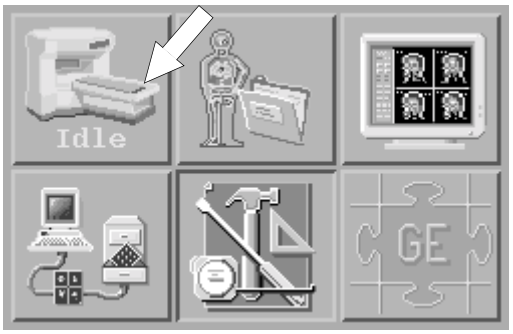
TABLE OF CONTENTS

1. Patient Information

1. Select Patient Information and Protocol Icon.



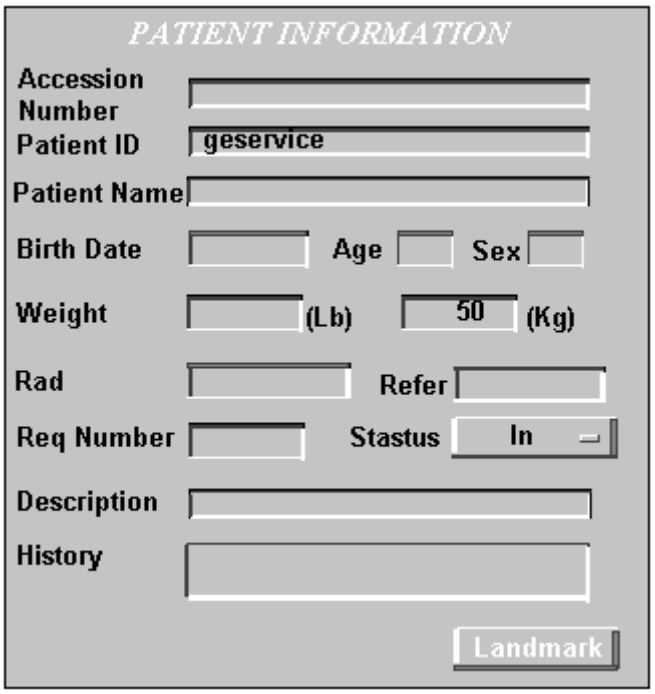
PATIENT INFORMATION AND PROTOCOL ICON
ILLUSTRATION 1

2. Click [**New Pt**] button in "PATIENT REGISTER".

[NEW PT] BUTTON
ILLUSTRATION 2

2. Scan Parameter Setting

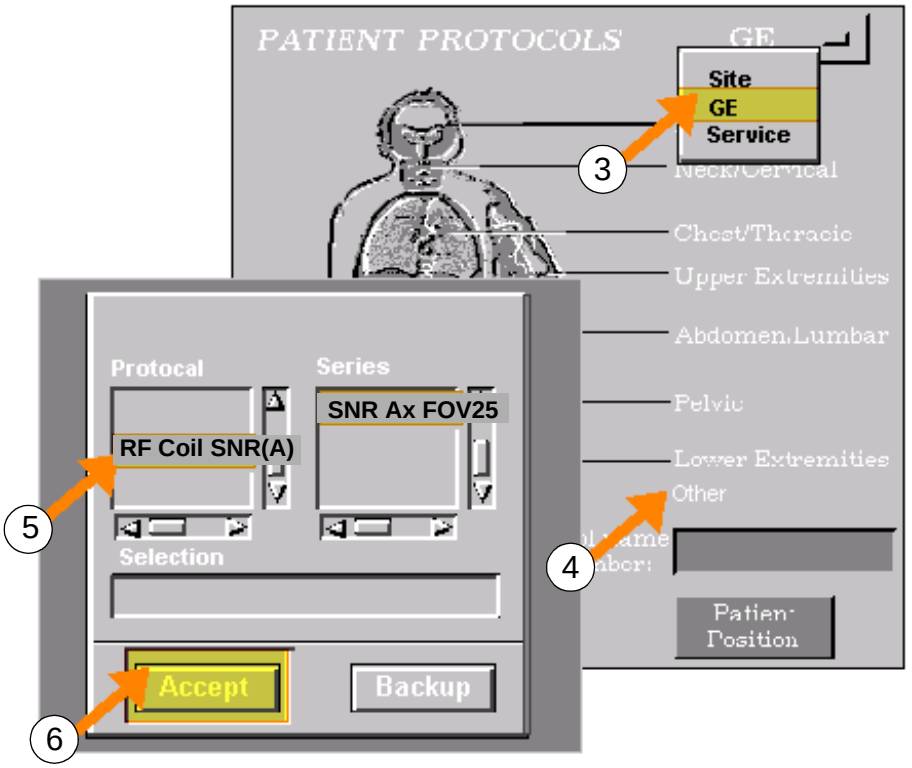
1. Click **[New Pt]**.
2. Input the following data in "patient information".
   - •Patient Data: geservice
   - •Weight: 50(Kg)



