

MRI Checklist for MED-EL Middle Ear Implant VORP 503

If the conditions or instructions herein are NOT followed, **INJURY** to the patient and/or **DAMAGE** to the implant may result!
 → **VALID** for all body regions
 In case of additional implants, e.g. a hearing implant in the other ear: MRI safety guidelines for this implant need to be considered in addition.



The external components of the MED-EL Implant System (audio processor and accessories) are MR Unsafe and need to be removed prior to scanning.



The implant components of the MED-EL Implant System are MR Conditional.



GENERAL CONDITIONS

→ PERMITTED , static magnetic field strength	1.5 T
→ MAXIMUM PERMITTED SAR (at 1.5T)	NORMAL OPERATING MODE 3.2W/kg (Head), 2.0W/kg (Whole-Body)

PREPARATION

- **USER IDENTIFICATION CARD** OK
Ask patient for User Identification Card to check implant type.
- **IMAGE ARTEFACT** YES → continue (next bullet point)
Is accurate diagnostic possible even with the expected image artefact (13–14 cm around the implant)? NO → consider MARS sequences, alternative imaging technologies
- **AUDITORY SENSATIONS** OK
Inform the patient about possible auditory sensations during the examination.
NOTE: The likelihood and intensity of auditory sensations can be reduced by selecting sequences with a lower Specific Absorption Rate (SAR) and slower gradient slew rates. May also be reduced by putting on noise protection headphones.
- **HEAD ORIENTATION** OK
Inform the patient not to turn her/his head.
- **EXTERNAL COMPONENTS** OK
Remove audio processor and accessories before entering the scanner room.
- **OPTIONAL: HEAD BANDAGE** OK
A head bandage over the implant is not needed.

EXECUTION

- **PATIENT POSITIONING** OK
Ensure straight head orientation.
NOTE: When lower extremities are to be examined, it is recommended that patient's legs are positioned in the scanner first.
- **OPERATING MODE** OK
Run sequences in "Normal Operating Mode" only.
NOTE: Max. 3.2W/kg for Head scans, 2.0W/kg for Whole-Body scans
- **ACCESSORIES** OK
Do not utilise head transmit coils or multi-channel transmit coils

Please also refer to the webpage www.medel.com/isi-VORP-503

Help and assistance are always available from your local office. Please visit us at www.medel.com.

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