

# Knee Osteo-Abscess DISCOVERY MR750w

## Technical Instructions

**LT-3-Plane Loc**

**RT-3-Plane Loc**

**Ax T2 FAT**

**Sag T2 FAT**

**Cor T2 FAT**

**Ax T1**

**Sag T1**

**Cor T1**

**+C Ax T1 FAT**

**+C Sag T1 FAT**

**+C Cor T1 FAT**

# LT-3-Plane Loc

## LT-3-Plane Loc

### PATIENT POSITION

Coil Configuration:	GEM Flex LG Full
Plane:	3-PLANE

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### IMAGING PARAMETERS

Imaging Mode:	2D
Pulse Sequence:	Spin Echo
Imaging Options:	Seq, EDR, Fast, SS, ARC
Phase:	2.00

---

### Image Recon

Intensity Filter:	None
Intensity Correction:	NONE

---

### FMRI

Brain Wave Real Time:	None
PSD Trigger:	Internal
Slice Order:	Interleaved
View Order:	Bottom/Up
# of Repetitions REST:	0
# of Repetitions ACTIVE:	0

---

### SAT

Tag Spacing: None

Tag Type: None

---

### **USER CVS**

User CV1: 1.00

User CV2: 240.00

User CV13: 1.00

User CV16: None

User CV39: 1.00

User CV Mask2: 256

---

### **DIFFUSION**

# Synthetic b-values: 1

Synthetic b-value: 1000.0;

Recon All Images: On

---

### **SCAN TIMING**

TE: 82.5

Number of Echoes: 1

TR: Minimum

Receiver Bandwidth: 62.50

---

### **GATING/TRIGGER**

Auto Trigger Type: Off

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### **MULTI-PHASE**

Seperate Series: 0

Mask Phase: 0

Mask Pause:	0
Preserve:	0

---

### SCAN RANGE

FOV:	28.0
Slice Thickness:	5.0
Slice Spacing:	5.0
Table Delta:	0.00

---

### ACQ TIMING

Freq:	384
Phase:	256
Freq DIR:	Unswap
# of Acq. Before Pause:	0
Phase FOV:	1.00
Auto Shim:	Auto
Phase Correct:	Off
RF Drive Mode:	Preset
Excitation Mode:	Selective

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### CONTRAST

Contrast Yes/No:	No
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### TRICKS

Pause On/Off:	On
Auto Subtract:	0

---

### OTHERS

Anatomical Region:

Knee

# RT-3-Plane Loc

## RT-3-Plane Loc

### PATIENT POSITION

Coil Configuration:	GEM Flex LG Full
Plane:	3-PLANE

---

### IMAGING PARAMETERS

Imaging Mode:	2D
Pulse Sequence:	Spin Echo
Imaging Options:	Seq, EDR, Fast, SS, ARC
Phase:	2.00

---

### Image Recon

Intensity Filter:	None
Intensity Correction:	NONE

---

### FMRI

Brain Wave Real Time:	None
PSD Trigger:	Internal
Slice Order:	Interleaved
View Order:	Bottom/Up
# of Repetitions REST:	0
# of Repetitions ACTIVE:	0

---

### SAT

Tag Spacing: None

Tag Type: None

---

### **USER CVS**

User CV1: 1.0

User CV2: 240.00

User CV13: 1.00

User CV15: None

User CV39: 1.00

User CV Mask2: 256

---

### **DIFFUSION**

Multi b-values: 1000.0;

Multi NEX Values: 1;

Recon All Images: On

---

### **SCAN TIMING**

TE: 80.0

TR: Minimum

Receiver Bandwidth: 62.50

---

### **GATING/TRIGGER**

Auto Trigger Type: Off

---

### **MULTI-PHASE**

Seperate Series: 0

Mask Phase: 0

Mask Pause: 0

---

**SCAN RANGE**

FOV:	28.0
Slice Thickness:	5.0
Slice Spacing:	5.0
Table Delta:	0.00

---

**ACQ TIMING**

Freq:	384
Phase:	256
Freq DIR:	Unswap
# of Acq. Before Pause:	0
Phase FOV:	1.00
Auto Shim:	Auto
Phase Correct:	Off
RF Drive Mode:	Preset
Excitation Mode:	Selective