PATIENT INFORMATION
ILLUSTRATION 3

2. Scan Parameter Setting(continued)

3. Choose **GE**.
4. Click **Other**. Protocol window comes Up.
5. Select **[RF Coil SNR(A)]** from protocol.
   Select **[SNR Ax FOV25]** from series.
6. Verify that coil name shows **9-Inch GP**. If not, select from menu.
7. Select **[Accept]**.)



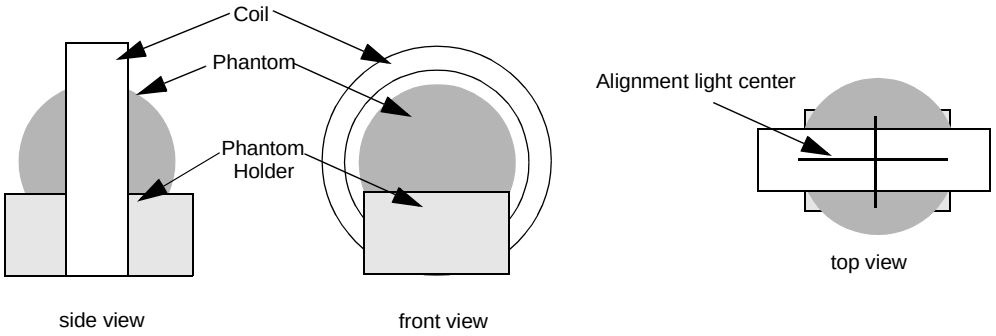
PATIENT INFORMATION
ILLUSTRATION 1

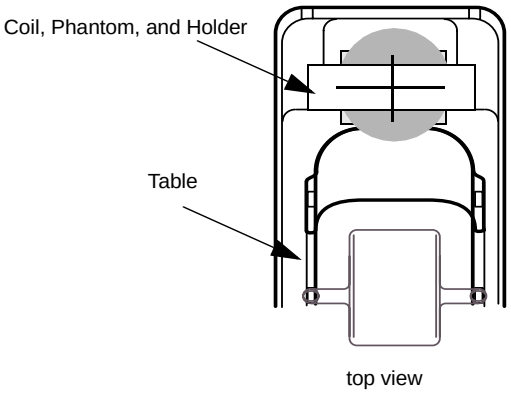
8. Select **[Save Series]**.

SAVE SERIES

3. Phantom Setting

1. Set the Sphere Phantom on the Phantom holder.
2. Set the Sphere Phantom and the Phantom holder in 9 inch GP Coil.
3. Set 2) on the table. See illustration about the phantom position.





PHANTOM SETTING
ILLUSTRATION 4

4. Turn alignment light ON.
5. Advance the cradle to the position where the A-light beam hits at center of 9 inch GP Coil.
6. Press **[Landmark]** button.
7. Press **[Adv to Scan]** button to send the phantom into the Magnet center.

