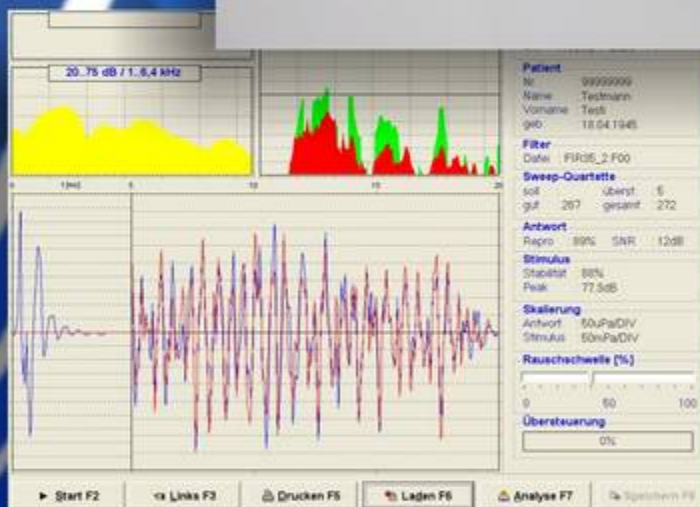


# T-OAE 4000

## otoacoustic emissions



we are one of the  
 leading companies  
 in the field of ENT-diagnostics  
 - worldwide -

# T-OAE 4000

As a world novelty, HOMOTH treads new paths in evaluating results of measured Otoacoustic Emissions. All measured data is classified according to signalstatistic and signaldynamic features. The result is transmitted to an expert system as parameter vectors. The expert system, containing

**more than 10.000 evaluated OAE measurements,**

compares all parameter vectors with the stored samples.

The analysis module consists of an artificial neuronal network, supplemented by modern fuzzy logic. The result is transmitted to the personal computer, via USB port, and is presented on the monitor. Using the HOMOTH expert system an objective result of a hearing test, comparable to subjective evaluation of an experienced OAE expert, is possible.

The actual measured data is compared and evaluated automatically within a few seconds. So everybody is able to use the special knowledge of many OAE experts. The analysis module evaluates the signalstatistic- and the signaldynamic parameters, the artefacts are eliminated and the characteristic components of the emissions are isolated. The screen shows the SOAE, TE-OAE and the artefacts.

Therefore the HOMOTH expert system also allows the untrained user of the OAE system, a very high safety regarding the statement of result.

As for a classical OAE measurement, all relevant diagrams are displayed at the monitor.

The HOMOTH TE-OAE expert connects all advantages of the classical OAE diagnostic with the most modern computer technology as neuronal networks and fuzzy logic.

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## Technical data

system requirements :	Pentium PC min. 800 MHz, Windows 98 / ME / 2000 / XP USB port version 2.0 or free PCI 2.1-slot with USB Port 2.0
standards :	EN 60601 -1 / 1-1 / 1-2 / MPG / NUB rules
stimulus :	clickquartett ( 3 pos. / 1 neg. ) 20 ms rate
intensity :	ca. 80dB with automatical gain control
probe :	miniature design with pressure ventilation realtime probe control via FFT
converter :	12Bit / 100kHz
amplifier :	80dB with automatical gain setting
measurement :	manual adjustable 16,32,64,128,256,512 clickquartetts
artefacts :	automatical artefact recognition and elimination,
results presentation :	time window with two correlating measurements in different colours time window with the spontaneous emissions maxima of the emissions realtime spectrum of the stimulus spectrum of the emissions / spectrum of the noise ZF correlation F/t parameter for SNR, stability, reproduction numbers of the artefacts and the given stimuli automatical analysis of the results after the expert system ( certain positiv, positiv, poor positiv, negativ, certain negativ )
dimensions/ weight :	290 X 250 X 75 mm ( W, D, H ) / 1,8 Kg
probe-cable:	2000 mm, high flexible with a patients clip for fastening
power consumption :	15 W
accessories :	1 miniature probe, complete with 30 ear plugs in 5 different sizes 1 extern power pack 1 kommunikation cable USB 2.0 1 program CD 1 instruction manual



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