---

**CONTRAST**

Contrast Yes/No:	No
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---

**TRICKS**

Pause On/Off:	On
Auto Subtract:	0

---

**OTHERS**

Anatomical Region:	Knee
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# Ax T2 FAT

## Ax T2 FAT

### PATIENT POSITION

Coil Configuration:	GEM Flex LG Full
Plane:	OBLIQUE

---

### IMAGING PARAMETERS

Imaging Mode:	2D
Pulse Sequence:	FSE-XL
Imaging Options:	FC, NPW, TRF, Fast, FR

---

### Image Recon

Intensity Filter:	None
Intensity Correction:	SCIC

---

### FMRI

Brain Wave Real Time:	None
PSD Trigger:	Internal
Slice Order:	Interleaved
View Order:	Bottom/Up
# of Repetitions REST:	0
# of Repetitions ACTIVE:	0

---

### SAT

SAT Location S:	9990
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SAT Location I:	9990
Tag Spacing:	None
Tag Type:	None
Fat/Water Saturation:	Fat

---

### **USER CVS**

User CV6:	None
User CV7:	1.00
User CV8:	None
User CV15:	None
User CV17:	1.00
User CV18:	None
User CV19:	1.00
User CV21:	1.00
User CV22:	1.00
User CV30:	1.00
User CV Mask2:	0

---

### **DIFFUSION**

# Synthetic b-values:	1
Synthetic b-value:	1000.0;
Recon All Images:	On

---

### **SCAN TIMING**

Flip Angle:	111
TE:	85.0
Number of Echoes:	1
TR:	4500.0
Echo Train Length:	19

Receiver Bandwidth: 35.71

---

### **GATING/TRIGGER**

Auto Trigger Type: Off

---

### **MULTI-PHASE**

Seperate Series: 0

Mask Phase: 0

Mask Pause: 0

Preserve: 0

---

### **SCAN RANGE**

FOV: 14.0

Slice Thickness: 5.0

Slice Spacing: 1.5

Number of Slices: 19

Table Delta: 0.00

---

### **ACQ TIMING**

Freq: 352

Phase: 256

Freq DIR: R/L

NEX: 2.00

Auto Shim: Auto

Phase Correct: On

Flow Comp Direction: Slice

RF Drive Mode: Quadrature

Excitation Mode: Selective

Fat Shift DIR: Normal (L)

---

**CONTRAST**

Contrast Yes/No: No

---

**TRICKS**

Pause On/Off: On

Auto Subtract: 0

---

**OTHERS**

3D Geometry Correction: Off

Anatomical Region: Knee

# Sag T2 FAT

## Sag T2 FAT

### PATIENT POSITION

Coil Configuration:	GEM Flex LG Full
Plane:	OBLIQUE

---

### IMAGING PARAMETERS

Imaging Mode:	2D
Pulse Sequence:	FSE-XL
Imaging Options:	NPW, EDR, TRF, Fast, FR

---

### Image Recon

Intensity Filter:	None
Intensity Correction:	SCIC

---

### FMRI

Brain Wave Real Time:	None
PSD Trigger:	Internal
Slice Order:	Interleaved
View Order:	Bottom/Up
# of Repetitions REST:	0
# of Repetitions ACTIVE:	0

---

### SAT

Tag Spacing:	None
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Tag Type:	None
Fat/Water Saturation:	Fat

---

### **USER CVS**

User CV6:	None
User CV7:	None
User CV8:	None
User CV9:	None
User CV15:	None
User CV18:	None
User CV19:	1.00
User CV21:	1.00
User CV22:	1.00
User CV30:	1.00
User CV39:	1.00
User CV Mask2:	256

---

### **DIFFUSION**

# Synthetic b-values:	1
Synthetic b-value:	1000.0;
Recon All Images:	On

---

### **SCAN TIMING**

Flip Angle:	111
TE:	80.0
Number of Echoes:	1
TR:	3500.0
Echo Train Length:	21

Receiver Bandwidth: 41.67

---

### **GATING/TRIGGER**

Auto Trigger Type: Off

---

### **MULTI-PHASE**

Seperate Series: 0

Mask Phase: 0

Mask Pause: 0

Preserve: 0

---

### **SCAN RANGE**

FOV: 16.0

Slice Thickness: 5.0

Slice Spacing: 2.0

Number of Slices: 14

Table Delta: 0.00

---

### **ACQ TIMING**

Freq: 352

Phase: 224

Freq DIR: A/P

NEX: 2.00

Auto Shim: Auto

Phase Correct: On

RF Drive Mode: Quadrature

Excitation Mode: Selective

Fat Shift DIR: Normal (P)