4. Scan

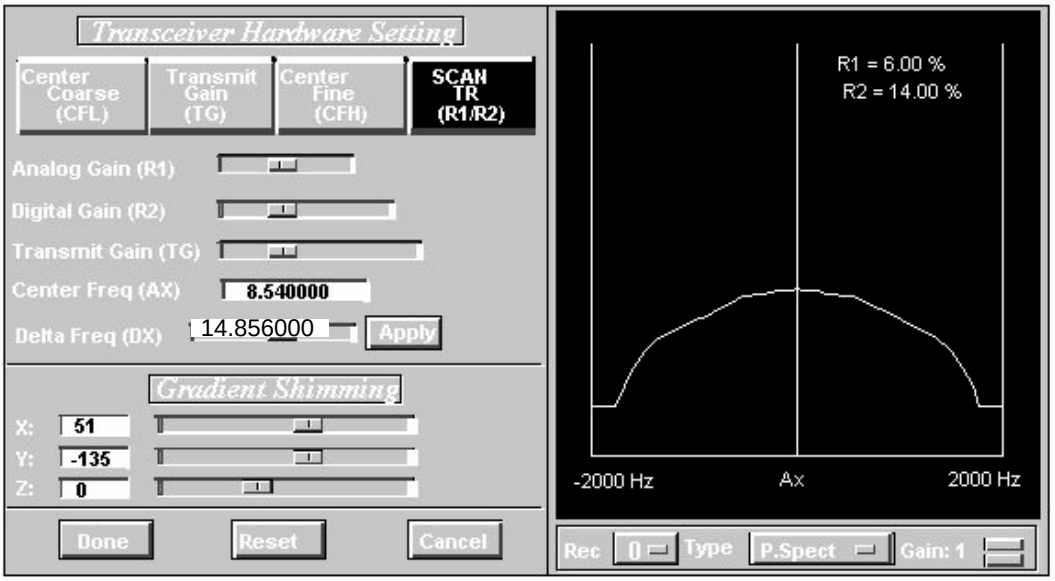
1. Select **Auto Prescan** button

AUTO PRESCAN
ILLUSTRATION 5

2. Select **Manual Prescan** button.

MANUAL PRESCAN
ILLUSTRATION 6

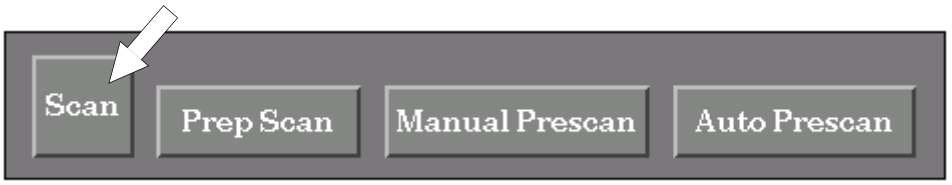
3. Click on "SCAN TR" and check that the projection is displayed.



PROJECTION
ILLUSTRATION 7

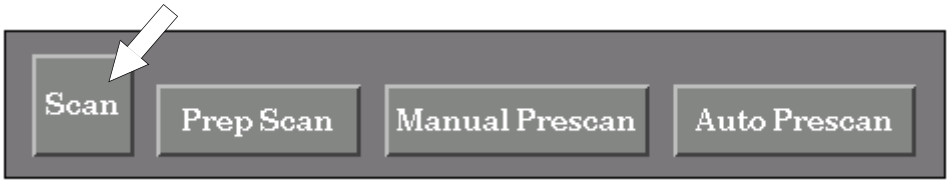
4. Scan(continued)

