

DEMO 7: OM-MHA real-time processing

AIM: To demonstrate the use of our proprietary MHA plugins to perform real-time processing of two complete stimulation strategy chains: **Crystalis**, the one used in our current clinical processors; and **SFE**, a recently developed strategy that provides better spectral resolution.

DESCRIPTION: A BTE containing just the microphones is connected to the audio acquisition module of OMRP (Oticon Medical Research Platform). The digitalized audio is sent to a computer (NUC) that is running an instance of MHA, that is configured to process the input audio either with Crystalis or SFE strategy.

OMRP driver

NUC

OM-MHA

digital audio

analog audio

BTE microphones

RT audio processing

A Matlab script controls the demo. Firstly,

the user selects the desired strategy, then the audio captured by the microphones in the following few seconds is processed in real time by MHA. A bar graph represents the instant energy in each electrode. By the end of this time, the recorded input spectrogram and output electrodogram are displayed.

BENEFITS: Test new strategies in real-time with OM-MHA plugins

POSTERS: #1637(OM-MHA); #1556 (SFE description); #1634 (SFE acute tests)

