

MRI Simulator™

Improve the productive yield of your MRI studies by as much as 80%.

MRI studies require long periods of scanning with minimal participant movement. The procedure can be an unsettling experience for many participants causing excessive movement resulting in unusable data and lost funds. Special populations such as children, the elderly, and psychiatric participants, are often prone to claustrophobia and anxiety in the bore of a magnet, and consequently have a much higher rate of terminating the scan session before its completion. Some centers that have dealt with these populations estimate a 50%-80% failure rate. With the use of the MRI Simulator this failure rate can often be reduced below 5%, minimizing data loss.

The MRI Simulator provides a realistic approximation of an actual MRI scanner to allow habituation and training of participants in an environment less daunting than a real scanner. The MRI Simulator introduces the participant to an authentic scanning environment, permitting them to gradually become accustomed to the scanning procedure and trained to minimize movements. Allowing the participant to acclimate to the scanner before the actual session helps to prepare them and encourages a calmer and more focused participant, ultimately resulting in more productive scanning sessions.

The MRI Simulator may also be used to quickly train new academic, research, or hospital personnel in an inexpensive, safe and controlled environment.

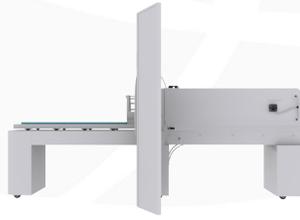
The MRI Simulator is designed to fit easily within a 12 foot office space and can be assembled and ready for use within 30 minutes at most sites (no tools required for assembly).

"In my research with 7 to 10 year old children I have found that use of a simulator before the actual scan has been critical to the success of most runs. The simulator provides a chance for children (as well as adults) to practice the activation task in a compellingly realistic scan environment. It allows them to ask questions and most importantly provides an opportunity to train children to hold still. I find that it's a great advantage to be able to use the simulator to present the exact task conditions that the child will encounter in the actual fMRI run."

- Bruce McCandliss, PhD

The Sackler Institute for Developmental Psychobiology

For information on the efficacy of MRI Simulators, visit: www.pstnet.com/simulator.



PSYCHOLOGY SOFTWARE TOOLS
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MRI Simulator™

Eliminate failed scans caused by claustrophobia or anxiety!

Standard Features

- Standard 60 cm circular bore with tapered entry and front façade panel
- Realistic scanner body with sturdy steel frame construction
- Cooling fans and diffused lighting for participant safety and comfort
- Amplified speakers with subwoofer for realistic scanner noise production and vibration
- Quiet, motorized participant table with drag sensing safety stop and dynamic speed control (table speed ramps up or down for smooth starts and stops during participant insertion and extraction)
- Integrated control panel for participant table operation, fans, and lights

Accessories (Sold Separately)

- Mock Head Coil (GE or Siemens) with Rear Facing Mirror System
- Participant Video - 15" LCD video display system with 1024x768 resolution and integrated display controls to adjust image orientation
- Participant Audio - High quality participant headphones offering a frequency response range of 10-30,000 Hz with a comfortable ear cup design
- Participant Response - Right and left hand button response units (5 buttons each hand)
- Participant Camera - Micro camera mounted inside of bore to monitor participant safety

Additional Options

- SimFx™ software simulates the ambient scanner sound and the active scanning noise. Four sound files can be played simultaneously.
- MoTrak® head motion tracking system capable of monitoring participant output based on user-defined criteria
- E-Prime® experiment development and stimulus presentation software



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