bone tumor, soft tissue mass, infection, abscess, soft tissue gas, osteomyelitis, pre/post surgical evaluation.

Bill under:

CT Humerus charges for **humerus**.

CT Upper Extremity charges for **radius/ulna**.

CT Femur charges for **femur**.

CT Lower Extremity charges for **tibia/fibula**.

## **GENERAL SCAN NOTES**

Remove any metal from the imaging field of view.

Topogram / Craniocaudal scan coverage:

Radius/Ulna - just above elbow to just below wrist.

Humerus - just above humeral head to just below elbow.

Femur - just above acetabulum to just below knee.

Tibia/Fibula - just above knee to just below ankle.

Scan through entire prosthesis or fracture if one is present.

Adjust FOV (field of view) on topogram to smallest without cropping anatomy.

IV Contrast: 100 mL Omnipaque-300, inject at 2.5 mL/sec, 60 secs scan delay.

For **GE scanners**, it is essential for the 1st recon thickness on the scanner to match the 1st recon thickness in this protocol book for the prescribed Noise Index to be valid. The 1st recon should generally be the thickest recon in the protocol.

# CT Long Bones

## SIEMENS PARAMETERS & RECONS

	Scan Mode	kV	mAs	Care Dose	Care kV & Lvl	Pitch	Acq	Coll	Rot Time	Scan Time
Sensation 16	spiral	120	150	on	NA	0.80	16	0.75	1.0	31.3
Go Up 32	spiral	Sn 110	366	on	on 75	0.40	32	0.7	1.0	33.5
Sensation 64	spiral	120	150	on	NA	0.90	64	0.6	1.0	17.4
Definition 64	spiral	120	100	on	<b>off</b>	0.80	64	0.6	1.0	19.5
Go Top 64	spiral	Sn 100	898	on	on 75	0.40	64	0.6	1.0	19.5
Drive 128	spiral	120	70	on	<b>off</b>	0.80	128	0.6	1.0	9.8
Force 192	spiral	120	70	on	<b>off</b>	0.80	192	0.6	1.0	6.5

Name of Series	Thick	Interval	Kernel	Window	IR Lvl	Recon Direction
AX BONE	3.0	3.0	Br59 / B60f	bone/osteo	3	head/feet
COR BONE	3.0	3.0	Br59 / B60f	bone/osteo	3	front/back
SAG BONE	3.0	3.0	Br59 / B60f	bone/osteo	3	left/right
AX SOFT	3.0	3.0	Br40 / B31f	abdomen	3	head/feet

Send the above recons on the pre contrast scan (if without only) or on the post contrast scan (if IV given).

Send only the following recon on the pre contrast scan (if without and with).

AX SOFT PRE	3.0	3.0	Br40 / B31f	abdomen	3	head/feet
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## GE PARAMETERS & RECONS

	Scan Type	SFOV	kV	mA Range	Noise Index	Smart mA	Slice Thick	Beam Coll	Pitch	Speed	Rot Time	Dose Red	ASIR	Scan Time
LS 16	helical	large	120	100-440	12.50	on	2.5	10	0.938	9.37	0.5	NA	NA	16.0
Opt 540	helical	large	120	100-440	12.50	on	2.5	10	0.938	9.37	0.5	NA	NA	16.0
LS VCT 64	helical	large body	120	100-450	16.00	on	2.5	40	0.984	39.37	0.5	20	20	3.8
Disc VCT 64	helical	large body	140	100-610	14.14	on	2.5	40	0.516	20.625	0.6	NA	NA	8.7

Name of Series	Thickness	Interval	Recon Algorithm	Window Width/Level	Recon Direction
AX BONE	2.5	2.5	bone full	2500/480	head/feet
COR BONE	2.5	2.5	bone full	2500/480	front/back
SAG BONE	2.5	2.5	bone full	2500/480	left/right
AX SOFT	2.5	2.5	std full	400/40	head/feet

**Must be first recon.**

Send the above recons on the pre contrast scan (if without only) or on the post contrast scan (if IV given).

Send only the following recon on the pre contrast scan (if without and with).

AX SOFT PRE	2.5	2.5	std full	400/40	head/feet
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# CT Long Bones

## PHILIPS PARAMETERS & RECONS

	Scan Mode	kV	Avg mAs	Dose Index	3D Dose	Pitch	Detect	Colli	Rot Time	Scan Time
Incisive 128	helical	120	129	22	on	0.80	64	0.625	1.00	9.4

Name of Series	Thick	Interval	Filter	Window	iDose	Recon Direction
AX BONE	3.0	3.0	YC	bone	3	head/feet
COR BONE	3.0	3.0	YC	bone	3	front/back
SAG BONE	3.0	3.0	YC	bone	3	left/right
AX SOFT	3.0	3.0	B	abdomen	3	head/feet

Send the above recons on the pre contrast scan (if without only) or on the post contrast scan (if IV given).

Send only the following recon on the pre contrast scan (if without and with).

AX SOFT PRE	3.0	3.0	B	abdomen	3	head/feet
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# CT Limb Length

Updated  
5/5/2024

Indications - leg length discrepancy.

Bill under CT LE w/o Contrast Bilateral charge.

## GENERAL SCAN NOTES

Remove any metal from the imaging field of view.

Get ruler from X-Ray.

Topogram scan only.

## SIEMENS PARAMETERS

	kVp	mA	Scan Length	Kernel	Window
Sensation 16	120	35	1536	T20	Topogram Body
Go Up 32	130	30	1536	Tr20	Topogram Body
Sensation 64	120	35	1536	T20	Topogram Body
Definition 64	100	20	1536	Tr20	Topogram Body
Go Top 64	Sn 140	60	1536	Tr20	Topogram Body
Drive 128	100	20	1536	Tr20	Topogram Body
Force 192	Sn 100	75	1536	Tr20	Topogram Body

## GE PARAMETERS

	kV	mA	Scan Length	Window Width/Level
LS 16	120	10	1536	250/-250
Opt 540	120	10	1536	250/-250
LS VCT 64	120	10	1536	250/-250
Disc VCT 64	120	10	1536	250/-250

## PHILIPS PARAMETERS & RECONS

	kV	mA	Scan Length
Incisive 128	120	30	1536

# CT Mako Hip

Updated  
5/5/2024

Indications - pre surgical evaluation for hip joint replacement.

