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### o.3.1 Spike Noise (Head Axial, A/P)

| SCAN OPTION | INPUT |
|---|---|
| PATIENT REGISTER . | **[New Pt]** |
| PATIENT INFORMATION | |
| Patient Id | **geservice** |
| Patient Name | **spike noise test** |
| Weight (Lb) | **111** |
| | **[Landmark]** |
| Landmark | **[>] [Nasion]** |
| PATIENT PROTOCOLS | **[Patient Position]** |
| PATIENT POSITION | |
| Patient Position | **[>] [Supine]** |
| Patient Entry | **[>] [Head First]** |
| Coil | **[...] [Head] [Accept]** |
| IMAGING PARAMETERS | |
| Plane | **[>] [Axial]** |
| Mode | **[>] [2D]** |
| Pulse Seq | **[...] [Gradient Echo] [Accept]** |
| Imaging Options | **[...] [Sequential]** |
| Psd Name | none |
| Protocol | no entry |
| SCAN TIMING | |
| # of Echoes | 1 (default) |
| TE. | **[10]** |
| TR. | **[20]** |
| Flip Angle | **[10]** |
| Bandwidth | **[15.63]** (1.0T) |
| | **[15.00]** (1.5T) |

| | |
|---|---|
| SCANNING RANGE | |
| FOV | **[24]** |
| Slice Thickness | **[5]** |
| Spacing | **[1.5]** |
| S/I Start | **[I60]** |
| S/I End | **[S60]** |
| # of Slices | 20 (default) |
| L/R Center | 0 (default) |
| P/A Center | 0 (default) |
| Table Delta | 0.00 (default) |
| ACQUISITION TIMING | |
| Freq | **[256]** |
| Phase | **[256]** |
| NEX | **[1]** (1:45) |
| # of Locs Before Pause | **0** |
| Freq Dir | **[>] [A/P]** |
| Auto Center Freq | **[>] [Peak]** |
| (lowest window) | **[Save Series]** |
| **[Research Operations]** | **[Setup Params]** |
| R1 | **11** |
| R2 | **15** |
| TG | **0** |
| Number of Frames | **2** |
| | **[Done]** |

### o.3.2 Spike Noise (Head Axial, R/L)

| SCAN OPTION | INPUT |
|---|---|
| RX MANAGER | Press right mouse button, then **[Copy Series], [Paste Series].** Double-click left mouse button on new series to activate it. See Note |
| ACQUISITION TIMING | |
| Freq Dir | **[>] [R/L]** |
| (lowest window) | **[Save Series]** |
| RX MANAGER | **[Prepare to Scan]** |

**Note:** Only values different from previous series shown. All other values should be the same as the previous series

### o.3.3 Spike Noise (Head Sagittal)

| SCAN OPTION | INPUT |
|---|---|
| RX MANAGER | Press right mouse button, then **[Copy Series], [Paste Series].** Double-click left mouse button on new series to activate it. See Note |
| IMAGING PARAMETERS | |
| Plane | **[>] [Sagittal]** |
| SCANNING RANGE | |
| R/L Start | **[R60]** |
| R/L End | **[L60]** |
| P/A Center | 0 (default) |
| I/S Center | 0 (default) |
| ACQUISITION TIMING | |
| Freq Dir | **[>] [A/P]** |
| (lowest window) | **[Save Series]** |
| RX MANAGER | **[Prepare to Scan]** |

**Note:** Only values different from previous series shown. All other values should be the same as the previous series

### o.3.4 Spike Noise (Head Coronal)

| SCAN OPTION | INPUT |
|---|---|
| RX MANAGER | Press right mouse button, then **[Copy Series], [Paste Series].** Double-click left mouse button on new series to activate it. See Note |
| IMAGING PARAMETERS | |
| Plane | **[>] [Coronal]** |
| SCANNING RANGE | |
| A/P Start | **[P60]** |
| A/P End | **[A60]** |
| S/I Center | 0 (default) |
| R/L Center | 0 (default) |
| ACQUISITION TIMING | |
| Freq Dir | **[>] [R/L]** |
| (lowest window) | **[Save Series]** |
| RX MANAGER | **[Prepare to Scan]** |

**Note:** Only values different from previous series shown. All other values should be the same as the previous series

### o.3.5 Spike Noise (Body Coronal)

| SCAN OPTION | INPUT |
|---|---|
| RX MANAGER | Press right mouse button, then **[Copy Series], [Paste Series].** Double-click left mouse button on new series to activate it. See Note |
| PATIENT POSITION | |
| Coil | **[...] [Bodyd] [Accept]** |
| (lowest window) | **[Save Series]** |
| RX MANAGER | **[Prepare to Scan]** |

**Note:** Only values different from previous series shown. All other values should be the same as the previous series

### o.3.6 Spike Noise (Body Sagittal)

| SCAN OPTION | INPUT |
|---|---|
| RX MANAGER | Press right mouse button, then **[Copy Series], [Paste Series].** Double-click left mouse button on new series to activate it. See Note |
| IMAGING PARAMETERS | |
| Plane | **[>] [Sagittal]** |
| SCANNING RANGE | |
| R/L Start | **[R60]** |
| R/L End | **[L60]** |
| P/A Center | 0 (default) |
| I/S Center | 0 (default) |
| ACQUISITION TIMING | |
| Freq Dir | **[>] [S/I]** |
| (lowest window) | **[Save Series]** |
| RX MANAGER | **[Prepare to Scan]** |

**Note:** Only values different from previous series shown. All other values should be the same as the previous series

### o.3.7 Spike Noise (Body Axial, R/L)

| SCAN OPTION | INPUT |
|---|---|
| RX MANAGER | Press right mouse button, then **[Copy Series], [Paste Series].** Double-click left mouse button on new series to activate it. See Note |
| IMAGING PARAMETERS | |
| Plane | **[>] [Axial]** |
| SCANNING RANGE | |
| S/I Start | **[I60]** |
| S/I End | **[S60]** |
| L/R Center | 0 (default) |
| P/A Center | 0 (default) |
| ACQUISITION TIMING | |
| Freq Dir | **[>] [R/L]** |
| (lowest window) | **[Save Series]** |
| RX MANAGER | **[Prepare to Scan]** |

**Note:** Only values different from previous series shown. All other values should be the same as the previous series

### o.3.8 Spike Noise (Body Axial, A/P)

| SCAN OPTION | INPUT |
|---|---|
| RX MANAGER | Press right mouse button, then **[Copy Series], [Paste Series].** Double-click left mouse button on new series to activate it. See Note |
| ACQUISITION TIMING | |
| Freq Dir | **[>] [A/P]** |
| (lowest window) | **[Save Series]** |
| RX MANAGER | **[Prepare to Scan]** |

**Note:** Only values different from previous series shown. All other values should be the same as the previous series

### o.5.1 Grafidy

| SCAN OPTION | INPUT |
|---|---|
| PATIENT REGISTER . | **[New Pt]** |
| PATIENT INFORMATION | |
| Patient Id | **geservice** |
| Patient Name | **grafidy** |
| Weight (Lb) | **111** |
| | **[Landmark]** |
| Landmark | **[>] [Nasion]** |
| PATIENT PROTOCOLS | **[Patient Position]** |
| PATIENT POSITION | |
| Patient Position | **[>] [Supine]** |
| Patient Entry | **[>] [Head First]** |
| Coil | **[...] [Head] [Accept]** |
| IMAGING PARAMETERS | |
| Plane | **[>] [Axial]** |
| Mode | **[>] [2D]** |
| Pulse Seq | **[...] [Spin Echo] [Accept]** |
| Imaging Options | none (default) |
| Psd Name | **grafidy** |
| Protocol | no entry |
| | |
| (lowest window) | **[Save Series]** |
| **[Research Operations]** | **[Setup Params]** |
| R1 | **13** |
| R2. | **14** |
| TG | **0** (TG must be set to 0.) |
| Number of Frames. | **4** |
| | Window 1 |
| | Frame 1 + Frame 0 |
| | Window 2 |
| | Frame 3 + Frame 0 |
| | **[Done]** |
| **[Manual Prescan]** | |
| Type | **P** |
| Gain | **1** |
| Windows menu | **[Two Windows]** |
| | **[Done]** |

### o.12.1 Head Slice Thickness (2D, 3mm)

| SCAN OPTION | INPUT |
|---|---|
| PATIENT REGISTER . | **[New Pt]** |
| PATIENT INFORMATION | |
| Patient Id | **geservice** |
| Patient Name | **head slice thick** |
| Weight (Lb)) | **111** |
| | **[Landmark]** |
| Landmark | **[>] [Nasion]** |
| PATIENT PROTOCOLS | **[Patient Position]** |
| PATIENT POSITION | |
| Patient Position | **[>] [Supine]** |
| Patient Entry | **[>] [Head First]** |
| Coil | **[...] [Head] [Accept]** |
| IMAGING PARAMETERS | |
| Plane | **[>] [Axial]** |
| Mode | **[>] [2D]** |
| Pulse Seq | **[...] [Spin Echo] [Accept]** |
| Imaging Options | none |
| Psd Name | no entry |
| Protocol | no entry |
| SCAN TIMING | |
| # of Echoes | 1 (default) |
| TE | **[25]** |
| TR | **[300]** |
| Bandwidth | **[7.81]** (1.0T only) |
| SCANNING RANGE | |
| FOV | **[20]** |
| Slice Thickness | **[3]** |
| Spacing | **[77]** |
| S/I Start | **[I80]** |
| S/I End | **[S80]** |
| # of Slices | 3 (default) |
| L/R Center | 0 (default) |
| P/A Center | 0 (default) |
| Table Delta | 0.00 (default) |

| ACQUISITION TIMING | |
|---|---|
| Freq | **[256]** |
| Phase | **[256]** |
| NEX | **[4]** (1.0T) |
| | **[2]** (1.5T) |
| Phase FOV | 1.00 (default) |
| Freq Dir | **[>] [A/P]** |
| Auto Center Freq | **[>] [Peak]** |
| | |
| (lowest window) | **[Save Series]** |

### o.12.2 Head Slice Thickness (2D, 5mm)

| SCAN OPTION | INPUT |
|---|---|
| RX MANAGER . | Place cursor in Series list area. |
| | Press right mouse button, then |
| | **[Copy Series], [Paste Series].** |
| | Double-click left mouse button |
| | On new series to activate it. |
| | See Note 1 |
| IMAGING PARAMETERS | |
| Imaging Options | **[...] [VBw] [Accept]** |
| SCAN TIMING | |
| TE | **[Min Full]** |
| TR | **[800]** |
| Bandwidth | **[15.63]** |
| SCANNING RANGE | |
| Slice Thickness | **[5]** |
| Spacing | **[75]** |
| ACQUISITION TIMING | |
| NEX | **[4]** |
| (lowest window) | **[Save Series]** |
| RX MANAGER | **[Prepare to Scan** |

**Note: 1**. Only values different from previous series shown. All other values should be the same as the previous series.

### o.12.3 Head Slice Thickness (2D, 10mm)

| SCAN OPTION | INPUT |
|---|---|
| RX MANAGER | Place cursor in Series list area. |
| | Press right mouse button, then |
| | **[Copy Series], [Paste Series].** |
| | Double-click left mouse button |
| | on new series to activate it. |
| | See Note 1 |
| SCANNING RANGE | |
| Slice Thickness | **[10]** |
| Spacing | **[70]** |
| (lowest window) | **[Save Series]** |
| RX MANAGER | **[Prepare to Scan** |

**Note: 1.** Only values different from previous series shown. All other values should be the same as the previous series.

### o.12.4 Head Slice Thickness (2D, Grad Echo, 5mm)

| SCAN OPTION | INPUT |
|---|---|
| RX MANAGER | Place cursor in Series list area. Press right mouse button, then **[Copy Series], [Paste Series].** Double-click left mouse button on new series to activate it. See Note 1 |
| IMAGING PARAMETERS | |
| Pulse Seq | **[...] [Gradient Echo] [Accept]** |
| SCAN TIMING | |
| TE | **[9]** |
| TR | **[100]** |
| Flip Angle | **[30]** |
| Bandwidth | **15.63** |
| SCANNING RANGE | |
| Slice Thickness | **[5]** |
| Spacing | **[77]** |
| S/I Start | **0** |
| S/I End | **0** |
| # of Slices | **1** |
| ACQUISITION TIMING | |
| Phase | **[128]** |
| NEX | **[1]** (0:16) |
| (lowest window) | **[Save Series]** |
| RX MANAGER | **[Prepare to Scan** |

**Note: 1.** Only values different from previous series shown. All other values should be the same as the previous series.

### o.12.5 Head Slice Thickness (3D, Localizer)

| SCAN OPTION | INPUT |
|---|---|
| RX MANAGER | Place cursor in Series list area.<br>Press right mouse button, then<br>**[Copy Series], [Paste Series].**<br>Double-click left mouse button<br>on new series to activate it.<br>See Note 1 |
| IMAGING PARAMETERS | |
| Plane | **[>] [Sagittal]** |
| Imaging Options | none |
| SCAN TIMING | |
| TR | **[50]** |
| SCANNING RANGE | |
| FOV | [**24]** |
| Spacing | **[1.5]** |
| ACQUISITION TIMING | |
| Freq Dir | **[>] [S/I]** |
| (lowest window) | **[Save Series]** |
| RX MANAGER | **[Prepare to Scan]** |

**Note:** Only values different from previous series are shown. All other values should be the same as the previous series.

