PtoleMedic System

USA-Instructions for Use

MRI Protocol Quick Reference Guide

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Lento Medical Innovation, Inc.
Imaging Quick Reference Guide
for 1.5T and 3T Scanners

These PtoleMedic System instructions for use are a quick reference guide for an MRI Technologist while setting up the listed MRI scanning equipment. The most current MRI set-up guide is always available on-line for reference or download. Lento Encourages technologists to verify the use of the most recent version frequently.

WARNING: Please note that the use of MRI scanners in patients with metallic implants in or near the knee joint may adversely affect the quality and accuracy of the images obtained. It is recommended that MRI scans not be attempted in these patients.

WARNING: The use of the PtoleMedic System software in pediatric patients has not been studied, and the results of such use in these patients are unknown. We do not recommend that such surgery not be attempted.

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3T MRI Scanners	General Electric	Philips	Siemens	Toshiba
3 plane Localizer Scan Parameters:	**GP FLEX (GE Users)** 4mm x 1mm Skip, 24cm FOV, Matrix 256 x192,	4mm x 1mm Gap, 240mm FOV, Voxel Size to equal 256 x192	4mm x 25% Distance Factor, 240mm FOV, Base Resolution 256 x 80% Phase Resolution	4mm x 1mm Spacing 24cm FOV, Matrix 256x192
Coronal Knee: Pulse Sequence	FRFSE-XL CORONAL	TSE CORONAL	TSF CORONAL	TSF CORONAL
Mode	2D	2D	2D	2D
Imaging Options	No Phase Wrap ON, Tailored RF, 3DGR (3D Geometry Correction for software version 23+)	Fold Over Suppression ON, 100% Sampling, "Default" Selected for Distortion Correction	100% Phase Oversampling, 3D Distortion Correction Filter ON	Fold Over Suppression ON, IDC (Intelligent Distortion Correction) Selected
TE (Echo Time)	Min Full	~24 to 35 (28 nominal)	~24 to 35 (28 nominal)	~24 to 35 (28 nominal)
TR (Repetition Time	Use TR to get series in one acquisition	Use TR to get the shortest scan time	Use TR to get the shortest scan time	Use TR to get the shortest scan time
Flip Angle (Deg)	90	90	120	90 Flop Angle 160
Echo Train Length (ETL), Turbo Spin Factor (TSF)	7	8	7	7
FOV	16cm	160mm	160mm	16cm
Slice Thickness (mm)	3mm	3mm	3mm	3mm
Spacing/Skip/Gap/Distance Factor (mm)	0	0	0%	0
Scan Matrix/Voxel Size Base Resolution x Phase Resolution	256 x 160	Voxel to equal 256 x 160	256 x 75% Base Resolution	256 x 160
NEX/NSA/Averages	2	2	1	2
Frequency Direction	S/I	S/I	H/F	S/I

3T MRI Scanners	General Electric	Philips	Siemens
3 plane Localizer Scan Parameters:	**GP FLEX (GE Users)** 4mm x 1mm Skip, 24cm FOV, Matrix 256 x192,	4mm x 1mm Gap, 240mm FOV, Voxel Size to equal 256 x192	4mm x 25% Distance Factor, 240mm FOV, Base Resolution 256 x 80% Phase Resolution
Coronal Knee: Pulse Sequence	FRFSE-XL CORONAL	TSE CORONAL	TSF CORONAL
Mode	2D	2D	2D
Imaging Options	No Phase Wrap ON, TRF (Tailored Radio Frequency), 3DGR (3D Geometry Correction for software version 23+)	Fold Over Suppression R/L, 100% Sampling, "Default" Selected for Distortion Correction	100% Phase Oversampling, 3D Distortion Correction Filter ON
TE (Echo Time)	Min Full	~24 to 35 (28 nominal)	~24 to 35 (28 nominal)
TR (Repetition Time	Use TR to get series in one acquisition or shortest scan time	Use TR to get the shortest scan time	Use TR to get the shortest scan time
Flip Angle (Deg)	90	90	120
Echo Train Length (ETL), Turbo Spin Factor (TSF)	7	8	7
FOV	16cm	160mm	160mm
Slice Thickness (mm)	3mm	3mm	3mm
Spacing/Skip/Gap/Distance Factor (mm)	0	0	0%
Scan Matrix/Voxel Size Base Resolution x Phase Resolution	256 x 160	Voxel to equal 256 x 160	256 x 75%Base Resolution
NEX/NSA/Averages	2	2	1
Frequency Direction	S/I	S/I	H/F