Bill under CT LE w/o Contrast charge. Do not include separate hip and knee charges.

## GENERAL SCAN NOTES

Move the patient's arms over his/her head if possible. Remove any metal from the imaging field of view.

Patient positioning:

Patient in supine position with feet first with both knees and ankles aligned.

Motion rod should be placed along lateral aspect of leg.

Wrap the Velcro strap one complete revolution around the rod.

Do not allow patient movement between or during the scans.

Topogram - iliac crests through mid lower leg.

Craniocaudal scan coverage (see image below):

Hip - iliac crests to 18 cm below lesser trochanter of femur. FOV to include both sides of pelvic bones.

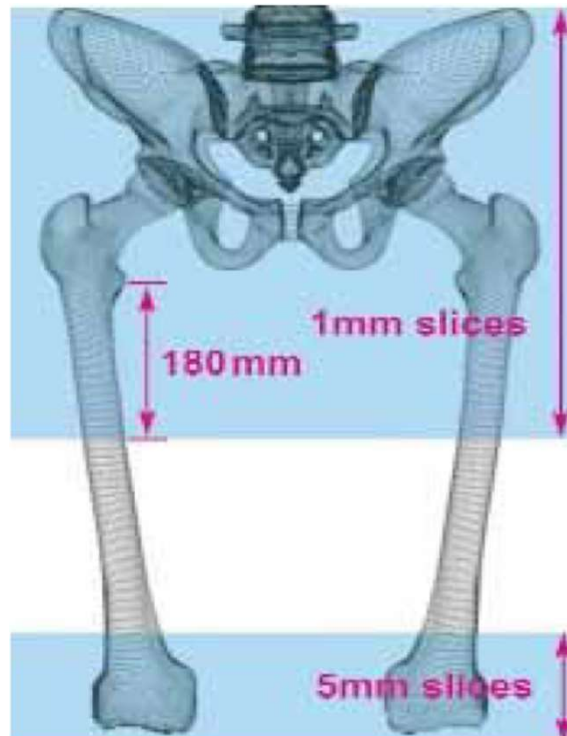
Knee - 10 cm above knee joint to 10 cm below knee joint. FOV to include both knees.

FOV must be <500 mm and matrix must be 512 x 512 squared.

IV Contrast: not given for this protocol.

For **GE scanners**, it is essential for the 1st recon thickness on the scanner to match the 1st recon thickness in this protocol book for the prescribed Noise Index to be valid. The 1st recon should generally be the thickest recon in the protocol.

Prepare an uncompressed DICOM disc containing all images (without DICOM viewer).



**Craniocaudal Scan Coverage**

# CT Mako Hip

## SIEMENS PARAMETERS & RECONS

For both Hip and Knee scans:

	Scan Mode	kV	mAs	Care Dose	Care kV & Lvl	Pitch	Acq	Coll	Rot Time
Sensation 16	spiral	120	200	on	NA	0.80	16	0.75	0.5
Go Up 32	spiral	130	200	on	on 170	0.80	32	0.7	1.0
Sensation 64	spiral	120	200	on	NA	0.90	64	0.6	0.5
Definition 64	spiral	120	200	on	on	0.80	64	0.6	1.0
Go Top 64	spiral	120	200	on	on 170	0.80	64	0.6	1.0
Drive 128	spiral	120	200	on	on	0.80	128	0.6	1.0
Force 192	spiral	120	200	on	on	0.80	192	0.6	1.0

### HIP RECONS

Name of Series	Thick	Interval	Kernel	Window	IR Lvl	Recon Direction
AX HIP BONE	3.0	3.0	Br59 / B60	bone/osteo	3	head/feet
COR HIP BONE	3.0	3.0	Br59 / B60	bone/osteo	3	front/back
SAG HIP BONE	3.0	3.0	Br59 / B60	bone/osteo	3	left/right
<b>AX HIP THINS</b>	<b>1.0</b>	<b>1.0</b>	<b>Br59 / B60</b>	<b>abdomen</b>	<b>3</b>	<b>head/feet</b>

**Mako specific recon.**

### KNEE RECONS

<b>AX KNEE BONE</b>	<b>3.0</b>	<b>3.0</b>	<b>Br59 / B60</b>	<b>bone/osteo</b>	<b>3</b>	<b>head/feet</b>
COR KNEE BONE	3.0	3.0	Br59 / B60	bone/osteo	3	front/back
SAG KNEE BONE	3.0	3.0	Br59 / B60	bone/osteo	3	left/right

**Mako specific recon.**

# CT Mako Hip

## GE PARAMETERS & RECONS

For both Hip and Knee scans:

	Scan Type	SFOV	kV	mA Range	Noise Index	Smart mA	Slice Thick	Beam Coll	Pitch	Speed	Rot Time	Dose Red	ASIR
LS 16	helical	large	120	100-440	19.09	on	2.5	20	1.375	27.50	0.5	NA	NA
Opt 540	helical	large	120	100-440	19.09	on	2.5	20	1.375	27.50	0.5	NA	NA
LS VCT 64	helical	large body	120	120-450	11.50	on	2.5	40	0.984	39.37	0.5	30	70
Disc VCT 64	helical	large body	120	100-700	14.14	on	2.5	40	0.984	39.37	0.8	NA	NA

### HIP RECONS

Name of Series	Thickness	Interval	Recon Algorithm/Mode	Window Width/Level	Recon Direction
<b>AX HIP BONE</b>	<b>2.5</b>	<b>2.5</b>	<b>bone full</b>	<b>2500/480</b>	<b>head/feet</b>
COR HIP BONE	2.5	2.5	bone full	2500/480	front/back
SAG HIP BONE	2.5	2.5	bone full	2500/480	left/right
<b>AX HIP THINS</b>	<b>0.625</b>	<b>0.625</b>	<b>bone plus full</b>	<b>2500/480</b>	<b>head/feet</b>