### o.12.6 Head Slice Thickness (3D, Grad Echo, 1.5mm)

| SCAN OPTION | INPUT |
|---|---|
| RX MANAGER | Place cursor in Series list area. |
| | Press right mouse button, then |
| | **[Copy Series], [Paste Series].** |
| | Double-click left mouse button |
| | on new series to activate it |
| IMAGING PARAMETERS | |
| Plane | **[>] [Axial]** |
| Mode | **[>] [3D]** |
| Pulse Seq | **[...] [Gradient Echo] [Accept]** |
| SCAN TIMING | |
| TR | **[34]** |
| Bandwidth | 1.0T only **15.63** |
| SCANNING RANGE | |
| Slice Thickness | **[1.5]** |
| # of Slices | **[28]** |
| ADDITIONAL PARAMETERS | |
| | **[Graphic Rx]** |
| | See procedure for instructions. |
| ACQUISITION TIMING | |
| Freq Dir | **[>] [A/P]** |
| (lowest window) | **[Save Series]** |
| RX MANAGER | **[Prepare to Scan]** |

**Note:** Only values different from previous series are shown. All other values should be the same as the previous series.

### o.13.1 SNR Check (Body, Axial)

| SCAN OPTION | INPUT |
|---|---|
| PATIENT REGISTER | **[New Pt]** |
| PATIENT INFORMATION | |
| Patient Id | **geservice** |
| Patient Name | **body snr** |
| Weight (Lb) | **111** |
| | **[Landmark]** |
| Landmark | **[Sternal Notch]** |
| PATIENT PROTOCOLS | **[Patient Position]** |
| PATIENT POSITION | |
| Patient Position | **[>] [Supine]** |
| Patient Entry | **[>] [Head First]** |
| Coil | **[...] [Body] [Accept]** |
| IMAGING PARAMETERS | |
| Plane | **[>] [Axial]** |
| Mode | **[>] [2D]** |
| Pulse Seq | **[...] [Spin Echo] [Accept]** |
| Imaging Options | none (default) |
| Psd Name | no entry |
| Protocol | no entry |
| SCAN TIMING | |
| # of Echoes | 1 (default) |
| TE | **[20]** |
| TR | **[2000]** |
| SCANNING RANGE | |
| FOV. | **[48]** |
| Slice Thickness. | **[3]** |
| Spacing | **[1.5]** |
| S/I Start | **0** |
| S/I End | **0** |
| # of Slices | 1 (default) |
| L/R Center | 0 (default) |
| P/A Center | 0 (default) |
| Table Delta | 0.00 (default) |

| ACQUISITION TIMING | |
|---|---|
| Freq | **[256]** |
| Phase | **[256]** |
| NEX | **[1]** (8:52) |
| Phase FOV | 1.00 (default) |
| Freq Dir | **[>] [A/P]** |
| Auto Center Freq | **[>] [Peak]** |
| | |
| (lowest window) | **[Save Series]** |

### o.13.2 SNR Check (Body, Sagittal)

| SCAN OPTION | INPUT |
|---|---|
| RX MANAGER | Place cursor in Series list area. Press right mouse button, then **[Copy Series], [Paste Series].** Double-click left mouse button on new series to activate it. See Note. |
| IMAGING PARAMETERS | |
| Plane | **[>] [Sagittal]** |
| SCANNING RANGE | |
| R/L Start | **0** |
| R/L End | **0** |
| P/A Center | 0 (default) |
| I/S Center | 0 (default) |
| ACQUISITION TIMING | |
| Freq Dir | **[>] [S/I]** |
| (lowest window) | **[Save Series]** |
| RX MANAGER | **[Prepare to Scan]** |

**Note:** Only values different from previous series shown. All other values should be the same as the previous series.

### o.13.3 SNR Check (Body, Coronal)

| SCAN OPTION | INPUT |
|---|---|
| RX MANAGER | Place cursor in Series list area. Press right mouse button, then **[Copy Series], [Paste Series].** Double-click left mouse button on new series to activate it. See Note. |
| IMAGING PARAMETERS | |
| Plane | **[>] [Coronal]** |
| SCANNING RANGE | |
| A/P Start | **[SEE PROCEDURE]** |
| A/P End | **[SEE PROCEDURE]** |
| S/I Center | 0 (default) |
| R/L Center | 0 (default) |
| (lowest window) | **[Save Series]** |
| RX MANAGER | **[Prepare to Scan]** |

**Note:** Only values different from previous series shown. All other values should be the same as the previous series.

### o.13.4 SNR Check (Head, Axial)

| SCAN OPTION | INPUT |
|---|---|
| PATIENT REGISTER . | **[New Pt]** |
| PATIENT INFORMATION | |
| Patient Id | **geservice** |
| Patient Name | **head snr** |
| Weight (Lb) | **111** |
| | **[Landmark]** |
| Landmark | **[Nasion]** |
| PATIENT PROTOCOLS | **[Patient Position]** |
| PATIENT POSITION | |
| Patient Position | **[>] [Supine]** |
| Patient Entry | **[>] [Head First]** |
| Coil | **[...] [Head] [Accept]** |
| IMAGING PARAMETERS | |
| Plane | **[>] [Axial]** |
| Mode | **[>] [2D]** |
| Pulse Seq | **[...] [Spin Echo] [Accept]** |
| Imaging Options | none (default) |
| Psd Name | no entry |
| Protocol | no entry |
| SCAN TIMING | |
| # of Echoes | 1 (default) |
| TE | **[20]** |
| TR | **[2000]** |
| SCANNING RANGE | |
| FOV | **[24]** |
| Slice Thickness | **[3]** |
| Spacing | **[1.5]** |
| Start | **0** |
| End | **0** |
| # of Slices | 1 (default) |
| L/R Center | 0 (default) |
| P/A Center | 0 (default) |

| ACQUISITION TIMING | |
|---|---|
| Freq | **[256]** |
| Phase | **[256]** |
| NEX | **[1]** (8.52) |
| Phase FOV | 1.00 (default) |
| Freq Dir | **[>] [A/P]** |
| Auto Center Freq | **[>] [Peak]** |
| | |
| (lowest window) | **[Save Series]** |

### o.13.5 SNR Check (Head, Sagittal)

| SCAN OPTION | INPUT |
|---|---|
| RX MANAGER | Place cursor in Series list area<br>Press right mouse button, then<br>**[Copy Series], [Paste Series].**<br>Double-click left mouse button<br>on new series to activate it.<br>See Note |
| IMAGING PARAMETERS | |
| Plane | **[>] [Sagittal]** |
| SCANNING RANGE | |
| R/L Start | **0** |
| R/L End | **0** |
| P/A Center | 0 (default) |
| I/S Center | 0 (default) |
| ACQUISITION TIMING | |
| Freq Dir | **[>] [S/I]** |
| (lowest window) | **[Save Series]** |
| RX MANAGER | **[Prepare to Scan]** |

**Note:** Only values different from previous series shown. All other values should be the same as the previous series.

### o.13.6 SNR Check (Head, Coronal)

| SCAN OPTION | INPUT |
|---|---|
| RX MANAGER | Place cursor in Series list area<br>Press right mouse button, then<br>**[Copy Series], [Paste Series].**<br>Double-click left mouse button<br>on new series to activate it.<br>See Note |
| IMAGING PARAMETERS | |
| Plane | **[>] [Coronal]** |
| SCANNING RANGE | |
| A/P Start | **[SEE PROCEDURE]** |
| A/P End | **[SEE PROCEDURE]** |
| S/I Center | 0 (default) |
| R/L Center | 0 (default) |
| (lowest window) | **[Save Series]** |
| RX MANAGER | **[Prepare to Scan]** |

**Note:** Only values different from previous series shown. All other values should be the same as the previous series.

### o.13.7 Surface Coil SNR

| SCAN OPTION | INPUT |
|---|---|
| PATIENT REGISTER . | **[New Pt]** |
| PATIENT INFORMATION | |
| Patient Id | **geservice** |
| Patient Name | **surface coil snr** |
| Weight (Lb) | **300** |
| | **[Landmark]** |
| Landmark | **[Sternal Notch]** |
| PATIENT PROTOCOLS | **[Patient Position]** |
| PATIENT POSITION | |
| Patient Position | **[>] [Supine]** |
| Patient Entry | **[>] [Head First]** |
| Coil | **[...] [Surface]** Select appropriate surface coil **[Accept]** |
| IMAGING PARAMETERS | |
| Plane | **[>] [Axial]** |
| Mode | **[>] [2D]** |
| Pulse Seq | **[…] [Spin Echo] [Accept]** |
| Imaging Options | none (default) |
| Psd Name | no entry |
| Protocol | no entry |
| SCAN TIMING | |
| # of Echoes | 1 (default) |
| TE | **[20]** |
| TR | **[2000]** |
| SCANNING RANGE | |
| FOV | **[48]** |
| Slice Thickness | **[3]** |
| Spacing | **0** |
| I/S Start | **0** |
| I/S End | **0** |
| # of Slices | 1 (default) |
| L/R Center | 0 (default) |
| P/A Center | 0 (default) |
| Table Delta | 0.00 (default) |

| ACQUISITION TIMING | |
|---|---|
| Freq | **[256]** |
| Phase | **[256]** |
| NEX | **[1]** (8.52) |
| Phase FOV | 1.00 (default) |
| Freq Dir | **[>] [A/P]** See Note 1. |
| Auto Center Freq | **[>] [Peak]** |
| | |
| (lowest window) | **[Save Series]** |

Note 1: Depends on surface coil selected. Some that require R/L for the Freq Dir setting are: Extrem, QuadKnee Neurovas. Most require the A/P setting.

### o.14.1 Multicoil Spike Noise (CTLTOP Coils)

| SCAN OPTION | INPUT |
|---|---|
| PATIENT REGISTER . | **[New Pt]** |
| PATIENT INFORMATION | |
| Patient Id | **geservice** |
| Patient Name | **mc noise test** |
| Weight (Lb) | **111** |
| | **[Landmark]** |
| Landmark | **[>] [Sternal Notch]** |
| PATIENT PROTOCOLS | **[Patient Position]** |
| PATIENT POSITION | |
| Patient Position | **[>] [Supine]** |
| Patient Entry | **[>] [Head First]** |
| Coil | **[...] [Phased Array]** Select **[CTLTOP] [Accept]** |
| IMAGING PARAMETERS | |
| Plane | **[>] [Sagittal]** |
| Mode | **[>] [2D]** |
| Pulse Seq | **[...] [Gradient Echo] [Accept]** |
| Imaging Options | **[...] [Sequential] [Variable BW]** |
| Psd Name | no entry |
| SCAN TIMING | |
| # of Echoes | 1 (default) |
| TE. | **[10]** |
| TR. | **[20]** |
| Flip Angle | **[10]** |
| Bandwidth | **15.63** (1.0T) |
| | **15.00** (1.5T) |

| | |
|---|---|
| SCANNING RANGE | |
| FOV | **[48]** |
| Slice Thickness | **[5]** |
| Spacing | **[1.5]** |
| R/L Start | **[L15]** (**0** if Pelvic Coil is used) |
| R/L End | **[R15]** (**0** if Pelvic Coil is used) |
| # of Slices | 6 (default) |
| P/A Center | 0 (default) |
| I/S Center | **[S120.0]** |
| Table Delta | 0.00 (default) |
| ACQUISITION TIMING | |
| Freq | **[256]** |
| Phase | **[256]** |
| NEX | **[1]** (0:32) |
| Phase FOV | 1.00 (default) |
| # Locs efore pause | **0** |
| Freq Dir | **[>] [S/I]** |
| Auto Center Freq | **[>] [Peak]** |

(lowest window) **[Save Series]**

| **[Research Operations]** | **[Setup Params]** |
|---|---|
| R1 | **11** |
| R2 | **15** |
| TG | **0** |
| Number of Frames | **2** |
| | **[Done]** |

### o.14.2 Multicoil Spike Noise (CTLBOT Coils)

| SCAN OPTION | INPUT |
|---|---|
| RX MANAGER | Press right mouse button, then **[Copy Series], [Paste Series].** Double-click left mouse button on new series to activate it. See Note |
| PATIENT POSITION | |
| Coil | **[...] [Phased Array]** Select **[CTLBOT] [Accept]** |
| IMAGING PARAMETERS | |
| Plane | **[>] [Sagittal]** |
| SCANNING RANGE | |
| I/S Center | **[I120.0]** |
| (lowest window) | **[Save Series]** |
| **[Research Operations]** | **[Setup Params]** |
| R1 | **11** |
| R2 | **15** |
| TG | **0** |
| Number of Frames | **2** |
| | **[Done]** |

**Note:** Only values different from previous series shown. All other values should be the same as the previous series.

### o.15.1 Slice Offset (2D, 3mm, Table 50mm)

| SCAN OPTION | INPUT |
|---|---|
| PATIENT REGISTER . | **[New Pt]** |
| PATIENT INFORMATION | |
| Patient Id | **geservice** |
| Patient Name | **head slice thick** |
| Weight (Lb) | **111** |
| | **[Landmark]** |
| Landmark | **[>] [Nasion]** |
| PATIENT PROTOCOLS | **[Patient Position]** |
| PATIENT POSITION | |
| Patient Position | **[>] [Supine]** |
| Patient Entry | **[>] [Head First]** |
| Coil | **[...] [Head] [Accept]** |
| IMAGING PARAMETERS | |
| Plane | **[>] [Axial]** |
| Mode | **[>] [2D]** |
| Pulse Seq | **[...] [SpinEcho] [Accept]** |
| Imaging Options | none (default) |
| Psd Name | no entry |
| Protocol | no entry |
| SCAN TIMING | |
| # of Echoes | 1 (default) |
| TE | **[25]** |
| TR | **[300]** |
| Bandwidth | **15.63** (1.0T only) |
| SCANNING RANGE | |
| FOV | **[20]** |
| Slice Thickness | **[3]** |
| Spacing | **[97]** |
| I/S Start | **I50** |
| I/S End | **S50** |
| # of Slices | 2 (default) |
| L/R Center | 0 (default) |
| P/A Center | 0 (default) |
| Table Delta | **50** |

| ACQUISITION TIMING | |
|---|---|
| Freq | **[256]** |
| Phase | **[256]** |
| NEX | **[2]** (2:35) |
| Phase FOV | 1.00 (default) |
| Freq Dir | **[>] [A/P]** |
| Auto Center Freq | **[>] [Peak]** |

