handydop®-pro

the allround-talent for your bidirectional Doppler sonography

Storage feature for examinations

Examination-Programs

Voice-Message-System

handydop®-pro   INT

ELCAT

handydop®-pro
Doppler principle

Bidirectional Doppler devices are capable of identifying the bloodflow-direction in relation to the ultrasonic-probe.

There is an acoustic separation between those two flow-directions (towards and away from the probe) by using two different speakers. The Doppler signal is displayed either bi-directional or as sum curve on the display or on printout. In general the orthograde flow is shown above the neutral axis and the retrograde flow is shown beneath the neutral axis.

For finding out the Doppler frequency shift a so-called Zero-Crosser is used.
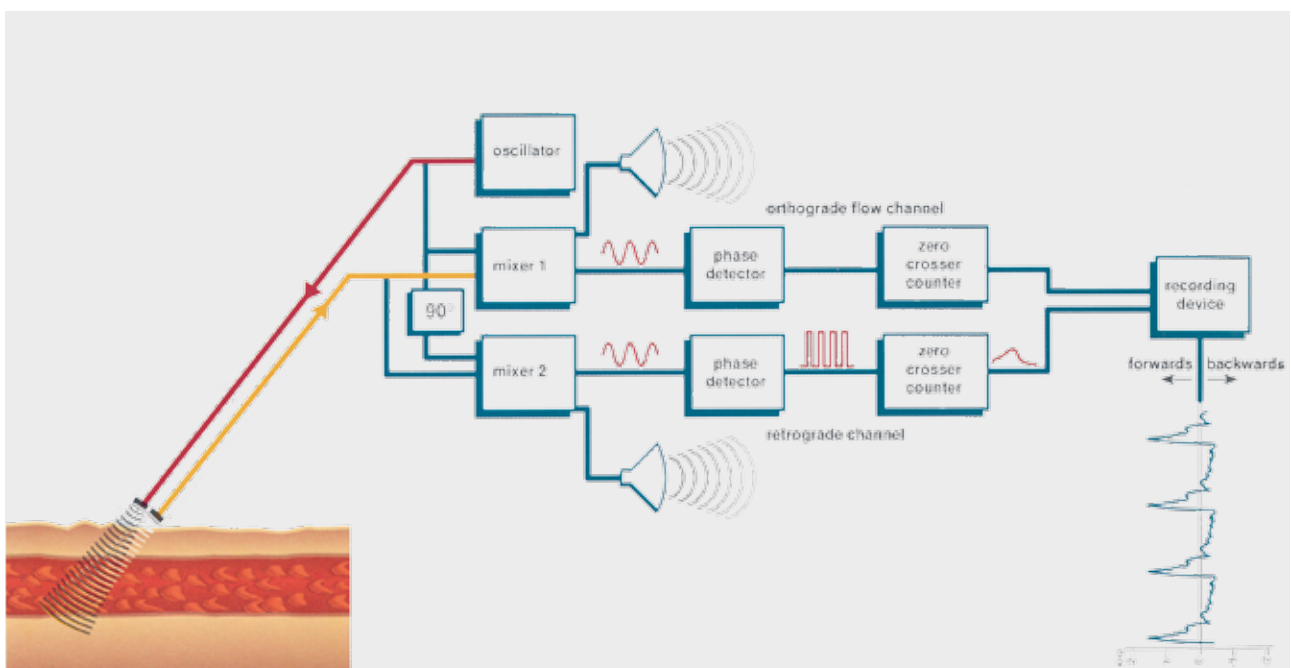
handydop®-pro
the allround-talent

All fields of bidirectional Doppler sonography are covered with the handydop-pro.

Optional connectable ultrasonic-probes with frequencies of 4- and 8MHz make it a pro for arterial and venous function diagnosis.

Its forward-looking features such as storage function, re-cordable and administrable voice messages and the clear menu-structure make him a professional tool for examination rooms and clinics.

handydop®-pro
Technical overview

recording acoustical messages...

Findings, notes, instructions can easily be recorded.

graphic-display (with backlight)

Doppler signal and menu-functions are displayed sharp and clear.

keyboard

The userfriendly and clear - structured keys ensure fast and efficient work with the handydop-pro.

Doppler plug-in module

Ultrasonic-Module for 4- and 8 MHz ultrasonic-probes

headphone-connection

Using headphones the two different blood-flow directions can be heard.