**Must be first recon.**

**Mako specific recon.**

### KNEE RECONS

<b>AX KNEE BONE</b>	<b>2.5</b>	<b>2.5</b>	<b>bone full</b>	<b>2500/480</b>	<b>head/feet</b>
COR KNEE BONE	2.5	2.5	bone full	2500/480	front/back
SAG KNEE BONE	2.5	2.5	bone full	2500/480	left/right

**Must be first recon.**

**Mako specific recon.**



# CT Mako Hip

## PHILIPS PARAMETERS & RECONS

For both Hip and Knee scans:

	Scan Mode	kV	Avg mAs	Dose Index	3D Dose	Pitch	Detect	Colli	Rot Time
Incisive 128	helical	120	285	29	<b>off</b>	1.00	64	0.625	0.75

### HIP RECONS

Name of Series	Thick	Interval	Filter	Window	iDose	Recon Direction
AX HIP BONE	3.0	3.0	YC	bone	3	head/feet
COR HIP BONE	3.0	3.0	YC	bone	3	front/back
SAG HIP BONE	3.0	3.0	YC	bone	3	left/right
<b>AX HIP THINS</b>	<b>1.0</b>	<b>1.0</b>	<b>YC</b>	<b>bone</b>	<b>3</b>	<b>head/feet</b>

**Mako specific recon.**

### KNEE RECONS

<b>AX KNEE BONE</b>	<b>3.0</b>	<b>3.0</b>	<b>YC</b>	<b>bone</b>	<b>3</b>	<b>head/feet</b>
COR KNEE BONE	3.0	3.0	YC	bone	3	front/back
SAG KNEE BONE	3.0	3.0	YC	bone	3	left/right

**Mako specific recon.**

# CT Mako Knee

Updated  
5/5/2024

Indications - pre surgical evaluation for knee joint replacement.

Bill under CT LE w/o Contrast charge. Do not include separate hip, knee and ankle charges.

## GENERAL SCAN NOTES

Move the patient's arms over his/her head if possible. Remove any metal from the imaging field of view.

Patient positioning:

Patient in supine position feet first with both knees and ankles aligned.

Elevate the knee of interest slightly with a rolled towel or blanket.

Motion rod should be placed along lateral aspect of leg.

Wrap the Velcro strap one complete revolution around the rod.

Do not allow patient movement between or during the scans.

Topogram - iliac crests through feet.

Craniocaudal scan coverage (see image below):

Hip - above femoral head to lesser trochanter of femur. FOV must be <500 mm.

Knee - 10 cm above knee joint to 10 cm below knee joint. FOV must be <250 mm.

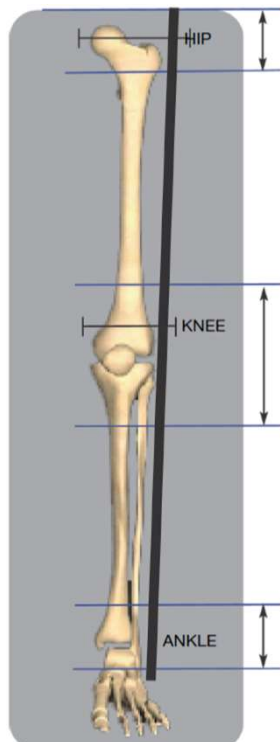
Ankle - few centimeters above ankle joint through bottom of talus. FOV must be <500 mm.

Matrix must be 512 x 512 squared.

IV Contrast: not given for this protocol.

For **GE scanners**, it is essential for the 1st recon thickness on the scanner to match the 1st recon thickness in this protocol book for the prescribed Noise Index to be valid. The 1st recon should generally be the thickest recon in the protocol.

Prepare an uncompressed DICOM disc containing all images (without DICOM viewer).



**Craniocaudal Scan Coverage**



**Metal Rod Placement**

# CT Mako Knee

## SIEMENS PARAMETERS & RECONS

For Hip, Knee and Ankle scans:

	Scan Mode	kV	mAs	Care Dose	Care kV & Lvl	Pitch	Acq	Coll	Rot Time
Sensation 16	spiral	120	200	on	NA	0.80	16	0.75	0.5
Go Up 32	spiral	130	200	on	on 170	0.80	32	0.7	1.0
Sensation 64	spiral	120	200	on	NA	0.90	64	0.6	0.5
Definition 64	spiral	120	200	on	on	0.80	64	0.6	1.0
Go Top 64	spiral	120	200	on	on 170	0.80	64	0.6	1.0
Drive 128	spiral	120	200	on	on	0.80	128	0.6	1.0
Force 192	spiral	120	200	on	on	0.80	192	0.6	1.0

### HIP RECONS

Name of Series	Thick	Interval	Kernel	Window	IR Lvl	Recon Direction
<b>AX HIP BONE</b>	<b>3.0</b>	<b>3.0</b>	<b>Br59 / B60</b>	<b>bone/osteo</b>	<b>3</b>	<b>head/feet</b>
COR HIP BONE	3.0	3.0	Br59 / B60	bone/osteo	3	front/back
SAG HIP BONE	3.0	3.0	Br59 / B60	bone/osteo	3	left/right

**Mako specific recon.**

### KNEE RECONS

AX KNEE BONE	3.0	3.0	Br59 / B60	bone/osteo	3	head/feet
COR KNEE BONE	3.0	3.0	Br59 / B60	bone/osteo	3	front/back
SAG KNEE BONE	3.0	3.0	Br59 / B60	bone/osteo	3	left/right
<b>AX KNEE THINS</b>	<b>0.75</b>	<b>0.75</b>	<b>Br59 / B60</b>	<b>bone/osteo</b>	<b>3</b>	<b>head/feet</b>

**Mako specific recon.**

### ANKLE RECONS

Name of Series	Thick	Interval	Kernel	Window	IR Lvl	Recon Direction
<b>AX ANKLE BONE</b>	<b>3.0</b>	<b>3.0</b>	<b>Br59 / B60</b>	<b>bone/osteo</b>	<b>3</b>	<b>head/feet</b>
COR ANKLE BONE	3.0	3.0	Br59 / B60	bone/osteo	3	front/back
SAG ANKLE BONE	3.0	3.0	Br59 / B60	bone/osteo	3	left/right