(lowest window) **[Save Series]**

### o.15.2 Slice Offset (2D, 3mm, Table –50mm)

| SCAN OPTION | INPUT |
|---|---|
| RX MANAGER | Place cursor in Series list area |
| | Press right mouse button, then |
| | **[Copy Series], [Paste Series].** |
| | Double-click left mouse button |
| | on new series to activate it. |
| | See Note |
| SCANNING RANGE | |
| Table Delta | **[-50]** |
| (lowest window) | **[Save Series]** |
| RX MANAGER | **[Prepare to Scan]** |

**Note:** Only values different from previous series shown. All other values should be the same as the previous series.

### o.15.3 Slice Offset (3D, Grad Echo Localizer)

| SCAN OPTION | INPUT |
|---|---|
| RX MANAGER | Place cursor in Series list area<br>Press right mouse button, then<br>**[Copy Series], [Paste Series].**<br>Double-click left mouse button<br>on new series to activate it.<br>See Note |
| IMAGING PARAMETERS | |
| Plane | **[>] [Sagittal]** |
| Pulse Seq | **[...] [Gradient Echo] [Accept]** |
| SCAN TIMING | |
| TE | **[9]** |
| TR | **[50]** |
| Flip Angle | **[30]** |
| Bandwidth | **[15.63]** |
| SCANNING RANGE | |
| Slice Thickness | **[5]** |
| Spacing | **[1.5]** |
| R/L Start | **0** |
| R/L End | **0** |
| # of Slices | **1** |
| P/A Center | 0 (default) |
| I/S Center | 0 (default) |
| Table Delta | 0.00 (default) |
| ACQUISITION TIMING | |
| Phase | **[128]** |
| NEX | **[1]** (0:10) |
| Freq Dir | **[>] [S/I]** |
| (lowest window) | **[Save Series]** |
| RX MANAGER | **[Prepare to Scan]** |

**Note:** Only values different from previous series shown. All other values should be the same as the previous series.

### o.15.4 Slice Offset (3D, Grad Table 50mm)

| SCAN OPTION | INPUT |
|---|---|
| RX MANAGER | Press right mouse button, then **[Copy Series], [Paste Series].** Double-click left mouse button on new series to activate it. See Note |
| IMAGING PARAMETERS | |
| Plane | **[>] [Axial]** |
| Mode | **[>] [3D]** |
| SCAN TIMING | |
| TR | **[34]** |
| SCANNING RANGE | |
| Slice Thickness | **[3]** |
| # of Slices | **[60]** |
| Table Delta | **[50]** |
| ADDITIONAL PARAMETERS | |
| | **[Graphic Rx]** See procedure for instructions. |
| ACQUISITION TIMING | |
| Freq Dir | **[>] [A/P]** |
| (lowest window) | **[Save Series]** |
| RX MANAGER | **[Prepare to Scan]** |

**Note:** Only values different from previous series shown. All other values should be the same as the previous series.

### o.15.5 Slice Offset (3D, Grad Table –50mm)

| SCAN OPTION | INPUT |
|---|---|
| RX MANAGER | Place cursor in Series list area<br>Press right mouse button, then<br>**[Copy Series], [Paste Series].**<br>Double-click left mouse button<br>on new series to activate it.<br>See Note |
| SCANNING RANGE | |
| Table Delta | **[50]** |
| (lowest window) | **[Save Series]** |
| RX MANAGER | **[Prepare to Scan]** |

**Note:** Only values different from previous series shown. All other values should be the same as the previous series.

### o.17.1 Body F/R Quadrature

| SCAN OPTION | INPUT |
|---|---|
| PATIENT REGISTER . | **[New Pt]** |
| PATIENT INFORMATION | |
| Patient Id | **geservice** |
| Patient Name | **body f/r quad** |
| Weight (Lb)) | **111** |
| | **[Landmark]** |
| Landmark | **[>] [Sternal Notch]** |
| PATIENT PROTOCOLS | **[Patient Position]** |
| PATIENT POSITION | |
| Patient Position | **[>] [Supine]** |
| Patient Entry | **[>] [Head First]** |
| Coil | **[...] [Body] [Accept]** |
| IMAGING PARAMETERS | |
| Plane | **[>] [Axial]** |
| Mode | **[>] [2D]** |
| Pulse Seq | **[...] [Spin Echo] [Accept]** |
| Imaging Options | **[…] [EDR]** |
| Psd Name | none |
| Protocol | no entry |
| SCAN TIMING | |
| # of Echoes | 1 (default) |
| TE | **[25]** |
| TR | **[84]** for 1.5T |
| | **[92]** for 1.0T |
| Band Width | **[15.63]** (1.0T only) |
| SCANNING RANGE | |
| FOV | **[48]** |
| Slice Thickness | **[10]** |
| Spacing | **[1.5]** |
| Start | **0** |
| End | **0** |
| # of Slices | 1 (default) |
| L/R Center | 0 (default) |
| P/A Center | 0 (default) |
| Table Delta | 0.00 (default) |

| ACQUISITION TIMING | |
|---|---|
| Freq | **[256]** |
| Phase | **[256]** |
| NEX | **[2]** (0:43) |
| Phase FOV | 1.00 (default) |
| Freq Dir | **[>] [A/P]** |
| Auto Center Freq | **[>] [Peak]** |
| | |
| (lowest window) | **[Save Series]** |

### o.17.2 Head F/R Quadrature

| SCAN OPTION | INPUT |
|---|---|
| PATIENT REGISTER . | **[New Pt]** |
| PATIENT INFORMATION | |
| Patient Id | **geservice** |
| Patient Name | **hd f/r quad** |
| Weight (Lb)) | **111** |
| | **[Landmark]** |
| Landmark | **[>] [Nasion]** |
| PATIENT PROTOCOLS | **[Patient Position]** |
| PATIENT POSITION | |
| Patient Position | **[>] [Supine]** |
| Patient Entry | **[>] [Head First]** |
| Coil | **[...] [Head] [Accept]** |
| IMAGING PARAMETERS | |
| Plane | **[>] [Axial]** |
| Mode | **[>] [2D]** |
| Pulse Seq | **[...] [Spin Echo] [Accept]** |
| Imaging Options | **[…] [EDR]** |
| Psd Name | none |
| Protocol | no entry |
| SCAN TIMING | |
| # of Echoes | 1 (default) |
| TE | **[25]** |
| TR | **[84]** for 1.5T |
| | **[92]** for 1.0T |
| Bandwidth | **[15.63]** (1.0T only) |
| SCANNING RANGE | |
| FOV | **[24]** |
| Slice Thickness | **[10]** |
| Spacing | **[1.5]** |
| Start | **0** |
| End | **0** |
| # of Slices | 1 (default) |
| L/R Center | 0 (default) |
| P/A Center | 0 (default) |
| Table Delta | 0.00 (default) |

| ACQUISITION TIMING | |
|---|---|
| Freq | **[256]** |
| Phase | **[256]** |
| NEX | **[2]** (0:43) |
| Phase FOV | 1.00 (default) |
| Freq Dir | **[>] [A/P]** |
| Auto Center Freq | **[>] [Peak]** |
| | |
| (lowest window) | **[Save Series]** |

### o.18.1 Dummy Load

| SCAN OPTION | INPUT |
|---|---|
| PATIENT REGISTER . | **[New Pt]** |
| PATIENT INFORMATION | |
| Patient Id | **geservice** |
| Patient Name | **dummy load cal** |
| Weight (Lb)) | **300** |
| | **[Landmark]** |
| Landmark | **[>] [Sternal Notch]** |
| PATIENT PROTOCOLS | **[Patient Position]** |
| PATIENT POSITION | |
| Patient Position | **[>] [Supine]** |
| Patient Entry | **[>] [Head First]** |
| Coil | **[...] [Body] [Accept]** |
| IMAGING PARAMETERS | |
| Plane | **[>] [Axial]** |
| Mode | **[>] [2D]** |
| Pulse Seq | **[...] [Spin Echo] [Accept]** |
| Imaging Options | none (default0 |
| Psd Name | **cal** |
| Protocol | no entry |
| SCAN TIMING | |
| # of Echoes | 1 (default) |
| TE | **[25]** |
| TR | **[200]** |
| SCANNING RANGE | |
| FOV | **[24]** |
| Slice Thickness | **[5]** |
| Spacing | **0** |
| Start | **0** |
| End | **0** |
| # of Slices | 1 (default) |
| L/R Center | 0 (default) |
| P/A Center | 0 (default) |
| Table Delta | 0.00 (default) |

ACQUISITION TIMING

| | |
|---|---|
| Freq | **[256]** |
| Phase | **[128]** |
| NEX | **[2]** (0:52) |
| Freq Dir | **[>] [R/L]** |
| Auto Center Freq | **[>] [Peak]** |

(lowest window) **[Save Series]**

**[Research Operations]**, **[Display CVs]**

Modify the following:

| | |
|---|---|
| Calmode | **2** (trapezoid pulse) |
| p2_ramp | **1** (1 μsec ramptime) |
| t2 | **50000** (50 msec tr) |
| pismode | **1** (exec service) |
| pmode | **1** (data collection) |
| daqm | **1** (data collection) |
| | **[Accept]** |

**[Research Operations] [Setup Params]**

| | |
|---|---|
| R1 | **7** |
| R2 | **14** |
| Number of Frames | **[2]** |
| | Window 1 |
| | Frame **1** + Frame **0** |
| | **[Done]** |

**[Manual Prescan]**

| | |
|---|---|
| Windows (From Menu Bar) | **2** |
| Window Type | **I Channel** |
| | **[Done]** |

### o.19.1 LVShim (Localizer)

| SCAN OPTION | INPUT |
|---|---|
| PATIENT REGISTER . | **[New Pt]** |
| PATIENT INFORMATION | |
| Patient Id | **geservice** |
| Patient Name | **LV shim** |
| Weight (Lb)) | **300** |
| | **[Landmark]** |
| Landmark | **[>] [Sternal]** |
| PATIENT PROTOCOLS | **[Patient Position]** |
| PATIENT POSITION | |
| Patient Position | **[>] [Supine]** |
| Patient Entry | **[>] [Head First]** |
| Coil | **[...] [Body] [Accept]** |
| IMAGING PARAMETERS | |
| Plane | **[>] [Coronal]** |
| Mode | **[>] [2D]** |
| Pulse Seq | **[...] [Spin Echo] [Accept]** |
| Imaging Options | none (default) |
| Psd Name | none |
| Protocol | no entry |
| SCAN TIMING | |
| # of Echoes | 1 (default) |
| TE | **[20]** |
| TR | **[300]** |
| Bandwidth | **[15.63]** (1.0T only) |
| SCANNING RANGE | |
| FOV | **[48]** |
| Slice Thickness | **[10]** |
| Spacing | **[1.5]** |
| Start | **0** |
| End | **0** |
| # of Slices | 1 (default) |
| S/I Center | 0 (default) |
| R/L Center | 0 (default) |
| Table Delta | 0.00 (default) |

| ACQUISITION TIMING | |
|---|---|
| Freq | **[256]** |
| Phase | **[256]** |
| NEX | **[1]** (1:23) |
| Phase FOV | 1.00 (default) |
| Freq Dir | **[>] [S/I]** |
| Auto Center Freq | **[>] [Peak]** |
| | |
| (lowest window) | **[Save Series]** |

### o.19.2 LVShim Scan

| SCAN OPTION | INPUT | | |
|---|---|---|---|
| PATIENT REGISTER . | **[New Pt]** | | |
| PATIENT POSITION | | | |
| Patient Position | **[>] [Supine]** | | |
| Patient Entry | **[>] [Head First]** | | |
| Coil | **[...] [Body] [Accept]** | | |
| Series Description | Note 1 | | |
| IMAGING PARAMETERS | | | |
| Plane | **[>] [Axial]** | | |
| Mode | **[>] [2D]** | | |
| Pulse Seq | **[...] [Spin Echo] [Accept]** | | |
| Imaging Options | none (default) | | |
| Psd Name | **LVshim** | | |
| Protocol | no entry | | |
| ADDITIONAL PARAMETERS | **[USER CVs]** | | |
| USER CONTROL VARIABLES | | | |
| | No. of scan planes | **[6]** | [2.0 to 16.0] |
| | Bandwidth in Hz | **[Note 2]** | [100.0 to 20000.0] |
| | **[Accept]** | | |
| (lowest window) | **[Save Series]** | | |