4. Select **Scan** button



SCAN
ILLUSTRATION 8

5. Verify that scanning has been started.
6. Select **Scan** button again.



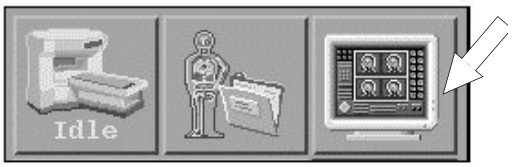
SCAN
ILLUSTRATION 9

7. Verify that scanning has been started.

5. Data Analysis

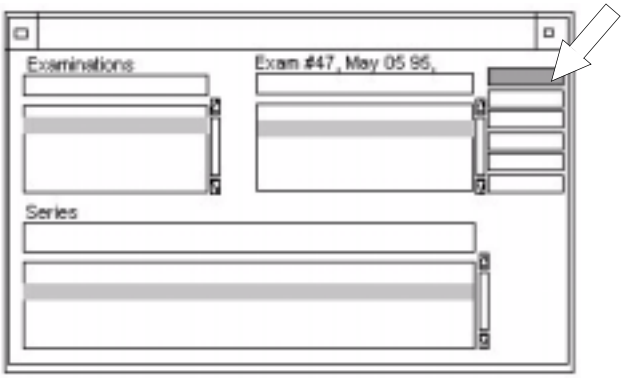
5-1 Subtract Scan Images

1. Select Advantage Window Icon.



AW ICON
ILLUSTRATION 10

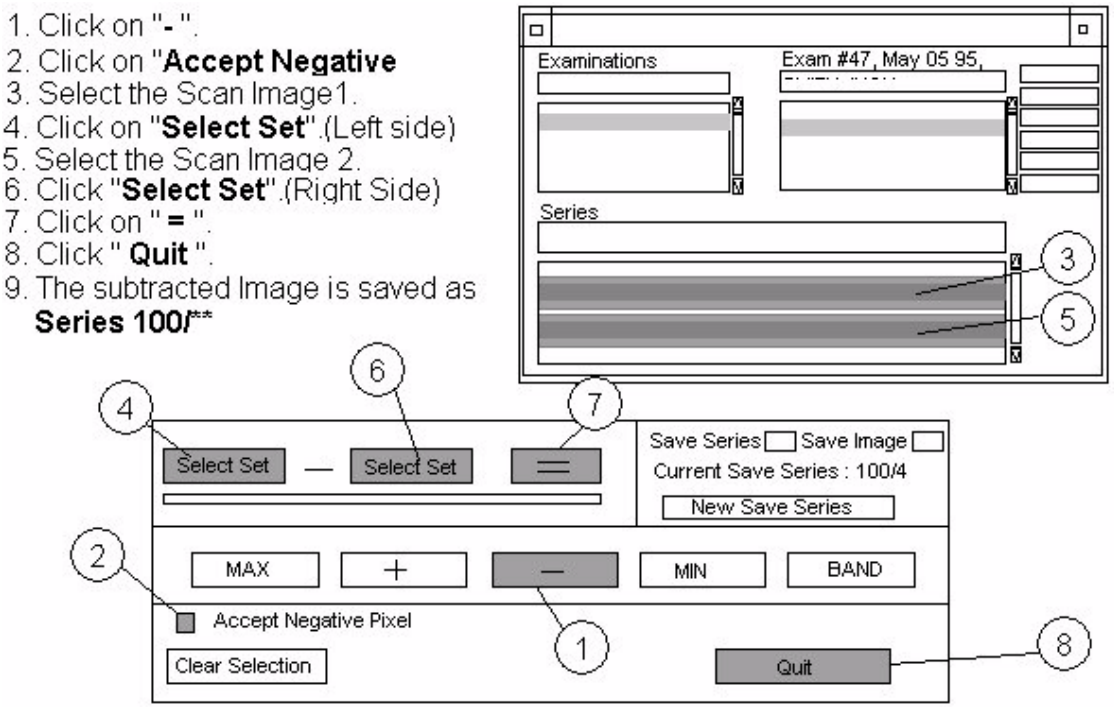
2. Click [**Add/Sub**] button.



ADD-SUB BUTTON
ILLUSTRATION 11

5-1 Subtract Scan Images (continued)

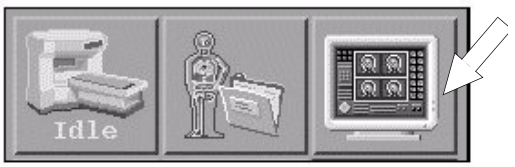
3. Subtract Image
   1st Image - 2nd Image



HOW TO SUBTRACT
ILLUSTRATION 12

5-2 Measure the Mean and SD of 1st image.

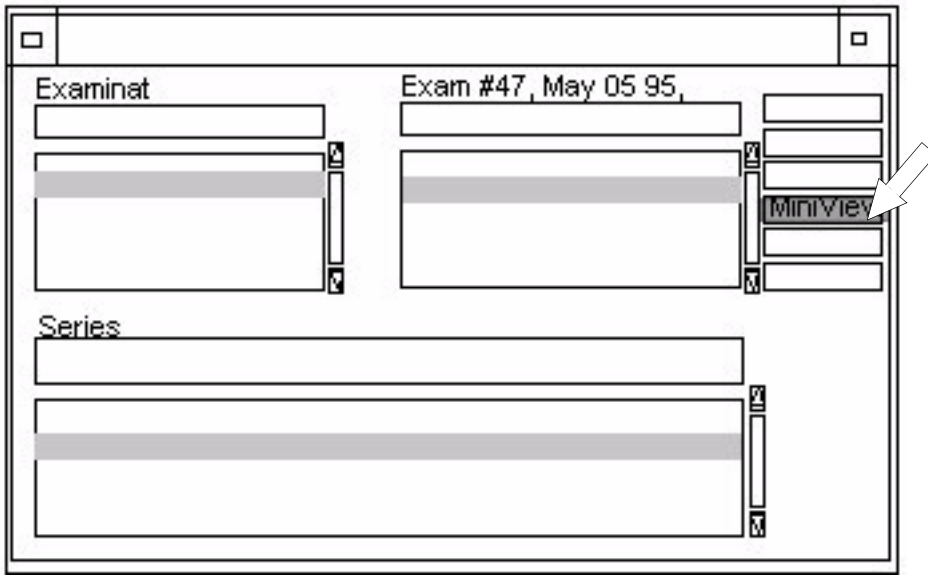
1. Open the 1st Image by using the Miniviewer.
   a. Select Advantage Window Icon.