---

**CONTRAST**

Contrast Yes/No: No

---

**TRICKS**

Pause On/Off: On

Auto Subtract: 0

---

**OTHERS**

3D Geometry Correction: Off

Anatomical Region: Knee

# Cor T2 FAT

## Cor T2 FAT

### PATIENT POSITION

Coil Configuration:	GEM Flex LG Full
Plane:	OBLIQUE

---

### IMAGING PARAMETERS

Imaging Mode:	2D
Pulse Sequence:	FSE-XL
Imaging Options:	NPW, EDR, TRF, Fast, FR

---

### Image Recon

Intensity Filter:	None
Intensity Correction:	SCIC

---

### FMRI

Brain Wave Real Time:	None
PSD Trigger:	Internal
Slice Order:	Interleaved
View Order:	Bottom/Up
# of Repetitions REST:	0
# of Repetitions ACTIVE:	0

---

### SAT

Tag Spacing:	None
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Tag Type:	None
Fat/Water Saturation:	Fat

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### **USER CVS**

User CV6:	None
User CV7:	None
User CV8:	None
User CV9:	None
User CV15:	None
User CV18:	None
User CV19:	1.00
User CV21:	1.00
User CV22:	1.00
User CV30:	1.00
User CV39:	1.00
User CV Mask2:	256

---

### **DIFFUSION**

# Synthetic b-values:	1
Synthetic b-value:	1000.0;
Recon All Images:	On

---

### **SCAN TIMING**

Flip Angle:	111
TE:	80.0
Number of Echoes:	1
TR:	2800.0
Echo Train Length:	19

Receiver Bandwidth: 41.67

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### **GATING/TRIGGER**

Auto Trigger Type: Off

---

### **MULTI-PHASE**

Seperate Series: 0

Mask Phase: 0

Mask Pause: 0

Preserve: 0

---

### **SCAN RANGE**

FOV: 16.0

Slice Thickness: 5.0

Slice Spacing: 2.0

Number of Slices: 15

Table Delta: 0.00

---

### **ACQ TIMING**

Freq: 352

Phase: 224

Freq DIR: R/L

NEX: 2.00

# of Acq. Before Pause: 0

Auto Shim: Auto

Phase Correct: On

RF Drive Mode: Quadrature

Excitation Mode: Selective

Fat Shift DIR:

Normal (R)

---

**CONTRAST**

Contrast Yes/No:

No

---

**TRICKS**

Pause On/Off:

On

Auto Subtract:

0

---

**OTHERS**

3D Geometry Correction:

Off

Anatomical Region:

Knee

# Ax T1

## Ax T1

### PATIENT POSITION

Coil Configuration:	GEM Flex LG Full
Plane:	OBLIQUE

---

### IMAGING PARAMETERS

Imaging Mode:	2D
Pulse Sequence:	FSE-XL
Imaging Options:	NPW, EDR, TRF, Fast

---

### Image Recon

Intensity Filter:	None
Intensity Correction:	SCIC

---

### FMRI

Brain Wave Real Time:	None
PSD Trigger:	Internal
Slice Order:	Interleaved
View Order:	Bottom/Up
# of Repetitions REST:	0
# of Repetitions ACTIVE:	0

---

### SAT

SAT Location S:	9990
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---

SAT Location I:	9990
Tag Spacing:	None
Tag Type:	None

---

### **USER CVS**

User CV6:	None
User CV7:	1.00
User CV8:	None
User CV9:	None
User CV15:	None
User CV17:	1.00
User CV21:	1.00
User CV22:	1.00
User CV39:	1.00
User CV Mask2:	256

---

### **DIFFUSION**

Recon All Images:	On
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---

### **SCAN TIMING**

Flip Angle:	111
TE:	20.0
Number of Echoes:	1
TR:	800.0
Echo Train Length:	5
Receiver Bandwidth:	41.67

