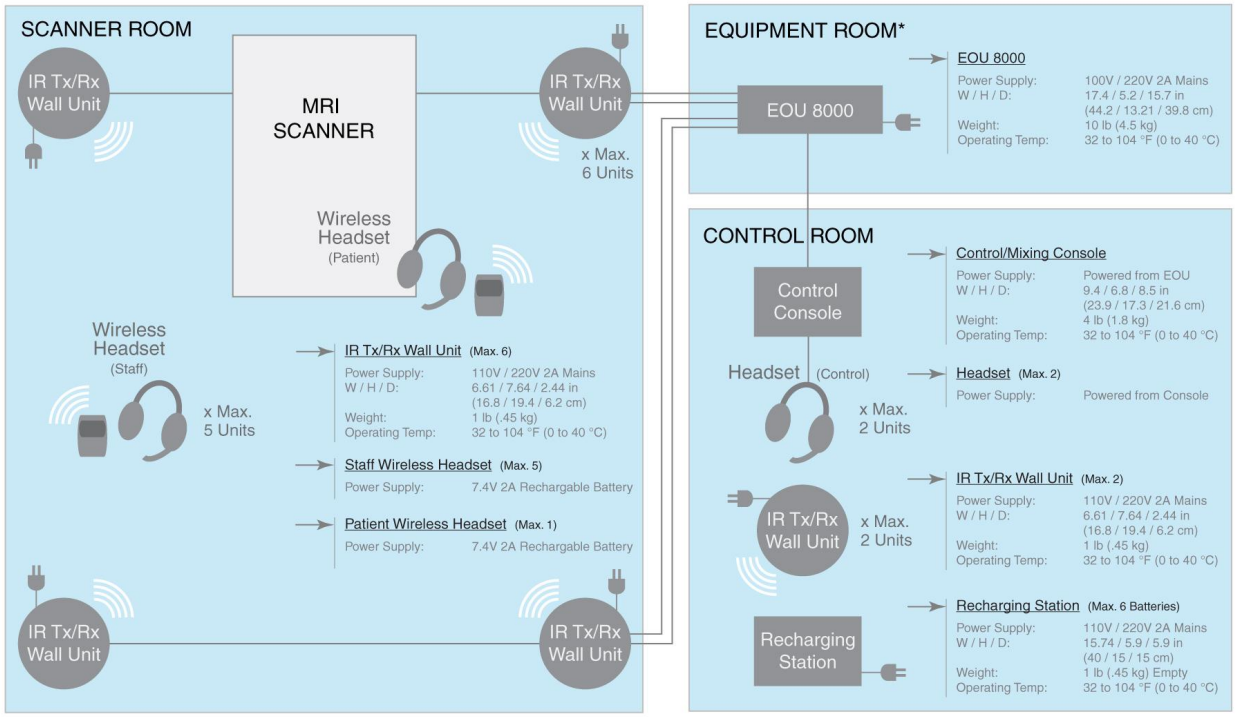
Preparing Your MR Suite

Components of the IMROC-IR System are installed in the Scanner Room, Equipment Room and Control Room, as shown below. Multi-channel communications are maintained via multiple diffuse IR wireless receivers, supported by fiber optical cable transmission to a central server. The MR technologist's control of the System uses a direct serial computer cable.



This drawing is not to scale.

* The EOU may also be located in the Control Room.

Carefully examine and prepare these locations before scheduling your installation. This will help you prevent unexpected technical issues and get you and your staff working quickly.

Steps:

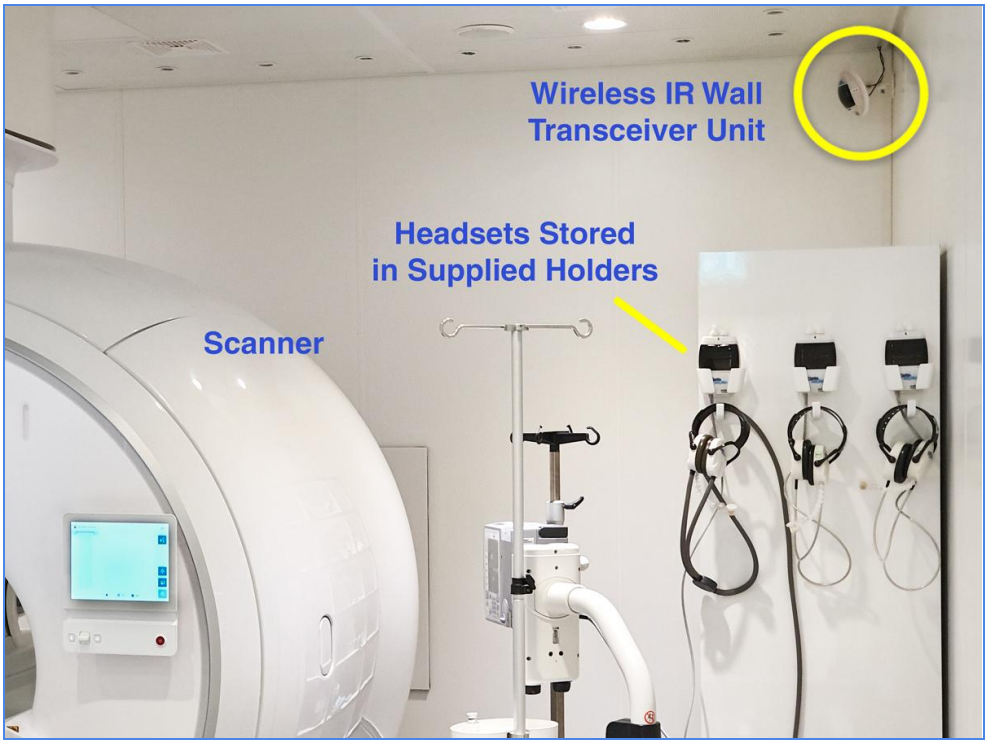
1. Plan physical mounting locations for IR Wall Transceivers

IMROC is supplied with up to 6 wireless IR Wall Transceiver units which support the multi-channel communications among the staff working in the Scanner Room (or iMRI Suite), the technologists working in the Control Room, as well as the patient, as needed.

These units need to be permanently mounted in physical 'line-of-sight' positions, high on the Scanner Room walls, in order to perform effectively.

NOTE: Your Optoacoustics support representative is trained to assist you when planning the ideal locations for each of the IR Wall Transceiver units, based on the dimensions and activities planned at your facility.

A dedicated electrical outlet must be installed above the Scanner Room ceiling to supply power to the transceiver units (see details in the item below). If needed, standard electrical extension cords with multiple outlets can be added. The IMROC System is supplied with all hardware required to mount the units and connect them to the local electrical outlet.



2. Prepare safe space for Staff Headsets (Scanner Room)

The IMROC Headsets require dedicated wall space measuring an area of 30 x 30 cm. The Headsets are stored in dedicated holders, typically attached to a wall next to the MRI scanner for convenient access.

The special Headset wall hanging units are supplied, together with all required mounting hardware.

3. Verify electrical supply

Mains power supply for all IMROC System components must be rated 90-240V.
Standard electrical plugs are supplied according to local requirements. System electrical safety is certified to be in full conformance with FCC, CE and other standard regulations.

Equipment Room	1 Standard Outlet for the EOU
Control Room	1 Standard Outlet for the Control Console 1 Standard Outlet for the Headset Battery AC Charger
Scanner Room(s)	Up to 6 Standard Outlets for Wireless IR Wall Transceiver Units: ● Up to 4 Outlets in main Scanner Room ● Up to 2 Outlets in adjoining Room(s) Standard electrical extension cords may be used.

4. Clear table space for Control Console (Control Room)

The IMROC Control Console has a table footprint of 20 cm width x 20 cm depth x 10 cm height. Additional table space should be calculated for up to two stereo headphones tethered to the Console. No special component clearance space is required.

The Console also supports an optional external stereo speaker set and external microphone.

Ideally, the Console should be situated next to the EPI controller.

5. Clear table or shelf space for Headset Battery AC Charger (Control Room)

The IMROC Battery AC Charger is used to recharge up to 6 Headsets simultaneously. The AC Charger has a footprint of 50 cm length x 30 cm width x 20 cm height. No special component clearance space is required.

6. Clear rack or floor space for EOU (Equipment/Control Room)

The IMROC EOU has a footprint similar to a standard PC case. It can be placed on the floor or if needed on an grounded electrical equipment shelf. No special component clearance space is required.

The maximum cabling distance from the EOU to the Control Console is 15 meters.