**Note 1:** Refer to procedure for description name to use.
**Note 2:** Refer to procedure for proper Bandwidth to use.

### o.20.1 First Image

| SCAN OPTION | INPUT |
|---|---|
| PATIENT REGISTER . | **[New Pt]** |
| PATIENT INFORMATION | |
| Patient Id | **geservice** |
| Patient Name | **first image** |
| Weight (Lb)) | **111** |
| | **[Landmark]** |
| Landmark | **[>] [Nasion]** |
| PATIENT PROTOCOLS | **[Patient Position]** |
| PATIENT POSITION | |
| Patient Position | **[>] [Supine]** |
| Patient Entry | **[>] [Head First]** |
| Coil | **[...] [Head] [Accept]** |
| IMAGING PARAMETERS | |
| Plane | **[>] [Axial]** |
| Mode | **[>] [2D]** |
| Pulse Seq | **[...] [Spin Echo] [Accept]** |
| Imaging Options | none (default) |
| Psd Name | none |
| Protocol | no entry |
| SCAN TIMING | |
| # of Echoes | **[1]** (default) |
| TE | **[20]** |
| TR | **[400]** |
| Band Width | **[15.63]** (1.0T only) |
| SCANNING RANGE | |
| FOV | **[24]** |
| Slice Thickness | **[10]** |
| Spacing | **[1.5]** |
| Start | **0** |
| End | **0** |
| # of Slices | 1 (default) |
| L/R Center | 0 (default) |
| P/A Center | 0 (default) |
| Table Delta | 0.00 (default) |

| | |
|---|---|
| ACQUISITION TIMING | |
| Freq | **[256]** |
| Phase | **[256]** |
| NEX | **[2]** (3:26) |
| Phase FOV | 1.00 (default) |
| Freq Dir | **[>] [A/P]** |
| Auto Center Freq | **[>] [Peak]** |
| | |
| (lowest window) | **[Save Series]** |

### o.21.1 T2 Unformity (Body, Axial)

| SCAN OPTION | INPUT |
|---|---|
| PATIENT REGISTER . | **[New Pt]** |
| PATIENT INFORMATION | |
| Patient Id | **geservice** |
| Patient Name | **body T2** |
| Weight (Lb)) | **111** |
| | **[Landmark]** |
| Landmark | **[>] [Sternal Notch]** |
| PATIENT PROTOCOLS | **[Patient Position]** |
| PATIENT POSITION | |
| Patient Position | **[>] [Supine]** |
| Patient Entry | **[>] [Head First]** |
| Coil | **[...] [Body] [Accept]** |
| IMAGING PARAMETERS | |
| Plane | **[>] [Axial]** |
| Mode | **[>] [2D]** |
| Pulse Seq | **[...] [Spin Echo] [Accept]** |
| Imaging Options | none (default) |
| Psd Name | no entry |
| Protocol | no entry |
| SCAN TIMING | |
| # of Echoes | **[4]** |
| TE | **[30]** |
| TR | **[1000]** |
| SCANNING RANGE | |
| FOV | **[48]** |
| Slice Thickness | **[10]** |
| Spacing | **[1.5]** |
| Start | **0** |
| End | **0** |
| # of Slices | 1 (default) |
| L/R Center | 0 (default) |
| P/A Center | 0 (default) |
| Table Delta | 0.00 (default) |

| ACQUISITION TIMING | |
|---|---|
| Freq | **[256]** |
| Phase | **[128]** |
| NEX | **[1]** (2:20) |
| Phase FOV | 1.00 (default) |
| Freq Dir | **[>] [A/P]** |
| Auto Center Freq | **[>] [Peak]** |

(lowest window) **[Save Series]**

## o.21.2 T2 Uniformity (Body, Sagittal)

| | |
|---|---|
| RX MANAGER | Place cursor in Series list area.<br>Press right mouse button, then<br>**[Copy Series], [Paste Series].**<br>Double-click left mouse button<br>on new series to activate it.<br>See Note |
| IMAGING PARAMETERS | |
| Plane | .**[>] [Sagittal]** |
| SCANNING RANGE | |
| R/L Start | **0** |
| R/L End | **0** |
| P/A Center | 0 (default) |
| I/S Center | 0 (default) |
| ACQUISITION TIMING | |
| Freq Dir | **[>] [S/I]** |
| (lowest window) | **[Save Series]** |
| RX MANAGER | **[Prepare to Scan]** |

**Note:** Only values different from previous series shown. All other values should be the same as the previous series.

### o.21.3 T2 Uniformity (Body/Head, Coronal)

| | |
|---|---|
| RX MANAGER | Place cursor in Series list area.<br>Press right mouse button, then<br>**[Copy Series], [Paste Series].**<br>Double-click left mouse button<br>on new series to activate it.<br>See Note |
| IMAGING PARAMETERS | |
| Plane | **[Coronal]** |
| SCANNING RANGE | |
| A/P Start | see procedure |
| A/P End | see procedure |
| S/I Center | 0 (default) |
| R/L Center | 0 (default) |
| (lowest window) | **[Save Series]** |
| RX MANAGER | **[Prepare to Scan]** |

**Note:** Only values different from previous series shown. All other values should be the same as the previous series.

### o.22.1 Isocenter Cal (DQA-III)

| SCAN OPTION | INPUT |
|---|---|
| PATIENT REGISTER . | **[New Pt]** |
| PATIENT INFORMATION | |
| Patient Id | **geservice** |
| Patient Name | **iso cal** |
| Weight (Lb)) | **111** |
| | **[Landmark]** |
| Exam Description | **dqa isoz cal** (see Note 1) |
| | **[Landmark]** |
| Landmark | **[>] [Nasion]** |
| PATIENT PROTOCOLS | **[Patient Position]** |
| PATIENT POSITION | |
| Patient Position | **[>] [Supine]** |
| Patient Entry | **[>] [Head First]** |
| Coil | **[...] [Head] [Accept]** |
| IMAGING PARAMETERS | |
| Plane | **[>] [Axial]** |
| Mode | **[>] [2D]** |
| Pulse Seq | **[...] [Spin Echo] [Accept]** |
| Imaging Options | none (default) |
| Psd Name | none |
| Protocol | no entry |
| SCAN TIMING | |
| # of Echoes | 1 (default) |
| TE | **[25]** |
| TR | **[300]** |
| Bandwidth | **[15.63]** (1.0T only) |
| SCANNING RANGE | |
| FOV | **[24]** |
| Slice Thickness | **[3.0]** |
| Spacing | **[1.5]** |
| S/I Start | **0** |
| S/I End | **0** |
| # of Slices | 1 (default) |
| L/R Center | 0 (default) |
| P/A Center | 0 (default) |
| Table Delta | 0.00 (default) |

| ACQUISITION TIMING | |
|---|---|
| Freq | **[512]** |
| Phase | **[256]** |
| NEX | **[1]** (1:20) |
| Phase FOV | 1.00 (default) |
| Freq Dir | **[>] [A/P]** |
| Auto Center Freq | **[>] [Peak]** |
| | |
| (lowest window) | **[Save Series]** |

**Note 1:** The Exam Description name must be exact because it is used by the automated analysis tool (Daily Quality).

### o.23.1 Head Power Monitor

| SCAN OPTION | INPUT |
|---|---|
| PATIENT REGISTER . | **[New Pt]** |
| PATIENT INFORMATION | |
| Patient Id | **geservice** |
| Patient Name | **head pm** |
| Weight (Lb)) | **300** ← *IMPORTANT* |
| | **[Landmark]** |
| Landmark | **[>] [Sternal Notch]** |
| PATIENT PROTOCOLS | **[Patient Position]** |
| PATIENT POSITION | |
| Patient Position | **[>] [Supine]** |
| Patient Entry | **[>] [Head First]** |
| Coil | **[...] [Head] [Accept]** |
| IMAGING PARAMETERS | |
| Plane | **[>] [Axial]** |
| Mode | **[>] [2D]** |
| Pulse Seq | **[...] [Spin Echo] [Accept]** |
| Imaging Options | none (default) |
| Psd Name | **cal** |
| Protocol | no entry |
| SCAN TIMING | |
| # of Echoes | 1 (default) |
| TE | **[25]** |
| TR | **[200]** |
| SCANNING RANGE | |
| FOV | **[24]** |
| Slice Thickness | **[10]** |
| Spacing | **0** |
| S/I Start | **0** |
| S/I End | **0** |
| # of Slices | 1 (default) |
| L/R Center | 0 (default) |
| P/A Center | 0 (default) |
| Table Delta | 0.00 (default) |

| ACQUISITION TIMING | |
|---|---|
| Freq | **[256]** |
| Phase | **[128]** |
| NEX | **[2]** (0:52) |
| Freq Dir | **[>] [R/L]** |
| Auto Center Freq | **[>] [Peak]** |

(lowest window) **Save Series]**

### o.23.2 Body Power Monitor

| SCAN OPTION | INPUT |
|---|---|
| PATIENT REGISTER . | **[New Pt]** |
| PATIENT INFORMATION | |
| Patient Id | **geservice** |
| Patient Name | **body pm** |
| Weight (Lb)) | **300** ← *IMPORTANT* |
| | **[Landmark]** |
| Landmark | **[>] [Sternal Notch]** |
| PATIENT PROTOCOLS | **[Patient Position]** |
| PATIENT POSITION | |
| Patient Position | **[>] [Supine]** |
| Patient Entry | **[>] [Head First]** |
| Coil | **[...] [Body] [Accept]** |
| IMAGING PARAMETERS | |
| Plane | **[>] [Axial]** |
| Mode | **[>] [2D]** |
| Pulse Seq | **[...] [Spin Echo] [Accept]** |
| Imaging Options | none (default) |
| Psd Name | **cal** |
| Protocol | no entry |
| SCAN TIMING | |
| # of Echoes | 1 (default) |
| TE | **[25]** |
| TR | **[200]** |
| SCANNING RANGE | |
| FOV | **[24]** |
| Slice Thickness | **[10]** |
| Spacing | **0** |
| Start | **0** |
| End | **0** |
| # of Slices | 1 (default) |
| L/R Center | 0 (default) |
| P/A Center | 0 (default) |
| Table Delta | 0.00 (default) |

ACQUISITION TIMING

| | |
|---|---|
| Freq | **[256]** |
| Phase | **[128]** |
| NEX | **[2] [R/L]** |
| Auto Center Freq | **[>] [Peak]** |

(lowest window) **Save Series]**

**[Research Operations], [Display CVs]**

Modify the following:

| | |
|---|---|
| dcset | **255** |
| t3 | **20000** |
| | **[Accept]** |

### o.23.3 Amp Shutdown Verification

| SCAN OPTION | INPUT |
|---|---|
| PATIENT REGISTER | **[New Pt]** |
| PATIENT INFORMATION | |
| Patient Id | **geservice** |
| Patient Name | **pm check** |
| Weight (Lb) | **300** ← *IMPORTANT* |
| | **[Landmark]** |
| Landmark | **[>] [Sternal Notch]** |
| PATIENT PROTOCOLS | **[Patient Position]** |
| PATIENT POSITION | |
| Patient Position | **[>] [Supine]** |
| Patient Entry | **[>] [Head First]** |
| Coil | **[...] [Body] [Accept]** |
| IMAGING PARAMETERS | |
| Plane | **[>] [Axial]** |
| Mode | **[>] [2D]** |
| Pulse Seq | **[...] [Spin Echo] [Accept]** |
| Imaging Options | none (default) |
| Psd Name | **cal** |
| Protocol | no entry |
| SCAN TIMING | |
| # of Echoes | 1 (default) |
| TE | **[25]** |
| TR | **[200]** |
| SCANNING RANGE | |
| FOV | **[24]** |
| Slice Thickness | **[10]** |
| Spacing | **0** |
| Start | **0** |
| End | **0** |
| # of Slices | 1 (default) |
| L/R Center | 0 (default) |
| P/A Center | 0 (default) |
| Table Delta | 0.00 (default) |

ACQUISITION TIMING

| | |
|---|---|
| Freq. | **[256]** |
| Phase | **[128]** |
| NEX | **[2]** (0:52) |
| Freq Dir | **[>] [R/L]** |
| Auto Center Freq. | **[>] [Peak]** |

(lowest window) **[Save Series]**

**[Research Operations], [Display CVs]**

Modify the following:

| | |
|---|---|
| dcset | **255** |
| aset | **30** |
| calmode | **2** |
| trig | **1** |

For RF/PEN Cabinet only, modify the following additional CVs:

| | |
|---|---|
| pwset | **255** |
| aset | **120** |
| p1 | **3100** |
| p3 | **2400** |
| | **[Accept]** |

### o.24.1 System Gain Cal (Body)

| SCAN OPTION | INPUT |
|---|---|
| PATIENT REGISTER | **[New Pt]** |
| PATIENT INFORMATION | |
| Patient Id | **geservice** |
| Patient Name | **bd sys gain** |
| Weight (Lb) | **111** |
| | **[Landmark]** |
| Landmark | **[>] [Sternal Notch]** |
| PATIENT PROTOCOLS | **[Patient Position]** |
| PATIENT POSITION | |
| Patient Position | **[>] [Supine]** |
| Patient Entry | **[>] [Head First]** |
| Coil | **[...] [Body] [Accept]** |
| IMAGING PARAMETERS | |
| Plane | **[>] [Axial]** |
| Mode | **[>] [2D]** |
| Pulse Seq | **[...] [Spin Echo] [Accept]** |
| Imaging Options | none (default) |
| Psd Name | none |
| Protocol | no entry |
| SCAN TIMING | |
| # of Echoes | 1 (default) |
| TE | **[25]** for 1.5T |
| | **[21]** for 1.0T |
| TR | **[700]** |
| Bandwidth | (1.0T only) **15.63** |
| SCANNING RANGE | |
| FOV | **[48]** |
| Slice Thickness | **[5]** |
| Spacing | **[1.5]** |
| S/I Start | **0** |
| S/I End | **0** |
| # of Slices | 1 (default) |
| L/R Center | 0 (default) |
| P/A Center | 0 (default) |
| Table Delta | 0.00 (default) |

ACQUISITION TIMING

| | |
|---|---|
| Freq. | **[256]** |
| Phase | **[128]** |
| NEX | **[1]** (1:38) |
| Phase FOV | 1.00 (default) |
| Freq Dir | **[>] [R/L]** |
| Auto Center Freq. | **[>] [Peak]** |
| | |
| (lowest window) | **[Save Series]** |

