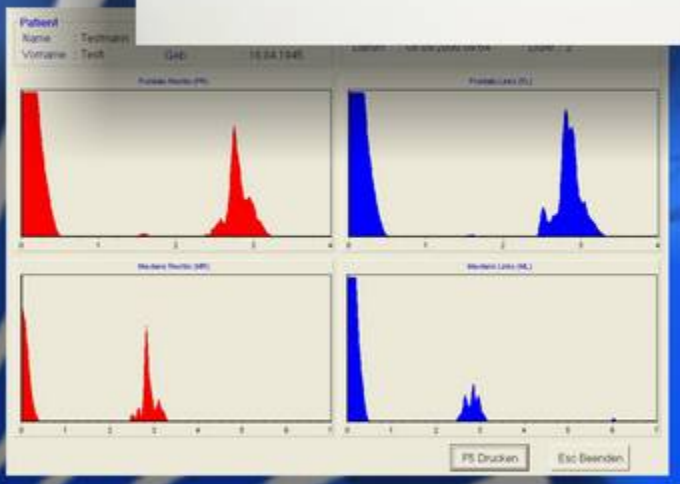
HOMOTH

MEDIZINELEKTRONIK GMBH & CO KG

US 4000
ultrasound A-scan



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

US 4000

Ultrasonic examinations have become more and more important in todays medicine. Ultrasonic impulses are sent through sinus-maxillaris and sinus-frontalis. The ultrasonic probe serves as transmitter for ultrasonic impulses, as well as receiver for the echos. The runtime of the echos is similar to the structures in the sinus. Echos are formed at a change of the acoustic impedance, between bone and tissue, bone and liqiuid as well as between all solid or liquid matter and air. The bigger the difference in impedance, the stronger the reflection.
A part of the energy is reflected at the transition from the front bone to the mucous. In a healthy sinus the rest of the energy is reflected at the end of the mucous membrane, no late echos appear. If the sinus is filled with liquid, nearly all energy crosses the sinus and is reflected at the backwall of the sinus.
Swelling of the mucous membrane or cysts produces a typical double echo. For examination of the sinus-frontalis, the depth scale and the amplification is automatically changed by the system.

The ultrasonic method is quick and easy to carry out, it is very user-friendly and completely without any dangerous side effects. It is specially used for progress reports of sinusitis patients. The measurement takes only a few seconds and is very reliable, no computer experience is required.

The method of ultrasonic serves as a supplement or replacement of the x-ray, especially by its considerable inexpensive costs. In Germany in every ENT practice ultrasonic is used.
For comparison, four sinus pictures can be stored. The depth amplification is stored in four curves that are able at the election. The linear amplification can be adjusted digital and linear.

All data and measured curves are stored automatically at the harddisc of the computer. For printouts all Windows printers are available.

Technical data

system:	PC module with USB 2.0 interface
system requirements:	Pentium PC min. 500 MHz, USB 2.0 port, Window 98, ME, 2000, XP
method:	A- mode
standards :	EN 60601 -1 / 1-1 / 1-2 / IEC 1157 / MPG
probe:	focussed, 14 mm diameter
probe frequency:	3,5 Mhz
impuls frequency:	120 Hz
probe power:	< 20 mW / cm^2
total amplification:	80 dB
depth amplification:	20 dB
depth range:	sinus frontalis - 3,5 cm sinus maxillaris - 7,5 cm
switchover:	automatical or manual by footswitch
depth amplification:	1. for maxillaris 2. for frontalis 3. for cysts 4. for small signals
comment line:	per sinus
patients data:	Paradox database
accessories:	1 ultrasound probe 1 bottle sonogel 1 footswitch 1 probe holder 1 program CD 1 instruction manual

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