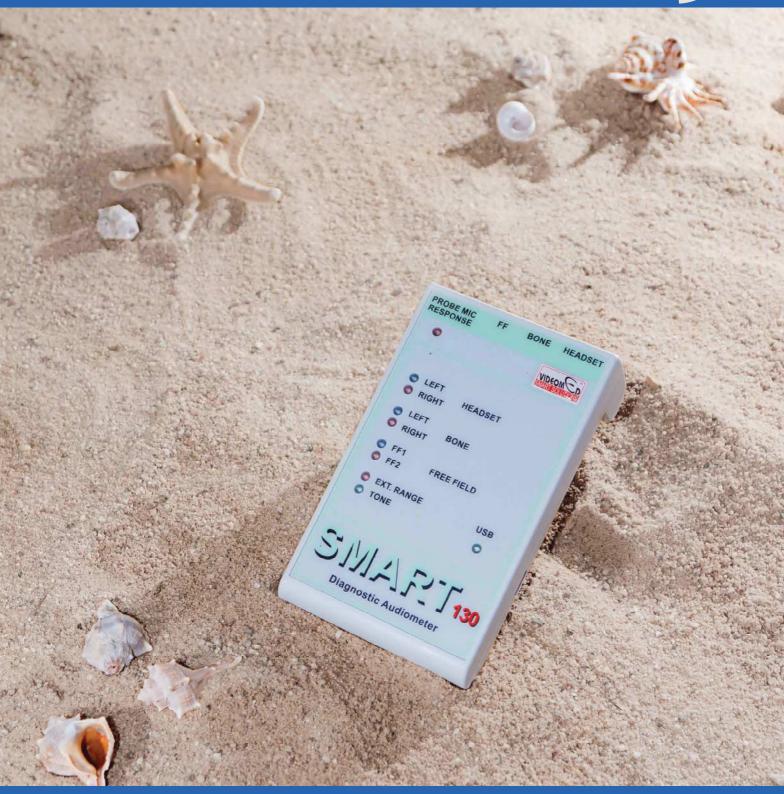
# SMART 130





IMPORTANT TASKS REQUIRE SMART SOLUTIONS

## **SMART 130**

Smart 130 is a portable digital diagnostic audiometer. It is excellent device to make measurements next to the patients bed as well as stationary device, because of its small dimensions and low weigh. Smart 130 has all necessary equipment to conduct the diagnostics hearing loss tests, like air and bone conductors, FF speaker, speach audiometry option, masking option, SISI and ABLB tests.

Smart 130 audiometer is a complex device made for the hearing aids acousticians and also for ENT doctors. Smart 130 is easy to operate and work with it is comfortable because of the excellent software Effetha.

Test results are stored in a database which can be on local machine or in the internet. It also features support for NOAH 4.x system.



Smart 130 is a energy-saving audiometer, and it uses only 2W of the electrical energy from USB connector. It is not necessary to have access to the electric power since it can work on laptop battery.

It is perfect for measurement of patient hearing loss of any severity. This device is specially useful for patients whose moving possibilities are limited, since it does not require audiometric booth. It can be connected to PC or laptop. Smart 130 goes in a full package which contains all the necessary equipment for diagnostics.

Software designed by our engineers for Smart 130 is Effetha 2. It is software for acquisition and storage of test results (it works also with: Ultra 130, Audio 4002 System,  $\mu$  Smart). This software has features like:

\* With PD81 headset, 120 dB otherwise.

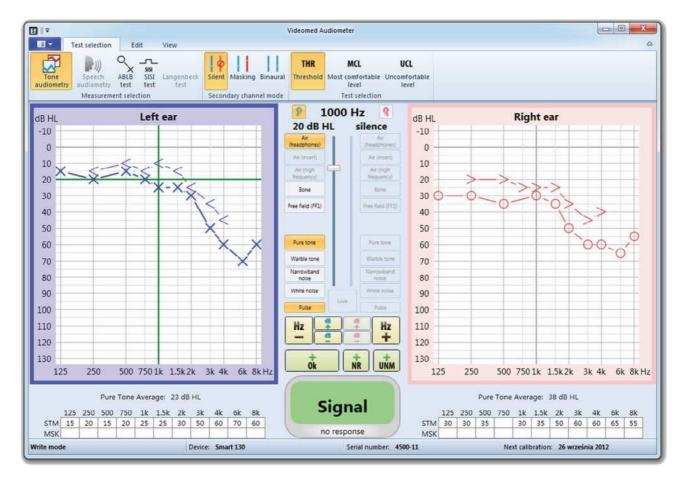


# **SMART 130**

- recording visits for different patients
- store patients' personal / contact data
- reviewing patient's previous visit frequencies and loudness change (UCL, SISI test, air, bone audiometry, THR, MCL, ABLB)
- word and digit speech test
- shortcut customization
- note taking for each patient visit



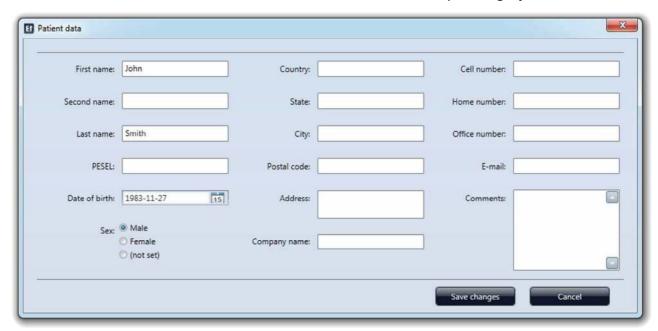
Effetha is currently available in English and Polish languages. If you are interested in your own language it can be easily prepared thanks to universal character of our software. In such case please contact us. All text is stored with UTF-8 encoding, making the software independent of specific language. This software also works with Effetha Video so it is possible to compare data of patients from the video examination.





