

Policies for the use of the Mock Scanner

1. The use of the mock scanner has to be scheduled in advance. The schedule for the mock scanner is available on the same webpage as the schedule for the MR scanner. The same rules in effect to schedule studies for the MR scanner apply to the scheduling for the mock scanner (except that there is no usage fee for the mockup).
2. There is a logbook in the mock scanner room. Users must sign-in and sign-out. Any problem detected while using the mock scanner system needs to be logged in the logbook. The logbook can not be removed from the room.
3. The primary function of the desktop computer in the mockup room is the presentation of the acoustic noise generated by the scanner. The acoustic noises of typical scanning sequences are available in the "Acoustic Noise" folder on the desktop. Double clicking a file will produce that specific noise. Additional controls are available once a file is opened.

The sound files **MUST NOT** be removed or relocated, under **any circumstances**.

Windows volume control can control the sound volume. A near-realistic simulation is obtained when the sound volume is set at 'maximum'.

At this level (maximum), **BOTH** the subject and the experimenter **MUST** wear the 33 dB earplugs.

The acoustic noise is designed to be played through the speakers installed around the bore.

FOR SAFETY REASONS, THE ACOUSTIC NOISE CANNOT BE PLAYED THROUGH ANY HEADPHONES.

4. Auditory stimuli can be played through the provided headphones.
5. Visual stimuli can be presented on the LCD display at the backend of the bore. Unlike in the MR scanner, where the projected image is reflected by an even number of mirrors, the mockup system consists of a single mirror. As a result, the image seen by the subject is left-right reversed. If image orientation is important, the stimuli will need to be left-right reversed when using the mockup system. Most commercial software designed for MRI applications has this function built in. In Matlab, it simply requires a few (3) extra lines of Matlab code.
6. The angle of the subject's mirror may need to be adjusted by the subject. The subject has to be instructed to use the edges of the mirror for adjustment. **DO NOT** touch the middle of the mirror.

The mirrors in both the MR scanner and in the mock scanner are first-surface mirrors.

Grease and sweat that comes into contact with the reflective surface **CAUSES PERMANENT DAMAGE TO THE MIRROR**. The subject must be instructed to avoid directly touching the mirror surface.

7. The desktop computer may be used to control experiments at the same time that acoustic noise is played back. The displays needs to be set to "expanded desktop" mode so that the experiment can run on the subject's screen while the researcher controls the acoustic noise on the operator's screen.

The researcher's laptop may also be used to present stimuli and/or control the experiment. The response keypads and the subject's screen may be disconnected from the desktop computer. In such case, **EVERYTHING HAS TO BE RECONNECTED** before leaving the mock-scanner room.

8. A new disposable bed sheet must be used for each subject. Shoes must be removed before getting on to the mock scanner bed.
9. The bed must be **GENTLY** moved in and out of the bore. **DO NOT** ramp it to the stops. Be careful that nothing is caught in the railing or the wall of the bore.
10. The head coil in the mock scanner is an expensive and functional 8-channel MR coil. It needs to be **HANDLED WITH GREAT CARE!**