---

### **GATING/TRIGGER**

Auto Trigger Type: Off

---

### MULTI-PHASE

Seperate Series: 0

Mask Phase: 0

Mask Pause: 0

---

### SCAN RANGE

FOV: 14.0

Slice Thickness: 5.0

Slice Spacing: 1.5

Number of Slices: 29

Table Delta: 0.00

---

### ACQ TIMING

Freq: 320

Phase: 224

Freq DIR: R/L

NEX: 2.00

# of Acq. Before Pause: 0

Auto Shim: Auto

Phase Correct: On

RF Drive Mode: Quadrature

Excitation Mode: Selective

---

### CONTRAST

Contrast Yes/No: No

---

### TRICKS

Pause On/Off:	On
Auto Subtract:	0

---

**OTHERS**

Anatomical Region:	Knee
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# Sag T1

## Sag T1

### PATIENT POSITION

Coil Configuration:	GEM Flex LG Full
Plane:	OBLIQUE

---

### IMAGING PARAMETERS

Imaging Mode:	2D
Pulse Sequence:	FSE-XL
Imaging Options:	NPW, EDR, TRF, Fast

---

### Image Recon

Intensity Filter:	None
Intensity Correction:	SCIC

---

### FMRI

Brain Wave Real Time:	None
PSD Trigger:	Internal
Slice Order:	Interleaved
View Order:	Bottom/Up
# of Repetitions REST:	0
# of Repetitions ACTIVE:	0

---

### SAT

Tag Spacing:	None
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Tag Type: None

---

### **USER CVS**

User CV6: None  
User CV7: None  
User CV8: None  
User CV9: None  
User CV15: None  
User CV16: None  
User CV18: None  
User CV21: 1.00  
User CV22: 1.00  
User CV30: 1.00  
User CV39: 1.00  
User CV Mask2: 256

---

### **DIFFUSION**

# Synthetic b-values: 1  
Synthetic b-value: 1000.0;  
Recon All Images: On

---

### **SCAN TIMING**

Flip Angle: 111  
TE: 20.0  
Number of Echoes: 1  
TR: 650.0  
Echo Train Length: 5  
Receiver Bandwidth: 31.25

---

## GATING/TRIGGER

Auto Trigger Type: Off

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## MULTI-PHASE

Seperate Series: 0  
Mask Phase: 0  
Mask Pause: 0  
Preserve: 0

---

## SCAN RANGE

FOV: 16.0  
Slice Thickness: 5.0  
Slice Spacing: 2.0  
Number of Slices: 14  
Table Delta: 0.00

---

## ACQ TIMING

Freq: 384  
Phase: 224  
Freq DIR: S/I  
NEX: 2.00  
# of Acq. Before Pause: 0  
Auto Shim: Auto  
Phase Correct: On  
RF Drive Mode: Quadrature  
Excitation Mode: Selective  
Fat Shift DIR: Normal (S)

---

**CONTRAST**

Contrast Yes/No: No

---

**TRICKS**

Pause On/Off: On

Auto Subtract: 0

---

**OTHERS**

Anatomical Region: Knee

# Cor T1

## Cor T1

### PATIENT POSITION

Coil Configuration:	GEM Flex LG Full
Plane:	OBLIQUE

---

### IMAGING PARAMETERS

Imaging Mode:	2D
Pulse Sequence:	FSE-XL
Imaging Options:	NPW, EDR, TRF, Fast, ARC
Phase:	2.00

---

### Image Recon

Intensity Filter:	None
Intensity Correction:	SCIC

---

### FMRI

Brain Wave Real Time:	None
PSD Trigger:	Internal
Slice Order:	Interleaved
View Order:	Bottom/Up
# of Repetitions REST:	0
# of Repetitions ACTIVE:	0

---

### SAT

SAT Location S:	9990
SAT Location I:	9990
Tag Spacing:	None
Tag Type:	None

---

### **USER CVS**

User CV6:	None
User CV7:	1.00
User CV8:	None
User CV9:	None
User CV15:	None
User CV16:	None
User CV17:	1.00
User CV18:	None
User CV21:	1.00
User CV22:	1.00
User CV30:	1.00
User CV39:	1.00
User CV Mask2:	256