USB-interface

The USB-interface is used for connecting the handydop-pro to PC-systems or a printer.

connection for battery charger

For charging the handydop-pro you can either use the convenient desktop charger or alternatively the regular battery-charger by using the connection.

desktop charger (option)

With this desktop charger the handydop-pro is automatically charged. This way your handydop-pro is always ready for use.

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handydop®-pro
Innovation by ELCAT

State of the art hardware-components were used while developing the handydop-pro:
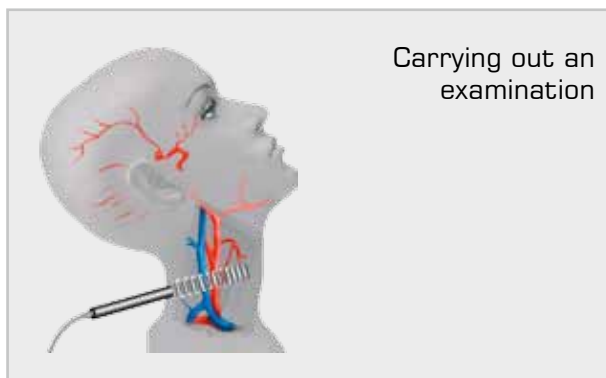
- high-performance processor
- flash-disk

Worldwide the handydop-pro is the first pocket Doppler based on Linux.

That`s how we define innovation!

handydop®-pro
is powered by
µClinux

handydop®-pro
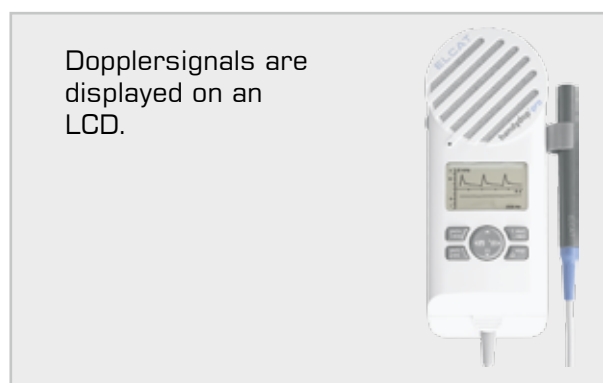## Workflow - examination

Carrying out an examination

Choosing the examination-program

Doppler examinations are carried out by using an examination-program. Examination-programs set the order of vessels that have to be examined. You can change those programs to your individual needs by using our vasoview-software. You can define as many examination-programs as you wish.

Carrying out the measurement

By using the Start / Stop-keys you carry out the measurement on a vessel. The speed of bloodflow is displayed on the LCD. During the measurement you can change Doppler-scale, time-basis, flow-direction-display or frequency of the wall-filter. When the complete measurement is finished, the examination-program stops. The examination is saved automatically.
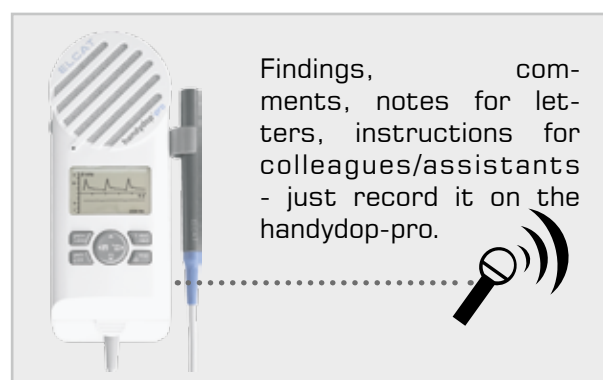

Dopplersignals are displayed on an LCD.

The handydop-pro can store up to 100 examinations incl. voice messages.

Documenting an examination

Finished examinations can be printed out at a later point of time or they can be transfered - together with the voice messages - to the vasoview-software.

Voice-message-system

Using the integrated voice-message-system you can easily record findings or comments and instructions for assistants or colleagues during the examination. Those voice-messages can be heard anytime you like. You can also transfer them to a PC by using vasoview-software.


Findings, comments, notes for letters, instructions for colleagues/assistants - just record it on the handydop-pro.

handydop®-pro
Workflow - handydop-pro - **vasoview**®

Connecting handydop-pro and vasoview

handydop-pro can be connected to your PC-system by using a USB-cable. vasoview-software automatically detects the connected handydop-pro. Right then vasoview is ready to be used.