It is user friendly and it is possible to learn quickly how does it works. Patients can also quickly learn how to cooperate with diagnostics.

Software is protected by password which will prevent from unauthorized use. Effetha works with Windows 7 (32/64bit), Vista and XP operating systems.



### Noise dampening

Frequency Khz	0.25	0.5	1	2	2 15	15	6.3	Ω
r requericy Kriz	0.23	0.5	1	2	3.13	7,3	0.5	U
Noise dampening dB	15	10	25	36	<b>/</b> 11	11	40	35
PD81 headphones	15	19	25	36	41	44	40	33

## Frequencies and maximum sound intensity

	AC dBHL	AC dBHL	AC dBHL	BC dBHL	NB dBHL	Free field
Hz	Headphones TDH-39	Headphones PD 81	Headphones Ear-Tone 5A	Bone transducer B 71	Headphones PD 81	dBSPL
125	85	100	85	-	80	
250	100	120	95	35	100	
500	115	120	115	55	100	
750	120	130	115	60	100	
1000	120	130	120	65	100	80 dB with
1500	120	125	120	75	100	standard speaker
2000	120	125	120	75	100	standard speaker
3000	120	125	120	70	100	
4000	120	125	115	70	100	
6000	120	120	100	50	100	
8000	105	115	90	50	100	



## Sound level ranges per sound emission type

Type	Ranges		
Air conduction (left & right ear)	125 ~ 8kHz	-10 ~ 130 dBHL	
Bone conduction (left & right ear)	250 ~ 8kHz	-10 ~ 75 dBHL	
Narrow band noise	125 ~ 8kHz	-10 ~ 100 dBHL	
Free field	250 ~ 8kHz	-10 ~ 80 dBHL	

## Standards compliance

Safety standards	IEC 60601-1, Class II, Applied parts type B. Continuous operation. IEC6060-1-1, IEC60601-1-2
Audiometer Standards	Audiometer: IEC 60645 -1, ANSI S3.6, type 2. Speech: IEC 60645-2/ANSI S3.6, type B or B-E.
Calibration	AC: ISO389-1, ISO389-2; BC: ISO389-3
Medical CE-mark	CE044

## Functionality details

Extended range function	Safeguards from accidential sound output above congliured sound level which could otherwise be harmful to some patients.		
Masking stimulus	Automatic selection of narrow band noise or white noise for tone presentation and speech noise for speech presentation.		
Input	Tone, Warble Tone, NB, CD (wave files), Mic1.		
Outputs	AC Left + Right, BC Left + Right, Insert Phone Left + Right, Insert Masking, FF1 and FF2.		
Available transducers	PD81 or TDH39 or HDA200 for HF Audiometric headset, EARTone 5a Audiometric insert phones, B71 Bone conductor. CIR33 Insert earphone set for masking or monitoring. Passive speaker for FF or Active speaker AS4 or AS10 for FF, H100 Headset for monitoring		
Tone presentation	Manual. Single or multiple pulses.		
Patient signal	One hand held push button.		
Intensity	AC: -10 to 120/130 (TDH39/PD81) dB HL in 1, 2 or 5dB steps.		
	BC: -10 to 80 dB in 1, 2 or 5 dB steps		
Frequency range	125Hz to 8kHz.		
Patient communication	Talk Forward		
Frequency selection	Any frequency in range can be freely disabled if needed		
Standard tests	SISI, ABLB		
Connectors (sockets)	POWER USB A, Free Field 1+2 (MiniDin), Phone L/R (MiniDin), Patient response + Talk Back Microphone (MiniDin)		

#### Software

	Operating System		
Compatible software	Mircosoft Windows	Linux	
Effetha 2	•	• *	
VIDEOMED NOAH 4.x module	•		

#### Physical parameters

Dimensions (LxWxH)	190 x 350 x 60 mm / 7.5 x 13.8 x 2.4 inches
Weight	250 g / 0.53 lbs
Power supply	USB 2.0 5V

## **Included parts**

- PD 81 Audiometric headset
- B71 Bone conductor
- Patient response button
- Builtin microphone
- USB AA wire
- Operation manual
- Diagnostic software Effetha 2 (languages: EN PL \*\*)
- Passive speaker for FF

## **Optional parts**

- TDH 39
- EARTone5A Audiometric insert phones
- HDA200 Audiometric Headest for HF
- CIR33 Insert earphone set for masking
- AS10 Active Speaker 10W for FF
- AS4 Active Speaker 4W for FF \*\*\*
- VIDEOMED NOAH 4.x module
- Carrying case

- \*\* Supported languages: English, Polish please contact us if you need support for your language version
- \*\*\* AS4 Active Spearker powered from USB or external supply 5V. Maximum power when powered from USB: 2.3W.



<sup>\*</sup> With VMware for Linux

## We recommend also our other available products:



Audio 4002 System







**VIDEOSMART** 





Hearing aids



#### **About us**

We are polish company established in 1989. Our goal is to provide innovative and efficient solutions for hearing disorders and virtual image systems. We are Polish precursor in digital hearing aids manufacturing. With this experience we can deliver cutting edge engineering solutions that makes our products work so well and intuitive software which enables you to work with pleasure and speed.

Our team gathers people who want to create modern, functional and long-lasting products. We specialize in audiometers — those manufactured by us are functional and easy to handle.

Software which is used with our hardware is specially designed for ease of use and excellent stability.

#### Contact us:

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