**Mako specific recon.**

# CT Mako Knee

## GE PARAMETERS & RECONS

For Hip, Knee and Ankle scans:

	Scan Type	SFOV	kV	mA Range	Noise Index	Smart mA	Slice Thick	Beam Coll	Pitch	Speed	Rot Time	Dose Red	ASIR
LS 16	helical	large	120	100-440	12.50	on	2.5	10	0.938	9.37	0.5	NA	NA
Opt 540	helical	large	120	100-440	12.50	on	2.5	10	0.938	9.37	0.5	NA	NA
LS VCT 64	helical	large body	120	100-450	16.00	on	2.5	40	0.984	39.37	0.5	20	20
Disc VCT 64	helical	large body	120	100-450	16.00	on	2.5	40	0.984	39.37	0.5	20	20

### HIP RECONS

Name of Series	Thickness	Interval	Recon Algorithm/Mode	Window Width/Level	Recon Direction
<b>AX HIP BONE</b>	<b>2.5</b>	<b>2.5</b>	<b>bone full</b>	<b>2500/480</b>	<b>head/feet</b>
COR HIP BONE	2.5	2.5	bone full	2500/480	front/back
SAG HIP BONE	2.5	2.5	bone full	2500/480	left/right

**Must be first recon.**

**Mako specific recon.**

### KNEE RECONS

AX KNEE BONE	2.5	2.5	bone full	2500/480	head/feet
COR KNEE BONE	2.5	2.5	bone full	2500/480	front/back
SAG KNEE BONE	2.5	2.5	bone full	2500/480	left/right
<b>AX KNEE THINS</b>	<b>0.625</b>	<b>0.625</b>	<b>bone plus full</b>	<b>2500/480</b>	<b>head/feet</b>

**Must be first recon.**

**Mako specific recon.**

### ANKLE RECONS

<b>AX ANKLE BONE</b>	<b>2.5</b>	<b>2.5</b>	<b>bone full</b>	<b>2500/480</b>	<b>head/feet</b>
COR ANKLE BONE	2.5	2.5	bone full	2500/480	front/back
SAG ANKLE BONE	2.5	2.5	bone full	2500/480	left/right

**Must be first recon.**

**Mako specific recon.**

# CT Mako Knee

## PHILIPS PARAMETERS & RECONS

For Hip, Knee and Ankle scans:

	Scan Mode	kV	Avg mAs	Dose Index	3D Dose	Pitch	Detect	Colli	Rot Time	Scan Time
Incisive 128	helical	120	285	29	<b>off</b>	1.00	64	0.625	0.75	5.6

### HIP RECONS

Name of Series	Thick	Interval	Filter	Window	iDose	Recon Direction
<b>AX HIP BONE</b>	<b>3.0</b>	<b>3.0</b>	<b>YC</b>	<b>bone</b>	<b>3</b>	<b>head/feet</b>
COR HIP BONE	3.0	3.0	YC	bone	3	front/back
SAG HIP BONE	3.0	3.0	YC	bone	3	left/right

**Mako specific recon.**

### KNEE RECONS

AX KNEE BONE	3.0	3.0	YC	bone	3	head/feet
COR KNEE BONE	3.0	3.0	YC	bone	3	front/back
SAG KNEE BONE	3.0	3.0	YC	bone	3	left/right
<b>AX KNEE THINS</b>	<b>0.75</b>	<b>0.75</b>	<b>YC</b>	<b>bone</b>	<b>3</b>	<b>head/feet</b>

**Mako specific recon.**

### ANKLE RECONS

<b>AX ANKLE BONE</b>	<b>3.0</b>	<b>3.0</b>	<b>YC</b>	<b>bone</b>	<b>3</b>	<b>head/feet</b>
COR ANKLE BONE	3.0	3.0	YC	bone	3	front/back
SAG ANKLE BONE	3.0	3.0	YC	bone	3	left/right

**Mako specific recon.**

# CT Zimmer PSI Knee

Updated  
5/5/2024

Indications - pre surgical evaluation prior to knee joint replacement.

Bill under CT LE w/o Contrast charge. Do not include separate hip, knee and ankle charges.

## GENERAL SCAN NOTES

Move the patient's arms over his/her head if possible. Remove any metal from the imaging field of view.

Patient positioning:

Patient in supine position feet first with knees extended and toes pointing straight up.

Elevate contralateral leg if prosthesis present to minimize streak artifact.

Do not allow patient movement between or during the scans.

Topogram - iliac crests through feet.

Craniocaudal scan coverage (see image below):

3 cm above hip joint through bottom of talus.

FOV must be  $\leq 250$  mm (up to 320 mm if bilateral) and matrix must be 512 x 512 squared.

If bilateral cannot fit in FOV  $< 320$  mm, scan with FOV of 500 mm and recon each leg at 250 mm.

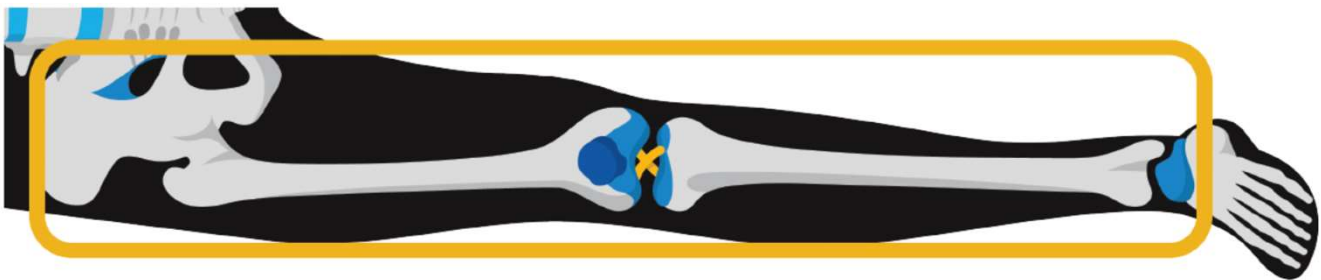
Only bones have to be included in FOV (soft tissues do not have to be included).

IV Contrast: not given for this protocol.