### o.24.2 System Gain Cal (Head)

| SCAN OPTION | INPUT |
|---|---|
| PATIENT REGISTER | **[New Pt]** |
| PATIENT INFORMATION | |
| Patient Id | **geservice** |
| Patient Name | **hd sys gain** |
| Weight (Lb) | **111** |
| | **[Landmark]** |
| Landmark | **[>] [Nasion]** |
| PATIENT PROTOCOLS | **[Patient Position]** |
| PATIENT POSITION | |
| Patient Position | **[>] [Supine]** |
| Patient Entry | **[>] [Head First]** |
| Coil | **[...] [Head] [Accept]** |
| IMAGING PARAMETERS | |
| Plane | **[>] [Axial]** |
| Mode | **[>] [2D]** |
| Pulse Seq | **[...] [Spin Echo] [Accept]** |
| Imaging Options | none (default) |
| Psd Name | none |
| Protocol | no entry |
| SCAN TIMING | |
| # of Echoes | 1 (default) |
| TE | **[25]** |
| TR | **[700]** |
| Bandwidth | **15.63** (1.0T only) |
| SCANNING RANGE | |
| FOV | **[24]** |
| Slice Thickness | **[5]** |
| Spacing | **[1.5]** |
| Start | **0** |
| End | **0** |
| # of Slices | 1 (default) |
| L/R Center | 0 (default) |
| P/A Center | 0 (default) |
| Table Delta | 0.00 (default) |

| ACQUISITION TIMING | |
|---|---|
| Freq. | **[256]** |
| Phase | **[128]** |
| NEX | **[1]** (1:38) |
| Phase FOV | 1.00 (default) |
| Freq Dir | **[>] [A/P]** |
| Auto Center Freq. | **[>] [Peak]** |
| | |
| (lowest window) | **[Save Series]** |

### o.28.1 Full Field Distortion (Sagittal)

| SCAN OPTION | INPUT |
|---|---|
| PATIENT REGISTER | **[New Pt]** |
| PATIENT INFORMATION | |
| Patient Id | **geservice** |
| Patient Name | **ffd** |
| Weight (Lb) | **111** |
| | **[Landmark]** |
| Landmark | **[>] [Sternal Notch]** |
| PATIENT PROTOCOLS | **[Patient Position]** |
| PATIENT POSITION | |
| Patient Position | **[>] [Supine]** |
| Patient Entry | **[>] [Head First]** |
| Coil | **[...] [Body] [Accept]** |
| IMAGING PARAMETERS | |
| Plane | **[>] [Sagittal]** |
| Mode | **[>] [2D]** |
| Pulse Seq | **[...] [Spin Echo] [Accept]** |
| Imaging Options | none (default) |
| Psd Name | no entry |
| Protocol | no entry |
| SCAN TIMING | |
| # of Echoes | 1 (default) |
| TE. | **[25]** |
| TR. | **[300]** |
| Bandwidth | **15.63** (1.0T only) |
| SCANNING RANGE | |
| FOV | **[48]** |
| Slice Thickness | **[20]** |
| Spacing | **[1.5]** |
| Start | **0** |
| End | **0** |
| # of Slices | 1 (default) |
| P/A Center | 0 (default) |
| I/S Center | 0 (default) |
| Table Delta | 0.00 (default) |

ACQUISITION TIMING

| | |
|---|---|
| Freq. | **[256]** |
| Phase | **[256]** |
| NEX | **[1]** (1:23) |
| Phase FOV | 1:00 (default) |
| Freq Dir | **[>] [S/I]** |
| Auto Center Freq. | **[>] [Peak]** |

(lowest window) **[Save Series]**

### o.28.2 Full Field Distortion (Coronal Localizer)

| SCAN OPTION | INPUT |
|---|---|
| RX MANAGER | **[New Series]** (If this procedure is Being performed immediately after The Sagittal series, otherwise click **[New Pt]** |
| PATIENT POSITION | |
| Patient Position | **[>] [Supine]** |
| Patient Entry | **[>] [Head First]** |
| Coil | **[...] [Body] [Accept]** |
| IMAGING PARAMETERS | |
| Plane | **[>] [Axial]** |
| Mode | **[>] [2D]** |
| Pulse Seq | **[...] [Spin Echo] [Accept]** |
| Imaging Options | none (default) |
| Psd Name | no entry |
| Protocol | no entry |
| SCAN TIMING | |
| # of Echoes | 1 (default) |
| TE. | **[20]** |
| TR. | **[150]** |
| Bandwidth | **15.63** (1.0T only) |
| SCANNING RANGE | |
| FOV | **[48]** |
| Slice Thickness | **[20]** |
| Spacing | **[1.5]** |
| Start | **0** |
| End | **0** |
| # of Slices | 1 (default) |
| R/L Center | 0 (default) |
| P/A Center | 0 (default) |
| Table Delta | 0.00 (default) |

ACQUISITION TIMING

| | |
|---|---|
| Freq. | **[256]** |
| Phase | **[128]** |
| NEX | **[1]** (0:24) |
| Phase FOV | 1:00 (default) |
| Freq Dir | **[>] [R/L]** |
| Auto Center Freq. | **[>] [Peak]** |

(lowest window) **[Save Series]**

RX MANAGER **[Prepare to Scan]**

### o.28.3 Full Field Distortion (Coronal)

| SCAN OPTION | INPUT |
|---|---|
| RX MANAGER | **[New Series]** |
| PATIENT POSITION | |
| Patient Position | **[>] [Supine]** |
| Patient Entry | **[>] [Head First]** |
| Coil | **[...] [Body] [Accept]** |
| IMAGING PARAMETERS | |
| Plane | **[>] [Coronal]** |
| Mode | **[>] [2D]** |
| Pulse Seq | **[...] [Spin Echo] [Accept]** |
| Imaging Options | none (default) |
| Psd Name | no entry |
| Protocol | no entry |
| SCAN TIMING | |
| # of Echoes | 1 (default) |
| TE. | **[25]** |
| TR. | **[300]** |
| Bandwidth | **15.63** (1.0T only) |
| SCANNING RANGE | |
| FOV | **[48]** |
| Slice Thickness | **[20]** |
| Spacing | **[1.5]** |
| Start | See procedure |
| End | See procedure |
| # of Slices | 1 (default) |
| S/I Center | 0 (default) |
| R/L Center | 0 (default) |
| Table Delta | 0.00 (default) |
| ACQUISITION TIMING | |
| Freq. | **[256]** |
| Phase | **[256]** |
| NEX | **[1]** (1:23) |
| Phase FOV | 1:00 (default) |
| Freq Dir | **[>] [S/I]** |
| Auto Center Freq. | **[>] [Peak]** |
| (lowest window) | **[Save Series]** |
| RX MANAGER | **[Prepare to Scan]** |

### o.29.1 Noise Floor (Head)

| SCAN OPTION | INPUT |
|---|---|
| PATIENT REGISTER | **[New Pt]** |
| PATIENT INFORMATION | |
| Patient Id | **geservice** |
| Patient Name | **noise floor** |
| Weight (Lb) | **111** |
| | **[Landmark]** |
| Landmark | **[>] [Nasion]** |
| PATIENT PROTOCOLS | **[Patient Position]** |
| PATIENT POSITION | |
| Patient Position | **[>] [Supine]** |
| Patient Entry | **[>] [Head First]** |
| Coil | **[...] [Head] [Accept]** |
| IMAGING PARAMETERS | |
| Plane | **[>] [Axial]** |
| Mode | **[>] [2D]** |
| Pulse Seq | **[...] [Gradient Echo] [Accept]** |
| Imaging Options | **[...] [Sequential]** |
| Psd Name | no entry |
| Protocol | no entry |
| SCAN TIMING | |
| # of Echoes | 1 (default) |
| TE. | **[9]** |
| TR. | **[20]** |
| Flip Angle | **[10]** |
| Bandwidth | **15.63** (1.0T) |
| | **15.00** (1.5T) |
| SCANNING RANGE | |
| FOV | **[24]** |
| Slice Thickness | **[5]** |
| Spacing | **[1.5]** |
| Start | **0** |
| End | **0** |
| # of Slices | 1 (default) |
| L/R Center | 0 (default) |
| P/A Center | 0 (default) |
| Table Delta | 0.00 (default) |

| ACQUISITION TIMING | |
|---|---|
| Freq. | **[256]** |
| Phase | **[256]** |
| NEX | **[1]** (0:05) |
| Phase FOV | 1:00 (default) |
| Freq Dir | **[>] [A/P]** |
| Auto Center Freq. | **[>] [Peak]** |
| | |
| (lowest window) | **[Save Series]** |

### o.29.2 Noise Floor (Body)

| SCAN OPTION | INPUT |
|---|---|
| RX MANAGER . | Place cursor in Series list area. |
| | Press right mouse button, then |
| | **[Copy Series], [Paste Series].** |
| | Double-click left mouse button |
| | On new series to activate it |
| | See Note |
| PATIENT POSITION | |
| Coil | **[...] [Body] [Accept]** |
| (lowest window | **[Save Series]** |
| RX MANAGER | **[Prepare to Scan]** |

**Note:** Only values different from previous series shown. All other values should be the same as the previous series.

### o.30.1 Carrier Leakage

| SCAN OPTION | INPUT |
|---|---|
| PATIENT REGISTER | **[New Pt]** |
| PATIENT INFORMATION | |
| Patient Id | **geservice** |
| Patient Name | **carrier leak** |
| Weight (Lb) | **111** |
| | **[Landmark]** |
| Landmark | **[>] [Nasion]** |
| PATIENT PROTOCOLS | **[Patient Position]** |
| PATIENT POSITION | |
| Patient Position | **[>] [Supine]** |
| Patient Entry | **[>] [Head First]** |
| Coil | **[...] [Head] [Accept]** |
| IMAGING PARAMETERS | |
| Plane | **[>] [Axial]** |
| Mode | **[>] [2D]** |
| Pulse Seq | **[...] [Gradient Echo] [Accept]** |
| Imaging Options | **[...] [Sequential]** |
| Psd Name | no entry |
| Protocol | no entry |
| SCAN TIMING | |
| # of Echoes | 1 (default) |
| TE. | **[16]** |
| TR. | **[35]** |
| Flip Angle | **[30]** |
| Bandwidth | **15.63** (1.0T) |
| | **15.00** (1.5T) |
| ADDITIONAL PARAMETERS | **[SAT]** |
| Saturation Parameters | |
| A Thickness | **[80]** (default Band) |
| P Thickness | **[80]** (default Band) |

| | |
|---|---|
| SCANNING RANGE | |
| FOV | **[40]** |
| Slice Thickness | **[5]** |
| Spacing | **[2.5]** |
| Start | **0** |
| End | **0** |
| # of Slices | 1 (default) |
| L/R Center | 0 (default) |
| P/A Center | 0 (default) |
| Table Delta | 0.00 (default) |
| ACQUISITION TIMING | |
| Freq. | **[256]** |
| Phase | **[128]** |
| NEX | **[1]** (0:05) |
| Phase FOV | 1:00 (default) |
| Freq Dir | **[>] [A/P]** |
| Auto Center Freq. | **[>] [Peak]** |
| (lowest window) | **[Save Series]** |

### o.31.1 Respiratory Compensation

| SCAN OPTION | INPUT |
|---|---|
| PATIENT REGISTER | **[New Pt]** |
| PATIENT INFORMATION | |
| Patient Id | **geservice** |
| Patient Name | **resp bellows** |
| Weight (Lb) | **111** |
| | **[Landmark]** |
| Landmark | **[>] [Sternal Notch]** |
| PATIENT PROTOCOLS | **[Patient Position]** |
| PATIENT POSITION | |
| Patient Position | **[>] [Supine]** |
| Patient Entry | **[>] [Head First]** |
| Coil | **[...] [Body] [Accept]** |
| IMAGING PARAMETERS | |
| Plane | **[>] [Sagittal]** |
| Mode | **[>] [2D]** |
| Pulse Seq | **[...] [Spin Echo] [Accept]** |
| Imaging Options | **[...] [Respiratory Compensation] [Accept]** |
| Psd Name | none |
| Protocol | no entry |

It is not necessary to enter the remainder of scan protocol for this procedure.