AW ICON
ILLUSTRATION 13

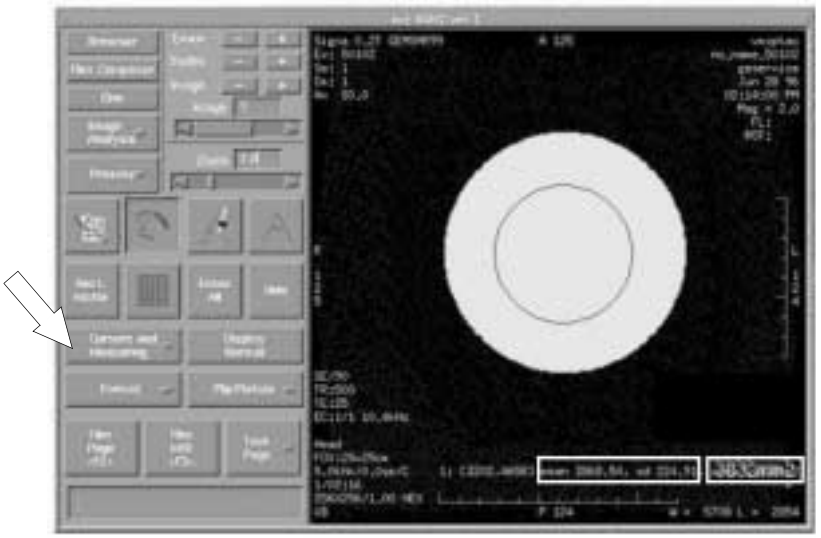
5-2 Measure the Mean and SD of 1st image (continued)

b.Select "Exam", "Series", and "Image" from the patient list and then press [MiniViewer].



MINIVIEWER
ILLUSTRATION 14

2. From "Cursors and Measuring", select ellipse and set the area to (10000±500mm2)

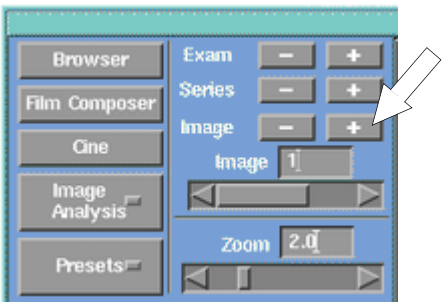


ELLIPTICAL CURSOR
ILLUSTRATION 15

3. Measure the Mean and SD.
4. Record the Data into the Data Sheet.
5. Press the keys at the same time to copy the current elliptical cursor :
   [**Ctrl + Alt + F6**] or [**Ctrl + c**].

5-3 Measure the Mean and SD of 2nd image.

1. Open the 2nd Image
   a. Click on "Image +" button, and next image will come up.



Next Image
ILLUSTRATION 16

2. Press the keys at the same time to paste the elliptical cursor: [**Ctrl + Alt + F8**] or [**Ctrl + v**].
3. Measure the Mean and SD.
4. Record the Data into the Data Sheet.

5-4 Measure the Subtracted Image.

1. Open the Subtracted Image.
   a. Click on "Image +" button, and next image will come up.
2. Measure the Mean and SD of the Subtracted Image.
3. Record the Data into the Data Sheet.

6. Data Sheet

1. Record the Mean and SD values, and calculate the SNR:

$$SNR = \left(\frac{m1 + m2}{2} \times \sqrt{2}\right) / SD(s)$$

where, M1 is the 1st Image Mean Value and SD(s) is the Subtracted Image SD value

TABLE 6-1
MEAN AND SD VALUES

	MEAN	SD
Ist Image		
2nd Image		
Subtracted Image	----------	

TABLE 6-2
SNR VALUE

Calculated SNR	SPEC
	≥ 189

Revision History

Rev	Date	Author	Primary Reasons For Change
0	Feb 9, 2001	Y.Masumo	Initial Releases
1	May 15, 2001	Y. Masumo	Coil setting and spec are updated.
2	Jan 28, 2002	Y. Masumo	Misc Correction.