For **GE scanners**, it is essential for the 1st recon thickness on the scanner to match the 1st recon thickness in this protocol book for the prescribed Noise Index to be valid. The 1st recon should generally be the thickest recon in the protocol.

Prepare an uncompressed DICOM disc containing only axial soft tissue images (do not send coronal and sagittal recons).

Zimmer Customer Support: 800-348-2759.



**Craniocaudal Scan Coverage**

# CT Zimmer PSI Knee

## SIEMENS PARAMETERS & RECONS

	Scan Mode	kV	mAs	Care Dose	Care kV & Lvl	Pitch	Acq	Coll	Rot Time
Sensation 16	spiral	120	200	on	NA	0.80	16	0.75	0.5
Go Up 32	spiral	130	109	on	on 170	0.80	32	0.7	1.0
Sensation 64	spiral	120	200	on	NA	0.90	64	0.6	0.5
Definition 64	spiral	120	190	on	on	0.80	64	0.6	1.0
Go Top 64	spiral	120	131	on	on 170	0.80	64	0.6	1.0
Drive 128	spiral	120	133	on	on	0.80	128	0.6	1.0
Force 192	spiral	120	133	on	on	0.80	192	0.6	1.0

Name of Series	Thick	Interval	Kernel	Window	IR Lvl	Recon Direction
<b>AX SOFT</b>	<b>1.5</b>	<b>0.75</b>	<b>Br40 / B31f</b>	<b>abdomen</b>	<b>3</b>	<b>head/feet</b>
AX BONE	3.0	3.0	Br59 / B60f	bone/osteo	3	head/feet
COR BONE	3.0	3.0	Br59 / B60f	bone/osteo	3	front/back
SAG BONE	3.0	3.0	Br59 / B60f	bone/osteo	3	left/right

**Zimmer specific recon.**

Only the axial soft tissue images are sent to Zimmer.

## GE PARAMETERS & RECONS

	Scan Type	SFOV	kV	mA Range	Noise Index	Smart mA	Slice Thick	Beam Coll	Pitch	Speed	Rot Time	Dose Red	ASIR
LS 16	helical	large	120	100-440	27.00	on	1.25	20	1.375	27.50	0.5	NA	NA
Opt 540	helical	large	120	100-440	27.00	on	1.25	20	1.375	27.50	0.5	NA	NA
LS VCT 64	helical	large body	120	120-450	16.26	on	1.25	40	0.984	39.37	0.5	30	70
Disc VCT 64	helical	large body	120	100-700	20.00	on	1.25	40	0.984	39.37	0.8	NA	NA

Name of Series	Thickness	Interval	Recon Algorithm/Mode	Window Width/Level	Recon Direction
<b>AX SOFT</b>	<b>1.25</b>	<b>0.625</b>	<b>std full</b>	<b>400/40</b>	<b>head/feet</b>
AX BONE	2.5	2.5	bone full	2500/480	head/feet
COR BONE	2.5	2.5	bone full	2500/480	front/back
SAG BONE	2.5	2.5	bone full	2500/480	left/right

**Must be first recon.  
Zimmer specific recon.**

Only the axial soft tissue images are sent to Zimmer.

# CT Zimmer PSI Knee

## PHILIPS PARAMETERS & RECONS

	Scan Mode	kV	Avg mAs	Dose Index	3D Dose	Pitch	Detect	Colli	Rot Time
Incisive 128	helical	120	103	20	on	0.80	64	0.625	0.75

Name of Series	Thick	Interval	Filter	Window	iDose	Recon Direction
<b>AX SOFT</b>	<b>1.5</b>	<b>0.75</b>	<b>B</b>	<b>abdomen</b>	<b>3</b>	<b>head/feet</b>
AX BONE	3.0	3.0	YC	bone	3	head/feet
COR BONE	3.0	3.0	YC	bone	3	front/back
SAG BONE	3.0	3.0	YC	bone	3	left/right

**Zimmer specific recon.**

Only the axial soft tissue images are sent to Zimmer.



# CT Conformis Knee

Updated  
5/5/2024

Indications - pre surgical evaluation prior to knee joint replacement.

Bill under CT LE w/o Contrast charge. Do not include separate hip, knee and ankle charges.

## GENERAL SCAN NOTES

Remove any metal from the imaging field of view.

Patient positioning:

Patient in supine position feet first with knees extended and toes pointing straight up.

Elevate contralateral leg if prosthesis present to minimize streak artifact.

Do not allow patient movement between or during the scans.

Topogram - iliac crests through feet.

Craniocaudal scan coverage (see images below):

Hip - acetabulum through bottom of femoral head. FOV 250-300 mm.

Knee - distal third of femur through proximal half of tibia. FOV 200-250 mm.

Ankle - 2 cm above to 2 cm below ankle joint. FOV 150-200 mm.

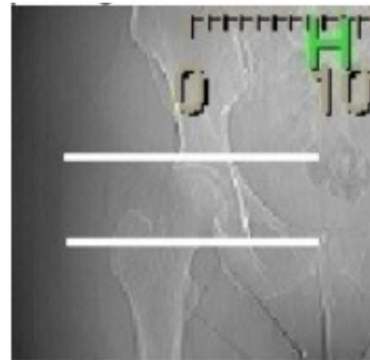
IV Contrast: not given for this protocol.

For **GE scanners**, it is essential for the 1st recon thickness on the scanner to match the 1st recon thickness in this protocol book for the prescribed Noise Index to be valid. The 1st recon should generally be the thickest recon in the protocol.

Prepare an uncompressed DICOM disc containing all images.