### o.32.1 Gradcal-X (DQA-III)

| SCAN OPTION | INPUT |
|---|---|
| PATIENT REGISTER . | **[New Pt]** |
| PATIENT INFORMATION | |
| Patient Id | **geservice** |
| Patient Name | **gradcal** |
| Weight (Lb) | **111** |
| Extra Description | **dqa xfield cal** (See Note 1) |
| | **[Landmark]** |
| Landmark | **[>] [Nasion]** |
| PATIENT PROTOCOLS | **[Patient Position]** |
| PATIENT POSITION | |
| Patient Position | **[>] [Supine]** |
| Patient Entry | **[>] [Head First]** |
| Coil | **[...] [Head] [Accept]** |
| IMAGING PARAMETERS | |
| Plane | **[>] [Coronal]** |
| Mode | **[>] [2D]** |
| Pulse Seq | **[...] [Spin Echo] [Accept]** |
| Imaging Options | none (default) |
| Psd Name | none |
| Protocol | no entry |
| SCAN TIMING | |
| # of Echoes | 1 (default) |
| TE. | **[25]** |
| TR. | **[300]** |
| Bandwidth | **15.63** (1.0T only) |
| SCANNING RANGE | |
| FOV | **[24]** |
| Slice Thickness | **[3]** |
| Spacing | **[1.5]** |
| Start | **0** |
| End | **0** |
| # of Slices | 1 (default) |
| L/R Center | 0 (default) |
| P/A Center | 0 (default) |
| Table Delta | 0.00 (default) |

| ACQUISITION TIMING | |
|---|---|
| Freq | **[512]** |
| Phase | **[256]** |
| NEX | **[1]** (1:20) |
| Phase FOV | 1 (default) |
| Freq Dir | **[>] [R/L]** |
| Auto Center Freq | **[>] [Peak]** |

(lowest window) **[Save Series]**

**Note 1:** The Exam Description name must be exact because it is used by the automated analysis tool (Daily Quality).

### o.32.2 Gradcal-Y (DQA-III)

| SCAN OPTION | INPUT |
|---|---|
| PATIENT REGISTER . | **[New Pt]** |
| PATIENT INFORMATION | |
| Patient Id | **geservice** |
| Patient Name | **gradcal** |
| Weight (Lb) | **111** |
| Exam Description | **dqa yfield cal** (See Note 1) |
| | **[Landmark]** |
| Landmark | **[>] [Nasion]** |
| PATIENT PROTOCOLS | **[Patient Position]** |
| PATIENT POSITION | |
| Patient Position | **[>] [Supine]** |
| Patient Entry | **[>] [Head First]** |
| Coil | **[...] [Head] [Accept]** |
| IMAGING PARAMETERS | |
| Plane | **[>] [Axial]** |
| Mode | **[>] [2D]** |
| Pulse Seq | **[...] [Spin Echo] [Accept]** |
| Imaging Options | none (default) |
| Psd Name | none |
| Protocol | no entry |
| SCAN TIMING | |
| # of Echoes | 1 (default) |
| TE. | **[25]** |
| TR. | **[300]** |
| Bandwidth | **15.63** (1.0T only) |
| SCANNING RANGE | |
| FOV | **[24]** |
| Slice Thickness | **[3]** |
| Spacing | **[1.5]** |
| Start | **0** |
| End | **0** |
| # of Slices | 1 (default) |
| L/R Center | 0 (default) |
| P/A Center | 0 (default) |
| Table Delta | 0.00 (default) |

| ACQUISITION TIMING | |
|---|---|
| Freq | **[512]** |
| Phase | **[256]** |
| NEX | **[1]** (1:20) |
| Phase FOV | 1 (default) |
| Freq Dir | **[>] [A/P]** |
| Auto Center Freq | **[>] [Peak]** |

(lowest window) **[Save Series]**

**Note 1:** The Exam Description name must be exact because it is used by the automated analysis tool (Daily Quality).

### o.32.3 Gradcal-Z (DQA-III)

| SCAN OPTION | INPUT |
|---|---|
| PATIENT REGISTER . | **[New Pt]** |
| PATIENT INFORMATION | |
| Patient Id | **geservice** |
| Patient Name | **gradcal** |
| Weight (Lb) | **111** |
| Exam Description | **dqa zfield cal** (See Note 1) |
| | **[Landmark]** |
| Landmark | **[>] [Nasion]** |
| PATIENT PROTOCOLS | **[Patient Position]** |
| PATIENT POSITION | |
| Patient Position | **[>] [Supine]** |
| Patient Entry | **[>] [Head First]** |
| Coil | **[...] [Head] [Accept]** |
| IMAGING PARAMETERS | |
| Plane | **[>] [Coronal]** |
| Mode | **[>] [2D]** |
| Pulse Seq | **[...] [Spin Echo] [Accept]** |
| Imaging Options | none (default) |
| Psd Name | none |
| Protocol | no entry |
| SCAN TIMING | |
| # of Echoes | 1 (default) |
| TE. | **[25]** |
| TR. | **[300]** |
| Bandwidth | **15.63** (1.0T only) |
| SCANNING RANGE | |
| FOV | **[24]** |
| Slice Thickness | **[3]** |
| Spacing | **[1.5]** |
| Start | **0** |
| End | **0** |
| # of Slices | 1 (default) |
| L/R Center | 0 (default) |
| P/A Center | 0 (default) |
| Table Delta | 0.00 (default) |

| ACQUISITION TIMING | |
|---|---|
| Freq | **[512]** |
| Phase | **[256]** |
| NEX | **[1]** (1:20) |
| Phase FOV | 1.00 (default) |
| Freq Dir | **[>] [S/I]** |
| Auto Center Freq | **[>] [Peak]** |

(lowest window) **[Save Series]**

**Note 1:** The Exam Description name must be exact because it is used by the automated analysis tool (Daily Quality).

### o.36.1 Correlated Noise (256 matrix)

| SCAN OPTION | INPUT |
|---|---|
| PATIENT REGISTER . | **[New Pt]** |
| PATIENT INFORMATION | |
| Patient Id | **geservice** |
| Patient Name | **corr noise** |
| Weight (Lb) | **111** |
| | **[Landmark]** |
| Landmark | **[>] [Nasion]** |
| PATIENT PROTOCOLS | **[Patient Position]** |
| PATIENT POSITION | |
| Patient Position | **[>] [Supine]** |
| Patient Entry | **[>] [Head First]** |
| Coil | **[...] [Head] [Accept]** |
| IMAGING PARAMETERS | |
| Plane | **[>] [Axial]** |
| Mode | **[>] [2D]** |
| Pulse Seq | **[...] [Gradient Echo] [Accept]** |
| Imaging Options | **[...] [Sequential]** |
| Psd Name | no entry |
| Protocol | no entry |
| SCAN TIMING | |
| # of Echoes | 1 (default) |
| TE | **[10]** |
| TR | **[20]** (1.0T) |
| | **[25]** (1.5T) |
| Flip Angle | **[10]** |
| Bandwidth | **[>] 15.63** (1.0T) |
| | **[>] 16.00** (1.5T) |
| SCANNING RANGE | |
| FOV | **[24]** |
| Slice Thickness | **[5]** |
| Spacing | **[1.5]** |
| Start | **0** |
| End | **0** |
| # of Slices | 1 (default) |
| L/R Center | 0 (default) |
| P/A Center | 0 (default) |
| Table Delta | 0.00 (default) |

ACQUISITION TIMING

| | |
|---|---|
| Freq | **[256]** |
| Phase | **[256]** |
| NEX | **[1]** (0:05) |
| Phase FOV | 1.00 (default) |
| Freq Dir | **[>] [A/P]** |
| Auto Center Freq | **[>] [Peak]** |
| | |
| (lowest window) | [**Save Series]** |

| **[Research Operations]** | **[Setup Params]** |
|---|---|
| R1 | **11** |
| R2 | **15** |
| TG | **0** |
| Number of Frames | **[2]** |
| | **[Done]** |

### o.36.2 Correlated Noise (512 matrix)

| SCAN OPTION | INPUT |
|---|---|
| RX MANAGER . | Place cursor in Series list area. |
| | Press right mouse button, then |
| | **[Copy Series], [Paste Series].** |
| | Double-click left mouse button |
| | on new series to activate it. |
| | See Note |
| SCAN TIMING | |
| Bandwidth | **[>] 31.25** (1.0T) |
| | **[>] 32.00** (1.5T) |
| SCANNING RANGE | |
| FOV | **[20]** |
| ACQUISITION TIMING | |
| Freq | **[512]** |
| (lowest window) | **[Save Series]** |
| RX MANGER | **[Prepare to Scan]** |

**Note:** Only values different from previous series shown. All other values should be the same as the previous series.

### o.36.3 Multicoil Correlated Noise

| SCAN OPTION | INPUT |
|---|---|
| PATIENT REGISTER . | **[New Pt]** |
| PATIENT INFORMATION | |
| Patient Id | **geservice** |
| Patient Name | **mc corr noise** |
| Weight (Lb) | **111** |
| | **[Landmark]** |
| Landmark | **[>] [Sternal Notch]** |
| PATIENT PROTOCOLS | **[Patient Position]** |
| PATIENT POSITION | |
| Patient Position | **[>] [Supine]** |
| Patient Entry | **[>] [Head First]** |
| Coil | **[...] [Phased Array] [CTLMID]** or **[Pelvic] [Accept]** |
| IMAGING PARAMETERS | |
| Plane | **[>] [Axial]** |
| Mode | **[>] [2D]** |
| Pulse Seq | **[...] [Gradient Echo] [Accept]** |
| Imaging Options | **[...] [Sequential]** |
| Psd Name | no entry |
| SCAN TIMING | |
| # of Echoes | 1 (default) |
| TE | **[10]** |
| TR | **[31]** (1.0T) |
| | **[25]** (1.5T) |
| Flip Angle | **[10]** |
| Bandwidth | **[>] 31.25** (1.0T) |
| | **[>] 32.00** (1.5T) |
| SCANNING RANGE | |
| FOV | **[20]** |
| Slice Thickness | **[5]** |
| Spacing | **[1.5]** |
| Start | **0** |
| End | **0** |
| # of Slices | 1 (default) |
| L/R Center | 0 (default) |
| P/A Center | 0 (default) |
| Table Delta | 0.00 (default) |

| | |
|---|---|
| ACQUISITION TIMING | |
| Freq | **[512]** |
| Phase | **[256]** |
| NEX | **[1]** (0:06) |
| Phase FOV | 1.00 (default) |
| Freq Dir | **[>] [A/P]** |
| Auto Center Freq | **[>] [Peak]** |
| | |
| (lowest window) | **[Save Series]** |
| | |
| **[Research Operations]** | **[Setup Params]** |
| R1 | **11** |
| R2 | **15** |
| TG | **0** |
| Number of Frames | **[2]** |
| | **[Done]** |
| **[Research Operations]** | **[Display CVs]** |
| CV Name: | **saveinter <Enter>** |
| Set value to: | **1 <Enter>** (Note 1) |
| | **[Accept]** |

**Note 1:** Setting this CV to 1 generates five images for each single multi-coil scan. Images 1 to 4 will correspond to data from Receivers 0 to 3. Therefore, Image 1 is reconstructed from Receiver 0 data. Image 5 is the combined and processed data from all 4 Receivers. This is the same image normally observed when saveinter = 0.

### o.36.4 EPI Correlated Noise

| SCAN OPTION | INPUT |
|---|---|
| PATIENT REGISTER . | **[New Pt]** |
| PATIENT INFORMATION | |
| Patient Id | **geservice** |
| Patient Name | **fast rcvr corr noise** |
| Weight (Lb) | **111** |
| | **[Landmark]** |
| Landmark | **[>] [Sternal Notch]** |
| PATIENT PROTOCOLS | **[Patient Position]** |
| PATIENT POSITION | |
| Patient Position | **[>] [Supine]** |
| Patient Entry | **[>] [Head First]** |
| Coil | **[...] [Body] [Accept]** |
| IMAGING PARAMETERS | |
| Plane | **[>] [Axial]** |
| Mode | **[>] [2D]** |
| Pulse Seq | **[...] [Spin Echo] [Accept]** |
| Imaging Options | **[...] [EPI]** |
| Psd Name | no entry |
| Protocol | default |
| ADDITIONAL PARAMETERS | **[USER CVs]** (1.5T only) |
| USER CONTROL VARIABLES | |
| Ramp Sampling: 1=on, 0=off | **0** (0 or 1) |
| SCAN TIMING | |
| # of Shots | **1** |
| TE | **[Min Full]** |
| TR | **[2000]** |
| Bandwidth | **[16.00]** (1.5T) |
| | **[15.63]** (1.0T) |
| SCANNING RANGE | |
| FOV | **[99]** |
| Slice Thickness | **[10]** |
| Spacing | **[10]** |
| Start | **0** |
| End | **0** |
| # of Slices | 1 (default) |
| L/R Center | 0 (default) |
| P/A Center | 0 (default) |
| Table Delta | 0.00 (default) |

| ACQUISITION TIMING | |
|---|---|
| Freq | **[256]** |
| Phase | **[128]** |
| NEX | **[1]** (0:02) |
| Phase FOV | 1.00 (default) |
| Freq Dir | **[>] [R/L]** |
| Auto Center Freq | **[>] [Peak]** |
| Autoshim | **no** (Verify) |
| Phase Correct | **no** (Verify) |

(lowest window) **[Save Series]**

### o.37.1 Body Slice Thickness (Sagittal, 3mm)

| SCAN OPTION | INPUT |
|---|---|
| PATIENT REGISTER . | **[New Pt]** |
| PATIENT INFORMATION | |
| Patient Id | **geservice** |
| Patient Name | **body slice thick** |
| Weight (Lb) | **111** |
| | **[Landmark]** |
| Landmark | **[>] [Sternal Notch]** |
| PATIENT PROTOCOLS | **[Patient Position]** |
| PATIENT POSITION | |
| Patient Position | **[>] [Supine]** |
| Patient Entry | **[>] [Head First]** |
| Coil | **[...] [Body] [Accept]** |
| IMAGING PARAMETERS | |
| Plane | **[>] [Sagittal]** |
| Mode | **[>] [2D]** |
| Pulse Seq | **[...] [Spin Echo] [Accept]** |
| Imaging Options | none |
| Psd Name | no entry |
| Protocol | no entry |
| SCAN TIMING | |
| # of Echoes | 1 (default) |
| TE | **[25]** |
| TR | **[300]** |
| Bandwidth | **[7.81]** (1.0T only) |
| SCANNING RANGE | |
| FOV | **[20]** |
| Slice Thickness | **[3]** |
| Spacing | **[77]** |
| R/L Start | **[R80]** |
| R/L End | **[L80]** |
| # of Slices | 3 (default) |
| P/A Center | 0 (default) |
| I/S Center | 0 (default) |
| Table Delta | 0.00 (default) |

| ACQUISITION TIMING | |
|---|---|
| Freq | **[256]** |
| Phase | **[256]** |
| NEX | **[4]** (1.0T) |
| | **[2]** (1.5T) |
| Phase FOV | 1.00 (default) |
| Freq Dir | **[>] [A/P]** |
| Auto Center Freq | **[>] [Peak]** |

(lowest window) **[Save Series]**

### o.37.2 Body Slice Thickness (Sagittal, 5mm)

| SCAN OPTION | INPUT |
|---|---|
| RX MANAGER . | Place cursor in Series list area. |
| | Press right mouse button, then |
| | **[Copy Series], [Paste Series].** |
| | Double-click left mouse button |
| | on new series to activate it |
| | See Note 1 |
| SCANNING RANGE | |
| Slice Thickness | **[5]** |
| Spacing | **[75]** |
| (lowest window) | **[Save Series]** |
| RX MANGER | **[Prepare to Scan]** |

**Note:** 1. Only values different from previous series are shown. All other values Should be the same as the previous series.

