MR Excite HD Quick Steps
MR ECHO

Step 1: Select the MR Echo "One Touch Application"

- LAVA
- MR-Echo
- TRICKS
- VIBRANT

Accept

Alternate Step 1: Select the MR Echo Protocol from the GE Protocol Library

- Protocol listed under Chest/Abdomen

Step 2: Prepare and Position the Patient

- Patient entry is Supine/Feet First
- Choose appropriate coil configuration (8ch Cardiac Array by GE)
- Landmark to center of anatomy
- Advance patient into the scanner

**FYI —** MR Echo is only compatible with the 8 channel cardiac array coils.

Step 3: Perform Localizer and Calibration Scans

- Select a 3-plane localizer series from the GE protocol library
- **[Save], [Download], [Scan]**
- Select the calibration series from the GE Protocol
- Prescribe the axial calibration scanning range to extend past the anatomy by 50%

FYI— ASSET can be turned off/on in MR Echo. Typically turn on ASSET for optimum temporal resolution.

Step 4: Download MR Echo Series

- Select the MR Echo series from the Prescription Manager
- **[Save], [Download], [Scan]**

FYI — Selecting MR Echo opens unique Scan and Manual Prescan desktops. The Scan desktop displays only parameters that are available with the PSD.

MR Echo cannot be the first series in an exam

FYI — The scan values on the Realtime Parameters tab are automatically completed when the window is displayed. Edit any fields while noting the effect it has

GE imagination at work
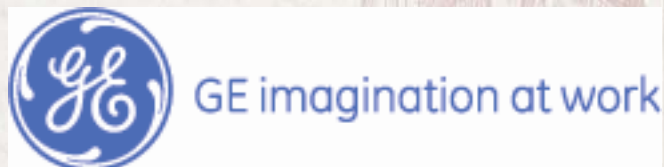
MR Echo Scan Procedure

When the real time scan begins, a sagittal localizer is placed in the upper left viewport, a coronal localizer is placed in the upper right viewport, and the lower right viewport shows real time axial images.

Step 1: Define a Movie

- Click and drag the navigator line to the desired location to define a real time location.
- To move the navigator line to a different viewport, right click into the desired viewport and select "add navigator line" from the pull down menu.

Step 2: Create a Bookmark

- Place cursor over the real time viewport
- Click, drag and drop the image to a bookmark viewport.
- Drag a bookmark image into the real time window to start scanning at that location.

Step 3: Define Sequential Slices
- Click the slice group icon.
- Click in any viewport at desired location to deposit the cursor.
- Add handles to adjust number of slices.
- Add another group by clicking in same or different viewport.
- Click the delete button on the keyboard to delete a group of slices.
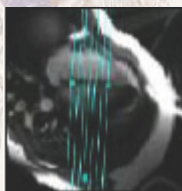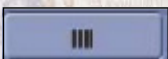
Step 4: Start Scan

- Click **Prep** and give patient breathing instructions.
- Click **Scan and Save**.

Step 5: Save Images to Database

- Scan and Save— image locations are saved to the database.
- Bookmark— right click on bookmark and select save. Images are sent to the browser.

> FYI— Note temporal resolution. For wall motion analysis, color codes should be green. To adjust, use [+] and [-] buttons.

Temp Res: 63
Breath Hold Time: 1
Breath Holds: 1
☐ Single Cardiac Cycle

MR Echo Real Time Window
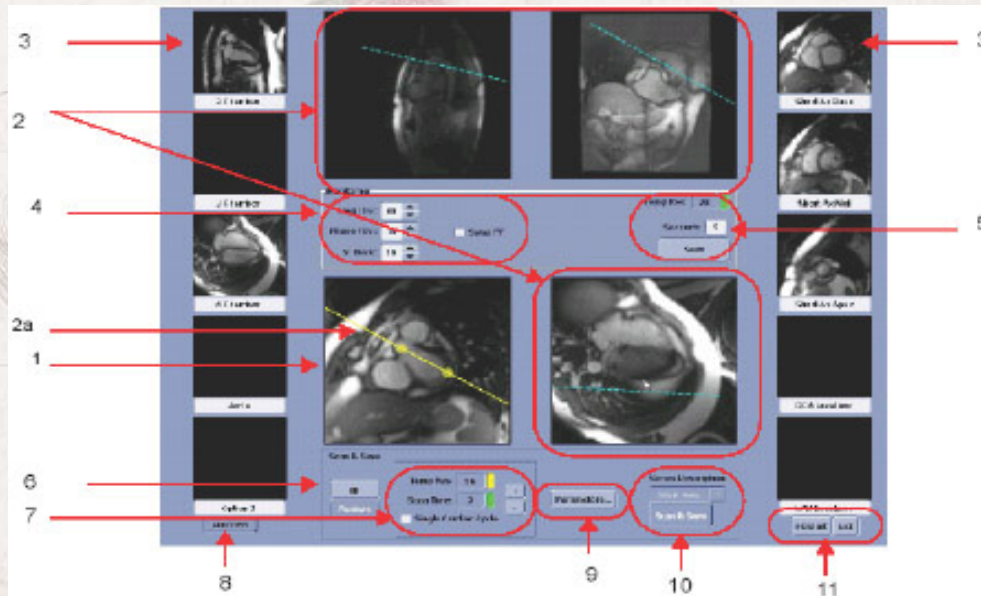
No.	Selection	Description
1	Realtime Viewport	Any of the four viewports can be the real time viewport.
2	Static Image Viewports	Three of the four display static images. Move the navigator line [2a] (defines real time scan locations) on any of the images and other viewports update.
3	Bookmarks	Bookmark images by clicking and dragging into one of the 10 viewports. Labels can be edited by user.
4	Real Time Parameters	Can be changed without stopping Real Time.
5	Save	Saves images in real time viewport to database.
6	Slice Group Restore	Deposits slice locations. Restores previous save and scan prescription.
7	Temporal Resolution	Selections from Scan and Save Parameters tab.
8	AutoView	Displays AutoView viewport
9	Parameters	Displays a pop-up window that allows changing of a subset of parameters from the Scan and Save Parameters tab.
10	Series description Scan and Save	Series description can be edited or selected from pull down menu. Initiates the scan.
11	Restart	Re-acquires the 3 orthogonal localizer images at position prescribed on the Real Time Parameters window.