**Knee CC Coverage**



**Hip CC Coverage**



**Ankle CC Coverage**

# CT Conformis Knee

## SIEMENS PARAMETERS & RECONS

For **Hip** scan:

	Scan Mode	kV	mAs	Care Dose	Care kV & Lvl	Pitch	Acq	Coll	Rot Time
Sensation 16	spiral	120	200	on	NA	0.80	16	0.75	0.5
Go Up 32	spiral	130	109	on	on 170	0.80	32	0.7	1.0
Sensation 64	spiral	120	200	on	NA	0.90	64	0.6	0.5
Definition 64	spiral	120	190	on	on	0.80	64	0.6	1.0
Go Top 64	spiral	120	131	on	on 170	0.80	64	0.6	1.0
Drive 128	spiral	120	133	on	on	0.80	128	0.6	1.0
Force 192	spiral	120	133	on	on	0.80	192	0.6	1.0

For **Knee** and **Ankle** scans:

	Scan Mode	kV	mAs	Care Dose	Care kV & Lvl	Pitch	Acq	Coll	Rot Time
Sensation 16	spiral	120	140	on	NA	0.55	16	0.75	1.0
Go Up 32	spiral	Sn 110	366	on	on 75	0.40	32	0.7	1.0
Sensation 64	spiral	120	140	on	NA	0.90	64	0.6	1.0
Definition 64	spiral	120	100	on	<b>off</b>	0.80	64	0.6	1.0
Go Top 64	spiral	Sn 110	898	on	on	0.40	64	0.6	1.0
Drive 128	spiral	120	70	on	<b>off</b>	0.80	128	0.6	1.0
Force 192	spiral	120	70	on	<b>off</b>	0.80	192	0.6	1.0

### HIP RECONS

Name of Series	Thick	Interval	Kernel	Window	IR Lvl	Recon Direction
AX HIP BONE	2.0	2.0	Br59 / B60	bone/osteo	3	head/feet

### KNEE RECONS

AX KNEE BONE	1.0	0.5	Br59 / B60	bone/osteo	3	head/feet
COR KNEE BONE	1.0	1.0	Br59 / B60	bone/osteo	3	front/back
SAG KNEE BONE	1.0	1.0	Br59 / B60	bone/osteo	3	left/right

### ANKLE RECONS

AX ANKLE BONE	2.0	2.0	Br59 / B60	bone/osteo	3	head/feet
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# CT Conformis Knee

## GE PARAMETERS & RECONS

For **Hip** and **Ankle** scans:

	Scan Type	SFOV	kV	mA Range	Noise Index	Smart mA	Slice Thick	Beam Coll	Pitch	Speed	Rot Time	Dose Red	ASIR
LS 16	helical	large	120	100-440	12.50	on	2.5	10	0.938	9.37	0.5	NA	NA
Opt 540	helical	large	120	100-440	12.50	on	2.5	10	0.938	9.37	0.5	NA	NA
LS VCT 64	helical	large body	120	100-450	16.00	on	2.5	40	0.984	39.37	0.5	20	20
Disc VCT 64	helical	large body	120	100-450	16.00	on	2.5	40	0.984	39.37	0.5	20	20

For **Knee** scan:

	Scan Type	SFOV	kV	mA Range	Noise Index	Smart mA	Slice Thick	Beam Coll	Pitch	Speed	Rot Time	Dose Red	ASIR
LS 16	helical	large	120	100-440	17.68	on	1.25	10	0.938	9.37	0.5	NA	NA
Opt 540	helical	large	120	100-440	17.68	on	1.25	10	0.938	9.37	0.5	NA	NA
LS VCT 64	helical	large body	120	100-450	22.63	on	1.25	40	0.984	39.37	0.5	20	20
Disc VCT 64	helical	large body	120	100-450	22.63	on	1.25	40	0.984	39.37	0.5	20	20

### HIP RECONS

Name of Series	Thickness	Interval	Recon Algorithm/Mode	Window Width/Level	Recon Direction
<b>AX HIP BONE</b>	<b>2.5</b>	<b>2.5</b>	<b>bone full</b>	<b>2500/480</b>	<b>head/feet</b>

**Must be first recon.**

### KNEE RECONS

<b>AX KNEE BONE</b>	<b>1.25</b>	<b>0.625</b>	<b>bone full</b>	<b>2500/480</b>	<b>head/feet</b>
COR KNEE BONE	0.625	0.625	bone plus full	2500/480	front/back
SAG KNEE BONE	0.625	0.625	bone plus full	2500/480	left/right

**Must be first recon.**

### ANKLE RECONS

<b>AX ANKLE BONE</b>	<b>2.5</b>	<b>2.5</b>	<b>bone full</b>	<b>2500/480</b>	<b>head/feet</b>
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**Must be first recon.**

# CT Conformis Knee

## PHILIPS PARAMETERS & RECONS

For Hip, Knee and Ankle scans:

	Scan Mode	kV	Avg mAs	Dose Index	3D Dose	Pitch	Detect	Colli	Rot Time
Incisive 128	helical	120	103	20	on	0.80	64	0.625	0.75

### HIP RECONS

Name of Series	Thick	Interval	Filter	Window	iDose	Recon Direction
AX HIP BONE	2.0	2.0	YC	bone	3	head/feet

### KNEE RECONS

AX KNEE BONE	1.0	0.5	YC	bone	3	head/feet
COR KNEE BONE	1.0	1.0	YC	bone	3	front/back
SAG KNEE BONE	1.0	1.0	YC	bone	3	left/right

### ANKLE RECONS

AX ANKLE BONE	2.0	2.0	YC	bone	3	head/feet
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# CT DePuy Knee

Updated  
5/5/2024

Indications - pre surgical evaluation prior to knee joint replacement.

Bill under CT LE w/o Contrast charge. Do not include separate hip, knee and ankle charges.

## GENERAL SCAN NOTES

Remove any metal from the imaging field of view.

Patient positioning:

Patient in supine position feet first with knees extended and toes pointing straight up.

Elevate contralateral leg if prosthesis present to minimize streak artifact.

Do not allow patient movement between or during the scans.

Topogram - iliac crests through feet.

Craniocaudal scan coverage - just above femoral head through just below talus.

Must use FOV 150-200 mm.

IV Contrast: not given for this protocol.

For **GE scanners**, it is essential for the 1st recon thickness on the scanner to match the 1st recon thickness in this protocol book for the prescribed Noise Index to be valid. The 1st recon should generally be the thickest recon in the protocol.