---

### **DIFFUSION**

# Synthetic b-values:	1
Synthetic b-value:	1000.0;
Recon All Images:	On

---

### **SCAN TIMING**

Flip Angle:	111
TE:	20.0
Number of Echoes:	1

TR:	800.0
Echo Train Length:	5
Receiver Bandwidth:	41.67

---

### **GATING/TRIGGER**

Auto Trigger Type:	Off
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---

### **MULTI-PHASE**

Seperate Series:	0
Mask Phase:	0
Mask Pause:	0
Preserve:	0

---

### **SCAN RANGE**

FOV:	16.0
Slice Thickness:	5.0
Slice Spacing:	2.0
Number of Slices:	15
Table Delta:	0.00

---

### **ACQ TIMING**

Freq:	384
Phase:	320
Freq DIR:	S/I
NEX:	2.00
# of Acq. Before Pause:	0
Auto Shim:	Auto
Phase Correct:	On

RF Drive Mode:	Quadrature
Excitation Mode:	Selective
Fat Shift DIR:	Normal (I)

---

### **CONTRAST**

Contrast Yes/No:	No
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---

### **TRICKS**

Pause On/Off:	On
Auto Subtract:	0

---

### **OTHERS**

3D Geometry Correction:	Off
Anatomical Region:	Knee

# +C Ax T1 FAT

## +C Ax T1 FAT

### PATIENT POSITION

Coil Configuration:	GEM Flex LG Full
Plane:	OBLIQUE

---

### IMAGING PARAMETERS

Imaging Mode:	2D
Pulse Sequence:	FSE-XL
Imaging Options:	NPW, EDR, TRF, Fast, ARC
Phase:	2.00

---

### Image Recon

Intensity Filter:	None
Intensity Correction:	SCIC

---

### FMRI

Brain Wave Real Time:	None
PSD Trigger:	Internal
Slice Order:	Interleaved
View Order:	Bottom/Up
# of Repetitions REST:	0
# of Repetitions ACTIVE:	0

---

### SAT

Tag Spacing:	None
Tag Type:	None
Fat/Water Saturation:	Fat

---

### **USER CVS**

User CV6:	None
User CV7:	None
User CV8:	None
User CV9:	None
User CV15:	None
User CV16:	None
User CV18:	None
User CV19:	1.00
User CV21:	1.00
User CV22:	1.00
User CV39:	1.00
User CV Mask2:	256

---

### **DIFFUSION**

Multi b-values:	1000.0;
Multi NEX Values:	1;
Recon All Images:	On

---

### **SCAN TIMING**

Flip Angle:	111
TE:	20.0
Number of Echoes:	1
TR:	800.0
Echo Train Length:	4

Receiver Bandwidth: 41.67

---

### **GATING/TRIGGER**

Auto Trigger Type: Off

---

### **MULTI-PHASE**

Seperate Series: 0

Mask Phase: 0

Mask Pause: 0

---

### **SCAN RANGE**

FOV: 14.0

Slice Thickness: 5.0

Slice Spacing: 1.5

Number of Slices: 29

Table Delta: 0.00

---

### **ACQ TIMING**

Freq: 352

Phase: 224

Freq DIR: R/L

NEX: 2.00

# of Acq. Before Pause: 0

Auto Shim: Auto

Phase Correct: On

RF Drive Mode: Quadrature

Excitation Mode: Selective

Fat Shift DIR: Normal (L)

---

**CONTRAST**

Contrast Yes/No: Yes

---

**TRICKS**

Pause On/Off: On

Auto Subtract: 0

---

**OTHERS**

Anatomical Region: Knee

# +C Sag T1 FAT

## +C Sag T1 FAT

### PATIENT POSITION

Coil Configuration:	GEM Flex LG Full
Plane:	OBLIQUE

---

### IMAGING PARAMETERS

Imaging Mode:	2D
Pulse Sequence:	FSE-XL
Imaging Options:	FC, EDR, TRF, Fast

---

### Image Recon

Intensity Filter:	None
Intensity Correction:	SCIC

---

### FMRI

Brain Wave Real Time:	None
PSD Trigger:	Internal
Slice Order:	Interleaved
View Order:	Bottom/Up
# of Repetitions REST:	0
# of Repetitions ACTIVE:	0