### o.37.3 Body Slice Thickness (Sagittal, 10mm)

| SCAN OPTION | INPUT |
|---|---|
| RX MANAGER . | Place cursor in Series list area. |
| | Press right mouse button, then |
| | **[Copy Series], [Paste Series].** |
| | Double-click left mouse button |
| | On new series to activate it |
| | See Note 1 |
| SCANNING RANGE | |
| Slice Thickness | **[10]** |
| Spacing | **[70]** |
| (lowest window) | **[Save Series]** |
| RX MANGER | **[Prepare to Scan]** |

**Note:** 1. Only values different from previous series are shown. All other values Should be the same as the previous series.

### o.37.4 Body Slice Thickness (Localizer)

| SCAN OPTION | INPUT |
|---|---|
| RX MANAGER . | Place cursor in Series list area. |
| | Press right mouse button, then |
| | **[Copy Series], [Paste Series].** |
| | Double-click left mouse button |
| | on new series to activate it. |
| | See Note |
| SCANNING RANGE | |
| Slice Thickness | **[3]** |
| Spacing | **[1.5]** |
| Start | **0** |
| End | **0** |
| # of Slices | **1** |
| AQUISTION TIMING | |
| Freq | **[256]** |
| Phase | **[128]** |
| NEX | **[1]** |
| Phase FOV | 1.00 (default) |
| Freq Dir | **[>] [S/I]** |
| | |
| (lowest window) | **[Save Series]** |
| RX MANAGER | **[Prepare to Scan]** |

**Note:** Only values different from previous series are shown. All other values Should be the same as the previous series.

### o.37.5 Body Slice Thickness (Coronal, 3mm)

| SCAN OPTION | INPUT |
|---|---|
| RX MANAGER . | Place cursor in Series list area. |
| | Press right mouse button, then |
| | **[Copy Series], [Paste Series].** |
| | Double-click left mouse button |
| | on new series to activate it. |
| | See Note. |
| IMAGING PARAMETERS | |
| Plane | **[>] [Coronal]** |
| SCANNING RANGE | |
| Spacing | **[77]** |
| ADDITIONAL PARAMETERS | **[Graphic Rx]** |
| | Position cursor at P= 0 mm |
| This should coincide with the center of the phantom. | |
| | **[Start]** |
| Position cursor 80 mm away (posterior) from list location. | |
| | **[End]** |
| | See procedure for additional information. |
| AQUISTION TIMING | |
| Freq | **[256]** |
| Phase | **[256]** |
| NEX | **[4]** (1.0T) |
| | **[2]** (1.5T) |
| Phase FOV | 1.00 (default) |
| Freq Dir | **[>] [S/I]** |
| Auto Center Freq | **[>] {Peak]** |
| | |
| (lowest window) | **[Save Series]** |
| RX MANAGER | **[Prepare to Scan]** |

**Note:** Only values different from previous series are shown. All other values Should be the same as the previous series.

### o.37.6 Body Slice Thickness (Coronal, 5mm)

| SCAN OPTION | INPUT |
|---|---|
| RX MANAGER . | Place cursor in Series list area. |
| | Press right mouse button, then |
| | **[Copy Series], [Paste Series].** |
| | Double-click left mouse button |
| | on new series to activate it. |
| | See Note1. |
| ADDITIONAL PARAMETERS | **[Graphic Rx]** |
| | Position cursor at P= 0 mm |
| This should coincide with the center of the phantom. | |
| | **[Start]** |
| Position cursor 80 mm away (posterior) from list location. | |
| | **[End]** |
| | See procedure for additional information. |
| SCANNING RANGE | |
| Slice Thickness | **[5]** |
| Spacing | **[75]** |
| | |
| (lowest window) | **[Save Series]** |
| RX MANAGER | **[Prepare to Scan]** |

**Note 1:** Only values different from previous series are shown. All other values Should be the same as the previous series.

### o.37.7 Body Slice Thickness (Coronal, 10 mm)

| SCAN OPTION | INPUT |
|---|---|
| RX MANAGER . | Place cursor in Series list area. |
| | Press right mouse button, then |
| | **[Copy Series], [Paste Series].** |
| | Double-click left mouse button |
| | on new series to activate it |
| | See note 1. |
| ADDITIONAL PARAMETERS | **[Graphic Rx]** |
| | Position cursor at P= 0 mm |
| This should coincide with the center of the phantom. | |
| | **[Start]** |
| Position cursor 80 mm away (posterior) from list location. | |
| | **[End]** |
| | See procedure for additional information. |
| SCANNING RANGE | |
| Slice Thickness | **[10]** |
| Spacing | **[70]** |
| | |
| (lowest window) | **[Save Series]** |
| RX MANAGER | **[Prepare to Scan]** |

**Note 1:** Only values different from previous series are shown. All other values Should be the same as the previous series.

### o.38.1 Geometry Verification (Coronal)

| SCAN OPTION | INPUT |
|---|---|
| PATIENT REGISTER . | **[New Pt]** |
| PATIENT INFORMATION | |
| Patient Id | **geservice** |
| Patient Name | **gradient polarity** (See Note 1) |
| Weight (Lb) | **111** |
| | **[Landmark]** |
| Landmark | **[>] [Nasion]** |
| PATIENT PROTOCOLS | **[Patient Position]** |
| PATIENT POSITION | |
| Patient Position | **[>] [Supine]** |
| Patient Entry | **[>] [Head First]** |
| Coil | **[...] [Head] [Accept]** |
| IMAGING PARAMETERS | |
| Plane | **[>] [Coronal]** |
| Mode | **[>] [2D]** |
| Pulse Seq | **[...] [Spin Echo] [Accept]** |
| Imaging Options | none (default) |
| Psd Name | none |
| Protocol | no entry |
| SCAN TIMING | |
| # of Echoes | 1 (default) |
| TE. | **[20]** |
| TR. | **[300]** |
| Bandwidth | **15.63** (1.0T only) |
| SCANNING RANGE | |
| FOV | **[24]** |
| Slice Thickness | **[10]** |
| Spacing | **[1.5]** |
| A/P Start | **0** |
| A/P End | **0** |
| # of Slices | 1 (default) |
| S/I Center | 0 (default) |
| R/L Center | 0 (default) |
| Table Delta | 0.00 (default) |

| ACQUISITION TIMING | |
|---|---|
| Freq | **[256]** |
| Phase | **[256]** |
| NEX | **[1]** |
| Phase FOV | 1:00 (default) |
| Freq Dir | **[>] [S/I]** |
| Auto Center Freq | **[>] [Peak]** |
| | |
| (lowest window) | **[Save Series]** |

**Note 1:** The Exam Description name must be exact because it is used by the automated analysis tool (Daily Quality).

### o.38.2 Geometry Verification (Axial)

| SCAN OPTION | INPUT |
|---|---|
| RX MANAGER . | Place cursor in Series list area.<br>Press right mouse button, then<br>**[Copy Series], [Paste Series].**<br>Double-click left mouse button<br>on new series to activate it.<br>See Note 1. |
| IMAGING PARAMETERS | |
| Plane | **[>] [Axial]** |
| SCANNING RANGE | |
| S/I Start | **0** |
| S/I End | **0** |
| # of Slices | 1 (default) |
| L/R Center | 0 (default) |
| P/A Center | 0 (default) |
| ACQUISITION TIMING | |
| Freq Dir | **[>] [R/L]** |
| | |
| (lowest window) | **[Save Series]** |
| RX MANAGER | **[Prepare to Scan]** |

**Note:** Only values different from previous series are shown. All other values should be the same as the previous series.

### o.39.1 FID Tuning

| SCAN OPTION | INPUT |
|---|---|
| PATIENT REGISTER . | **[New Pt]** |
| PATIENT INFORMATION | |
| Patient Id | **geservice** |
| Patient Name | **fid** |
| Weight (Lb) | **111** |
| | **[Landmark]** |
| Landmark | **[>] [Sternal Notch]** |
| PATIENT PROTOCOLS | **[Patient Position]** |
| PATIENT POSITION | |
| Patient Position | **[>] [Supine]** |
| Patient Entry | **[>] [Head First]** |
| Coil | **[...] [Body] [Accept]** |
| IMAGING PARAMETERS | |
| Plane | **[>] [Sagittal]** |
| Mode | **[>] [2D]** |
| Pulse Seq | **[...] [Spin Echo] [Accept]** |
| Imaging Options | none (default) |
| Psd Name | none |
| Protocol | no entry |
| SCAN TIMING | |
| # of Echoes | **4** |
| TE | **[20]** |
| TR | **[250]** |
| Band Width | **[15.63]** (1.0T only) |
| Band Width 2 | **[15.63]** (1.0T only) |
| SCANNING RANGE | |
| FOV | **[40]** |
| Slice Thickness | **[15]** |
| Spacing | **[1.5]** |
| R/L Start | **0** |
| R/L End | **0** |
| # of Slices | 1 (default) |
| P/A Center | 0 (default) |
| I/S Center | 0 (default) |
| Table Delta | 0.00 (default) |

| ACQUISITION TIMING | |
|---|---|
| Freq | **[256]** |
| Phase | **[256]** |
| NEX | **[2]** |
| Phase FOV | 1.00 (default) |
| Freq Dir | **[>] [S/I]** |
| Auto Center Freq | **[>] [Peak]** |
| | |
| (lowest window) | **[Save Series]** |

### o.40.1 Gradient Waveforms

| SCAN OPTION | INPUT |
|---|---|
| PATIENT REGISTER . | **[New Pt]** |
| PATIENT INFORMATION | |
| Patient Id | **geservice** |
| Patient Name | **grad** |
| Weight (Lb) | **111** |
| | **[Landmark]** |
| Landmark | **[>] [Nasion]** |
| PATIENT PROTOCOLS | **[Patient Position]** |
| PATIENT POSITION | |
| Patient Position | **[>] [Supine]** |
| Patient Entry | **[>] [Head First]** |
| Coil | **[...] [Body] [Accept]** |
| IMAGING PARAMETERS | |
| Plane | **[>] [Axial]** |
| Mode | **[>] [2D]** |
| Pulse Seq | **[...] [Spin Echo] [Accept]** |
| Imaging Options | none (default) |
| Psd Name | none |
| Protocol | no entry |
| SCAN TIMING | |
| # of Echoes | **[4]** |
| TE | **[25]** |
| TR | **[1000]** |
| Bandwidth | **[15.63]** (1.0T only) |
| Bandwidth 2 | **[15.63]** (1.0T only) |
| SCANNING RANGE | |
| FOV | **[48]** |
| Slice Thickness | **[5]** |
| Spacing | **[1.5]** |
| S/I Start | **0** |
| S/I End | **0** |
| # of Slices | 1 (default) |
| L/R Center | 0 (default) |
| P/A Center | 0 (default) |
| Table Delta | 0.00 (default) |

| ACQUISITION TIMING | |
|---|---|
| Freq | **[256]** |
| Phase | **[256]** |
| NEX | **[1]** (4:28) |
| Phase FOV | 1.00 (default) |
| Freq Dir | **[>] [R/L]** |
| Auto Center Freq | **[>] [Peak]** |

(lowest window) **[Save Series]**

### o.41.1 Body APB Cal

| SCAN OPTION | INPUT |
|---|---|
| PATIENT REGISTER . | **[New Pt]** |
| PATIENT INFORMATION | |
| Patient Id | **geservice** |
| Patient Name | **body apb check** |
| Weight (Lb) | **300** ← *IMPORTANT* |
| | **[Landmark]** |
| Landmark | **[>] [Sternal Notch]** |
| PATIENT PROTOCOLS | **[Patient Position]** |
| PATIENT POSITION | |
| Patient Position | **[>] [Supine]** |
| Patient Entry | **[>] [Head First]** |
| Coil | **[...] [Body] [Accept]** |
| IMAGING PARAMETERS | |
| Plane | **[>] [Axial]** |
| Mode | **[>] [2D]** |
| Pulse Seq | **[...] [Spin Echo] [Accept]** |
| Imaging Options | none (default) |
| Psd Name | **cal** |
| Protocol | no entry |
| SCAN TIMING | |
| # of Echoes | 1 (default) |
| TE | **[25]** |
| TR | **[55]** |
| SCANNING RANGE | |
| FOV | **[24]** |
| Slice Thickness | **[5]** |
| Spacing | **0** |
| S/I Start | **0** |
| S/I End | **0** |
| # of Slices | 1 (default) |
| L/R Center | 0 (default) |
| P/A Center | 0 (default) |
| Table Delta | 0.00 (default) |

ACQUISITION TIMING

| | |
|---|---|
| Freq | **[256]** |
| Phase | **[128]** |
| NEX | **[2]** (0:52) |
| Freq Dir | **[>] [A/P]** |
| Auto Center Freq | **[>] [Peak]** |