Prepare an uncompressed DICOM disc containing axial soft tissue images and send to:

## SIEMENS PARAMETERS & RECONS

	Scan Mode	kV	mAs	Care Dose	Care kV & Lvl	Pitch	Acq	Coll	Rot Time
Sensation 16	spiral	120	200	on	NA	0.80	16	0.75	0.5
Go Up 32	spiral	130	109	on	on 170	0.80	32	0.7	1.0
Sensation 64	spiral	120	200	on	NA	0.90	64	0.6	0.5
Definition 64	spiral	120	190	on	on	0.80	64	0.6	1.0
Go Top 64	spiral	120	131	on	on 170	0.80	64	0.6	1.0
Drive 128	spiral	120	133	on	on	0.80	128	0.6	1.0
Force 192	spiral	120	133	on	on	0.80	192	0.6	1.0

Name of Series	Thick	Interval	Kernel	Window	IR Lvl	Recon Direction
AX BONE	3.0	3.0	Br59 / B60	bone/osteo	3	head/feet
COR BONE	3.0	3.0	Br59 / B60	bone/osteo	3	front/back
SAG BONE	3.0	3.0	Br59 / B60	bone/osteo	3	left/right
<b>AX SOFT</b>	<b>0.75</b>	<b>0.7</b>	<b>Br40 / B31</b>	<b>abdomen</b>	<b>3</b>	<b>head/feet</b>

**DePuy specific recon.**

# CT DePuy Knee

## GE PARAMETERS & RECONS

	Scan Type	SFOV	kV	mA Range	Noise Index	Smart mA	Slice Thick	Beam Coll	Pitch	Speed	Rot Time	Dose Red	ASIR
LS 16	helical	large	120	100-440	19.09	on	2.5	20	1.375	27.50	0.5	NA	NA
Opt 540	helical	large	120	100-440	19.09	on	2.5	20	1.375	27.50	0.5	NA	NA
LS VCT 64	helical	large body	120	120-450	11.50	on	2.5	40	0.984	39.37	0.5	30	70
Disc VCT 64	helical	large body	120	100-700	14.14	on	2.5	40	0.984	39.37	0.8	NA	NA

Name of Series	Thickness	Interval	Recon Algorithm	Window Width/Level	Recon Direction
<b>AX BONE</b>	<b>2.5</b>	<b>2.5</b>	<b>bone full</b>	<b>2500/480</b>	<b>head/feet</b>
COR BONE	2.5	2.5	bone full	2500/480	front/back
SAG BONE	2.5	2.5	bone full	2500/480	left/right
<b>AX SOFT</b>	<b>0.625</b>	<b>0.625</b>	<b>std full</b>	<b>400/40</b>	<b>head/feet</b>

**Must be first recon.**

**DePuy specific recon.**

## PHILIPS PARAMETERS & RECONS

	Scan Mode	kV	Avg mAs	Dose Index	3D Dose	Pitch	Detect	Colli	Rot Time
Incisive 128	helical	120	103	20	on	0.80	64	0.625	0.75

Name of Series	Thick	Interval	Filter	Window	iDose	Recon Direction
AX BONE	3.0	3.0	YC	bone	3	head/feet
COR BONE	3.0	3.0	YC	bone	3	front/back
SAG BONE	3.0	3.0	YC	bone	3	left/right
<b>AX SOFT</b>	<b>0.75</b>	<b>0.7</b>	<b>B</b>	<b>abdomen</b>	<b>3</b>	<b>head/feet</b>

**DePuy specific recon.**

# CT Prophecy (TAR) Ankle

Updated  
5/5/2024

Indications - pre surgical evaluation prior to ankle joint replacement.

Bill under CT LE w/o Contrast charge. Do not include separate knee and ankle charges.

## GENERAL SCAN NOTES

Remove any metal from the imaging field of view.

Patient positioning (see images at bottom of page):

Have opposite leg bent at knee with ankle/foot out of way of ankle of interest.

Foot must be dorsiflexed with foot perpendicular to tibia.

Do not allow patient movement between or during the scans.

Topogram - from above knee through bottom of foot.

Craniocaudal scan coverage (see images at bottom of page):

Knee - 5 cm superior to and 5 cm inferior to joint.

Ankle - 10 cm superior to ankle joint through bottom of foot (including all toes).

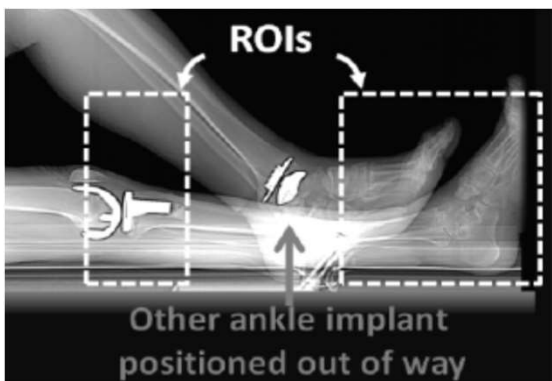
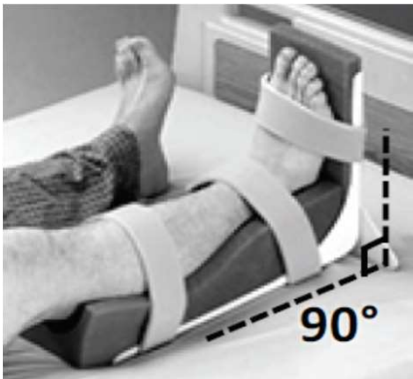
FOV of 280 mm preferred (must be <400 mm) using a 512 x 512 matrix squared.

Okay if soft tissue from contralateral extremity is included.

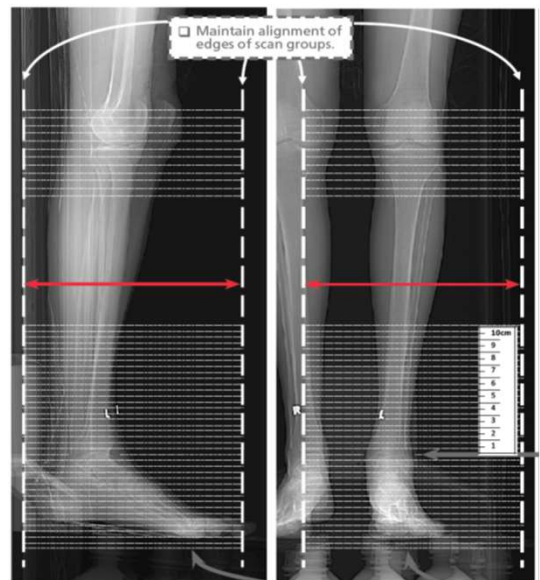
IV Contrast: 100 mL Omnipaque-300, inject at 2.5 mL/sec, 60 secs scan delay.