---

### SAT

Tag Spacing:	None
--------------	------

Tag Type:	None
Fat/Water Saturation:	Fat

---

### **USER CVS**

User CV6:	None
User CV7:	None
User CV8:	None
User CV15:	None
User CV16:	None
User CV18:	None
User CV19:	1.00
User CV21:	1.00
User CV22:	1.00
User CV30:	1.00
User CV39:	1.00
User CV Mask2:	256

---

### **DIFFUSION**

# Synthetic b-values:	1
Synthetic b-value:	1000.0;
Recon All Images:	On

---

### **SCAN TIMING**

Flip Angle:	111
TE:	20.0
Number of Echoes:	1
TR:	800.0
Echo Train Length:	4

Receiver Bandwidth: 41.67

---

### **GATING/TRIGGER**

Auto Trigger Type: Off

---

### **MULTI-PHASE**

Seperate Series: 0

Mask Phase: 0

Mask Pause: 0

Preserve: 0

---

### **SCAN RANGE**

FOV: 16.0

Slice Thickness: 5.0

Slice Spacing: 2.0

Number of Slices: 14

Table Delta: 0.00

---

### **ACQ TIMING**

Freq: 320

Phase: 224

Freq DIR: S/I

NEX: 2.00

# of Acq. Before Pause: 0

Phase FOV: 1.00

Auto Shim: Auto

Phase Correct: On

Flow Comp Direction: Freq

RF Drive Mode: Quadrature

Excitation Mode: Selective  
Fat Shift DIR: Normal (S)

---

**CONTRAST**

Contrast Yes/No: Yes

---

**TRICKS**

Pause On/Off: On  
Auto Subtract: 0

---

**OTHERS**

Anatomical Region: Knee

# +C Cor T1 FAT

## +C Cor T1 FAT

### PATIENT POSITION

Coil Configuration:	GEM Flex LG Full
Plane:	OBLIQUE

---

### IMAGING PARAMETERS

Imaging Mode:	2D
Pulse Sequence:	FSE-XL
Imaging Options:	FC, NPW, EDR, TRF, Fast

---

### Image Recon

Intensity Filter:	None
Intensity Correction:	SCIC

---

### FMRI

Brain Wave Real Time:	None
PSD Trigger:	Internal
Slice Order:	Interleaved
View Order:	Bottom/Up
# of Repetitions REST:	0
# of Repetitions ACTIVE:	0

---

### SAT

Tag Spacing:	None
--------------	------

Tag Type:	None
Fat/Water Saturation:	Fat

---

### **USER CVS**

User CV6:	None
User CV7:	None
User CV8:	None
User CV15:	None
User CV16:	None
User CV18:	None
User CV19:	1.00
User CV21:	1.00
User CV22:	1.00
User CV30:	1.00
User CV39:	1.00
User CV Mask2:	256

---

### **DIFFUSION**

# Synthetic b-values:	1
Synthetic b-value:	1000.0;
Recon All Images:	On

---

### **SCAN TIMING**

Flip Angle:	111
TE:	20.0
Number of Echoes:	1
TR:	800.0
Echo Train Length:	4

Receiver Bandwidth: 41.67

---

### **GATING/TRIGGER**

Auto Trigger Type: Off

---

### **MULTI-PHASE**

Seperate Series: 0

Mask Phase: 0

Mask Pause: 0

Preserve: 0

---

### **SCAN RANGE**

FOV: 16.0

Slice Thickness: 5.0

Slice Spacing: 2.0

Number of Slices: 15

Table Delta: 0.00

---

### **ACQ TIMING**

Freq: 352

Phase: 224

Freq DIR: S/I

NEX: 2.00

# of Acq. Before Pause: 0

Auto Shim: Auto

Phase Correct: On

Flow Comp Direction: Freq

RF Drive Mode: Preset

Excitation Mode: Selective

Fat Shift DIR: Normal (I)

---

**CONTRAST**

Contrast Yes/No: Yes

---

**TRICKS**

Pause On/Off: On

Auto Subtract: 0

---

**OTHERS**

Anatomical Region: Knee