(lowest window) **[Save Series]**

**[Research Operations]** **[Display CVs]**

Modify the following:

| | |
|---|---|
| Calmode | **5** (normal rf sinc normal) |
| 1a_rf1 | **32766** (sets 90° pulse full-scale) |
| 1a_rf2 | **0** (turns off 180° pulse) |
| | **[Accept]** |

**[Research Operations]** **[Setup Params]**

| | |
|---|---|
| TG | **50** |
| | **[Done]** |

### o.41.2 Head APB Cal

| SCAN OPTION | INPUT |
|---|---|
| PATIENT REGISTER . | **[New Pt]** |
| PATIENT INFORMATION | |
| Patient Id | **geservice** |
| Patient Name | **head apb check** |
| Weight (Lb) | **300** ← *IMPORTANT* |
| | **[Landmark]** |
| Landmark | **[>] [Sternal Notch]** |
| PATIENT PROTOCOLS | **[Patient Position]** |
| PATIENT POSITION | |
| Patient Position | **[>] [Supine]** |
| Patient Entry | **[>] [Head First]** |
| Coil | **[...] [Head] [Accept]** |
| IMAGING PARAMETERS | |
| Plane | **[>] [Axial]** |
| Mode | **[>] [2D]** |
| Pulse Seq | **[...] [Spin Echo] [Accept]** |
| Imaging Options | none (default) |
| Psd Name | **cal** |
| Protocol | no entry |
| SCAN TIMING | |
| # of Echoes | 1 (default) |
| TE | **[25]** |
| TR | **[55]** |
| SCANNING RANGE | |
| FOV | **[24]** |
| Slice Thickness | **[5]** |
| Spacing | **0** |
| S/I Start | **0** |
| S/I End | **0** |
| # of Slices | 1 (default) |
| L/R Center | 0 (default) |
| P/A Center | 0 (default) |
| Table Delta | 0.00 (default) |

ACQUISITION TIMING

| | |
|---|---|
| Freq | **[256]** |
| Phase | **[128]** |
| NEX | **[2]** (0:52) |
| Freq Dir | **[>] [A/P]** |
| Auto Center Freq | **[>] [Peak]** |

(lowest window) **[Save Series]**

**[Research Operations]** **[Display CVs]**

Modify the following:

| | |
|---|---|
| calmode | **5** (normal rf sinc normal) |
| 1a_rf1 | **32766** (sets 90° pulse full-scale) |
| 1a_rf2 | **0** (sets 180° pulse to small-scale) |
| | **[Accept]** |

**[Research Operations]** **[Setup Params]**

| | |
|---|---|
| TG | **50** |
| | **[Done]** |

### o.42.1 Bandpass Asymmetry Correction Compensation (BACC)

| SCAN OPTION | INPUT |
|---|---|
| PATIENT REGISTER . | **[New Pt]** |
| PATIENT INFORMATION | |
| Patient Id | **geservice** |
| Patient Name | **bacc** |
| Weight (Lb) | **111** |
| | **[Landmark]** |
| Landmark | **[>] [Sternal Notch]** |
| PATIENT PROTOCOLS | **[Patient Position]** |
| PATIENT POSITION | |
| Patient Position | **[>] [Supine]** |
| Patient Entry | **[>] [Head First]** |
| Coil | **[...] [Body] [Accept]** |
| IMAGING PARAMETERS | |
| Plane | **[>] [Axial]** |
| Mode | **[>] [2D]** |
| Pulse Seq | **[...] [Spin Echo] [Accept]** |
| Imaging Options | none (default) |
| Psd Name | **bat** |
| Protocol | no entry |
| | |
| (lowest window) | **[Save Series]** |

### o.43.1 Center Frequency

| SCAN OPTION | INPUT |
|---|---|
| PATIENT REGISTER . | **[New Pt]** |
| PATIENT INFORMATION | |
| Patient Id | **geservice** |
| Patient Name | **center frequency** |
| Weight (Lb) | **111** |
| | **[Landmark]** |
| Landmark | **[>] [Sternal Notch]** |
| PATIENT PROTOCOLS | **[Patient Position]** |
| PATIENT POSITION | |
| Patient Position | **[>] [Supine]** |
| Patient Entry | **[>] [Head First]** |
| Coil | **[...] [Body] [Accept]** |
| IMAGING PARAMETERS | |
| Plane | **[>] [Sagittal]** |
| Mode | **[>] [2D]** |
| Pulse Seq | **[...] [Spin Echo] [Accept]** |
| Imaging Options | none |
| Psd Name | none |
| Protocol | no entry |
| SCAN TIMING | |
| # of Echoes | **[4]** |
| TR | **[250]** |
| Bandwidth | **[15.00]** (1.0T only) |
| Bandwidth2 | **[15.00]** (1.0T only) |
| SCANNING RANGE | |
| FOV | **[40]** |
| Slice Thickness | **[15]** |
| Spacing | **[1.5]** |
| R/L Start | **0** |
| R/L End | **0** |
| # of Slices | 1 (default) |
| P/A Center | 0 (default) |
| I/S Center | 0 (default) |
| Table Delta | 0.00 (default) |

| ACQUISITION TIMING | |
|---|---|
| Freq | **[256]** |
| Phase | **[256]** |
| NEX | **[2]** |
| Phase FOV | 1 (default) |
| Freq Dir | **[>] [S/I]** |
| Auto Center Freq | **[>] [Peak]** |

(lowest window) **[Save Series]**

### o.44.1 Head B0 Dither

| SCAN OPTION | INPUT |
|---|---|
| PATIENT REGISTER . | **[New Pt]** |
| PATIENT INFORMATION | |
| Patient Id | **geservice** |
| Patient Name | **Head B0 Dither** |
| Weight (Lb) | **111** |
| | **[Landmark]** |
| Landmark | **[>] [Sternal Notch]** |
| PATIENT PROTOCOLS | **[Patient Position]** |
| PATIENT POSITION | |
| Patient Position | **[>] [Supine]** |
| Patient Entry | **[>] [Head First]** |
| Coil | **[...] [Head] [Accept]** |
| IMAGING PARAMETERS | |
| Plane | **[>] [Axial]** |
| Mode | **[>] [2D]** |
| Pulse Seq | **[...] [Spin Echo] [Accept]** |
| Imaging Options | **[...] [Echo Planar]** |
| Psd Name | none |
| Protocol | no entry |
| SCAN TIMING | |
| # of Echoes | **[16]** |
| TE | **[Minimum]** |
| TR | **[6000]** |
| Bandwidth | **[62.50]** |
| SCANNING RANGE | |
| FOV | **[30]** |
| Slice Thickness | **[10]** |
| Spacing | **[10]** |
| S/I Start | **[I20]** |
| S/I End | **[S20]** |
| # of Slices | 3 (default) |
| L/R Center | 0 (default) |
| P/A Center | 0 (default) |
| Table Delta | 0.00 (default) |

ACQUISITION TIMING

| | |
|---|---|
| Freq | **[128]** |
| Phase | **[64]** |
| NEX | **[1]** (0:06) |
| Freq Dir | **[>] [R/L]** |
| Auto Center Freq | **[>] [Water]** |

(lowest window) **[Save Series]**

## o.45.1 Body $B_0$ Dither & EPI Group Delay

| SCAN OPTION | INPUT |
|---|---|
| PATIENT REGISTER . | **[New Pt]** |
| PATIENT INFORMATION | |
| Patient Id | **geservice** |
| Patient Name | **Body B0 Dither** |
| Weight (Lb) | **111** |
| | **[Landmark]** |
| Landmark | **[>] [Sternal Notch]** |
| PATIENT PROTOCOLS | **[Patient Position]** |
| PATIENT POSITION | |
| Patient Position | **[>] [Supine]** |
| Patient Entry | **[>] [Head First]** |
| Coil | **[...] [Body] [Accept]** |
| IMAGING PARAMETERS | |
| Plane | **[>] [Axial]** |
| Mode | **[>] [2D]** |
| Pulse Seq | **[...] [Gradient Echo] [Accept]** |
| Imaging Options | **[...] [Echo Planar]** |
| Psd Name | none |
| Protocol | no entry |
| SCAN TIMING | |
| # of Shots | **[16]** |
| TE | **[Minimum]** |
| TR | **[6000]** |
| Bandwidth | **[62.50]** |
| SCANNING RANGE | |
| FOV | **[30]** |
| Slice Thickness | **[10]** |
| Spacing | **[10]** |
| S/I Start | **[I20]** |
| S/I End | **[S20]** |
| # of Slices | 3 (default) |
| L/R Center | 0 (default) |
| P/A Center | 0 (default) |
| Table Delta | 0.00 (default) |

ACQUISITION TIMING

| | |
|---|---|
| Freq | **[128]** |
| Phase | **[64]** |
| NEX | **[1]** (0:06) |
| Phase FOV | 1.00 (default) |
| Freq Dir | **[>] [R/L]** |
| Auto Center Freq | **[>] [Water]** |

(lowest window) **[Save Series]**

### o.56.1 SNR - Probe S

| SCAN OPTION | INPUT |
|---|---|
| PATIENT REGISTER | **[New Pt]** |
| PATIENT INFORMATION | |
| Patient Id | **geservice** |
| Patient Name | **probe s snr** |
| Weight (Lb) | **111** |
| | **[Landmark]** |
| Landmark | **[>] [Nasion]** |
| PATIENT PROTOCOLS | **[Patient Position]** |
| PATIENT POSITION | |
| Patient Position | **[>] [Supine]** |
| Patient Entry | **[>] [Head First]** |
| Coil | **[...] [Head] [Accept]** |
| IMAGING PARAMETERS | |
| Plane | **[>] [Axial]** |
| Mode | **[>] [MRS]** |
| Pulse Seq | **[...] [Probe-S] [Accept]** |
| Imaging Options | **[...] [EDR] [Accept]** |
| Psd Name | no entry |
| Protocol | no entry |
| SCAN TIMING | |
| # of Echos | **1** |
| TE | **[30]** |
| TR | **[2000]** |
| ADDITIONAL PARAMETERS | **[USER CVs]** |
| USER CONTROL VARIABLES | |

| | | |
|---|---|---|
| Scan Mode | **[1]** | [-1 to 1] |
| Total # of Scans | **[32]** | [1 to 4096] |
| AWS Optimization: 1=on | **[0]** | [0 or 1] |
| Spatial Sats: 1=on | **[0]** | [0 or 1] |
| | **[Accept]** | |

| | |
|---|---|
| SCANNING RANGE | |
| FOV | **[24]** |
| Voxel Thickness | **[20]** |
| S/I Start | **[S10]** |
| S/I End | **[I10]** |
| R/L Start | **[R10]** |
| R/L End | **[L10]** |
| A/P Start | **[A10]** |
| A/P End | **[P10]** |
| Table Delta | 0.00 (default) |
| ACQUISITION TIMING | |
| NEX | **[>] [2]** |
| Freq Dir | **[>] [A/P]** |
| Auto Center Freq. | **[>] [Water]** |

(lowest window) **[Save Series]**

### o.57.1 SNR - Probe P

| SCAN OPTION | INPUT |
|---|---|
| PATIENT REGISTER | **[New Pt]** |
| PATIENT INFORMATION | |
| Patient Id | **geservice** |
| Patient Name | **probe p snr** |
| Weight (Lb) | **111** |
| | **[Landmark]** |
| Landmark | **[>] [Nasion]** |
| PATIENT PROTOCOLS | **[Patient Position]** |
| PATIENT POSITION | |
| Patient Position | **[>] [Supine]** |
| Patient Entry | **[>] [Head First]** |
| Coil | **[...] [Head] [Accept]** |
| IMAGING PARAMETERS | |
| Plane | **[>] [Axial]** |
| Mode | **[>] [MRS]** |
| Pulse Seq | **[...] [Probe-P] [Accept]** |
| Imaging Options | **[...] [EDR] [Accept]** |
| Psd Name | no entry |
| Protocol | no entry |
| SCAN TIMING | |
| # of Echos | **1** |
| TE | **[37]** |
| TR | **[2000]** |
| ADDITIONAL PARAMETERS | **[USER CVs]** |
| USER CONTROL VARIABLES | |

| | | |
|---|---|---|
| Scan Mode | **[1]** | [-1 to 1] |
| Total # of Scans | **[32]** | [1 to 4096] |
| AWS Optimization: 1=on | **[0]** | [0 or 1] |
| Spatial Sats: 1=on | **[0]** | [0 or 1] |
| | **[Accept]** | |

| | |
|---|---|
| SCANNING RANGE | |
| FOV | **[24]** |
| Voxel Thickness | **[20]** |
| S/I Start | **[S10]** |
| S/I End | **[I10]** |
| R/L Start | **[R10]** |
| R/L End | **[L10]** |
| A/P Start | **[A10]** |
| A/P End | **[P10]** |
| Table Delta | 0.00 (default) |
| ACQUISITION TIMING | |
| NEX | **[>] [2]** |
| Freq Dir | **[>] [A/P]** |
| Auto Center Freq. | **[>] [Water]** |

(lowest window) **[Save Series]**

# REVISION HISTORY

| REV | DATE | AUTHOR | PRIMARY REASONS FOR CHANGE |
|---|---|---|---|
| 0 | Aug 30, 1998 | L. Loehrer | Converted Toolbook to Word 7.0 document. |
| 1 | Nov 12, 1998 | M. Keber | Updated protocol o.23.3 for additional CVs to modify for RF/PEN Cabinet. |
| 2 | Mar 3, 2000 | G. Boerner | Updated all entries per 8.3 validation. Added "A" protocols 56 & 57. Deleted Protocol 46 which is Class "C". |
| 3 | May 19, 2000 | M. Jones | Changed document file name to “PROTOCOLA.DOC” in header. |
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