For **GE scanners**, it is essential for the 1st recon thickness on the scanner to match the 1st recon thickness in this protocol book for the prescribed Noise Index to be valid. The 1st recon should generally be the thickest recon in the protocol.

Prepare an uncompressed DICOM disc including the AP and lateral topograms, axial images of the knee and axial thin images of the ankle. This CD will need to go with the patient after the exam.



**Ankle Positioning**



**Craniocaudal Scan Coverage**

# CT Prophecy (TAR) Ankle

## SIEMENS PARAMETERS & RECONS

For Knee and Ankle scans:

	Scan Mode	kV	mAs	Care Dose	Care kV & Lvl	Pitch	Acq	Coll	Rot Time
Sensation 16	spiral	120	140	on	NA	0.55	16	0.75	1.0
Go Up 32	spiral	Sn 110	366	on	on 75	0.40	32	0.7	1.0
Sensation 64	spiral	120	140	on	NA	0.90	64	0.6	1.0
Definition 64	spiral	120	100	on	<b>off</b>	0.80	64	0.6	1.0
Go Top 64	spiral	Sn 110	898	on	on	0.40	64	0.6	1.0
Drive 128	spiral	120	70	on	<b>off</b>	0.80	128	0.6	1.0
Force 192	spiral	120	70	on	<b>off</b>	0.80	192	0.6	1.0

### KNEE RECONS

Name of Series	Thick	Interval	Kernel	Window	IR Lvl	Recon Direction
<b>AX KNEE BONE</b>	<b>3.0</b>	<b>3.0</b>	<b>Br59 / B60</b>	<b>bone/osteo</b>	<b>3</b>	<b>head/feet</b>
COR KNEE BONE	3.0	3.0	Br59 / B60	bone/osteo	3	front/back
SAG KNEE BONE	3.0	3.0	Br59 / B60	bone/osteo	3	left/right

Prophecy specific recon.

### ANKLE RECONS

AX ANKLE BONE	2.0	2.0	Br59 / B60	bone/osteo	3	head/feet
COR ANKLE BONE	2.0	2.0	Br59 / B60	bone/osteo	3	front/back
SAG ANKLE BONE	2.0	2.0	Br59 / B60	bone/osteo	3	left/right
<b>AX ANKLE THINS</b>	<b>1.0</b>	<b>1.0</b>	<b>Br59 / B60</b>	<b>bone/osteo</b>	<b>3</b>	<b>head/feet</b>

Prophecy specific recon.



# CT Prophecy (TAR) Ankle

## GE PARAMETERS & RECONS

For Knee and Ankle scans:

	Scan Type	SFOV	kV	mA Range	Noise Index	Smart mA	Slice Thick	Beam Coll	Pitch	Speed	Rot Time	Dose Red	ASIR
LS 16	helical	large	120	100-440	12.50	on	2.5	10	0.938	9.37	0.5	NA	NA
Opt 540	helical	large	120	100-440	12.50	on	2.5	10	0.938	9.37	0.5	NA	NA
LS VCT 64	helical	large body	120	100-450	16.00	on	2.5	40	0.984	39.37	0.5	20	20
Disc VCT 64	helical	large body	120	100-450	16.00	on	2.5	40	0.984	39.37	0.5	20	20

### KNEE RECONS

Name of Series	Thickness	Interval	Recon Algorithm/Mode	Window Width/Level	Recon Direction
<b>AX KNEE BONE</b>	<b>2.5</b>	<b>2.5</b>	<b>bone full</b>	<b>2500/480</b>	<b>head/feet</b>
COR KNEE BONE	2.5	2.5	bone full	2500/480	front/back
SAG KNEE BONE	2.5	2.5	bone full	2500/480	left/right

**Must be first recon.**  
**Prophecy specific recon.**

### ANKLE RECONS

<b>AX ANKLE BONE</b>	<b>2.5</b>	<b>2.5</b>	<b>bone full</b>	<b>2500/480</b>	<b>head/feet</b>
COR ANKLE BONE	2.5	2.5	bone full	2500/480	front/back
SAG ANKLE BONE	2.5	2.5	bone full	2500/480	left/right
<b>AX ANKLE THINS</b>	<b>0.625</b>	<b>0.625</b>	<b>bone plus full</b>	<b>2500/480</b>	<b>head/feet</b>

**Must be first recon.**  
**Prophecy specific recon.**

# CT Prophecy (TAR) Ankle

## PHILIPS PARAMETERS & RECONS

For Knee and Ankle scans:

	Scan Mode	kV	Avg mAs	Dose Index	3D Dose	Pitch	Detect	Colli	Rot Time
Incisive 128	helical	120	85	32	on	0.80	64	0.625	1.00

### KNEE RECONS

Name of Series	Thick	Interval	Filter	Window	iDose	Recon Direction
<b>AX KNEE BONE</b>	<b>3.0</b>	<b>3.0</b>	<b>YC</b>	<b>bone</b>	<b>3</b>	<b>head/feet</b>
COR KNEE BONE	3.0	3.0	YC	bone	3	front/back
SAG KNEE BONE	3.0	3.0	YC	bone	3	left/right

**Prophecy specific recon.**

### ANKLE RECONS

AX ANKLE BONE	2.0	2.0	YC	bone	3	head/feet
COR ANKLE BONE	2.0	2.0	YC	bone	3	front/back
SAG ANKLE BONE	2.0	2.0	YC	bone	3	left/right
<b>AX ANKLE THINS</b>	<b>1.0</b>	<b>1.0</b>	<b>YC</b>	<b>bone</b>	<b>3</b>	<b>head/feet</b>

**Prophecy specific recon.**