Connecting the handydop-pro with a PC via USB-interface

Examinations are transfered to a PC or notebook
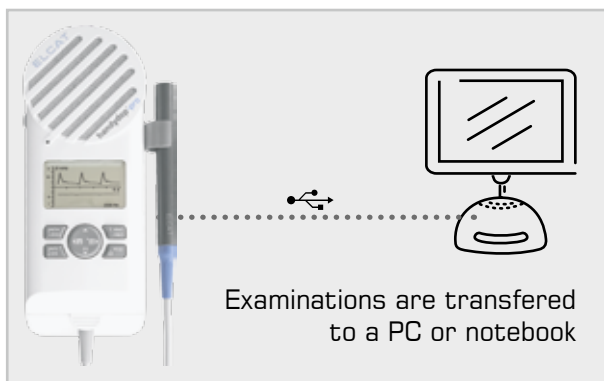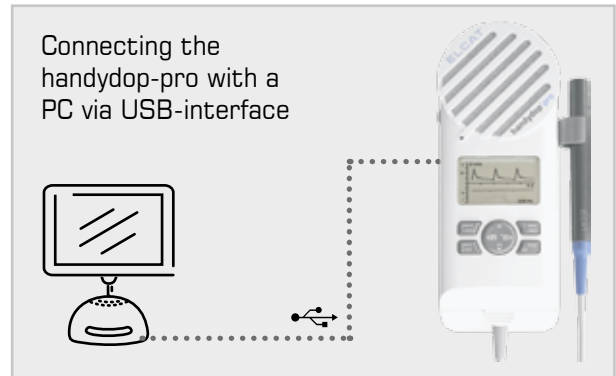
Transferring data

Data-transfer between handydop-pro and vasoview is bidirectional. This means, that on the one hand saved examinations on the handydop-pro can be transfered to the vasoview-software and on the other hand examination-programs can be transfered from vasoview-software to the handydop-pro as well.

Analysing and working on data

Sitting in front of your desktop you can analyse and work on examination-results. You can analyse, save and print all results you need. The voice-messages can be heard, this way you may remember important notes. Using the voice-message-system in a professional way, the efficiency of your patient-management will improve considerably.

Analysing and working on examination results and voice messages
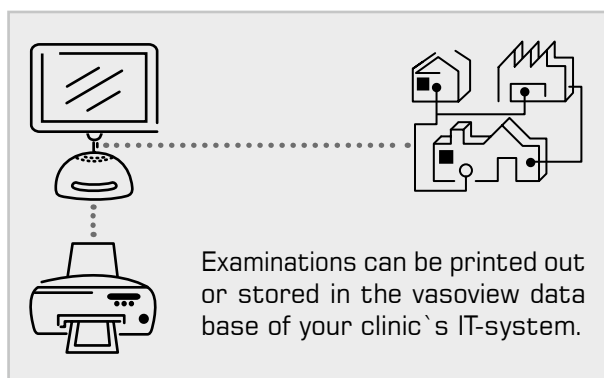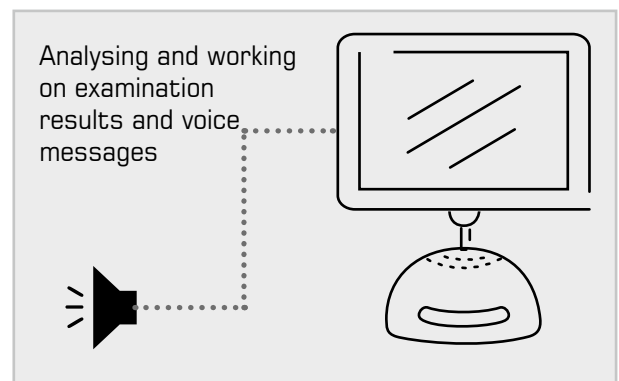
Storing data

vasoview-software supports connections to a clinic`s IT-system by BDT- / GDT- and DICOM interfaces.
The vasoview data base can be installed on a local PC or directly on the server. When installing the software on a server, you can use every workstation (equiped with vasoview) to get access to the vasoview data base.

Examinations can be printed out or stored in the vasoview data base of your clinic`s IT-system.

handydop®-pro
and vasoview®
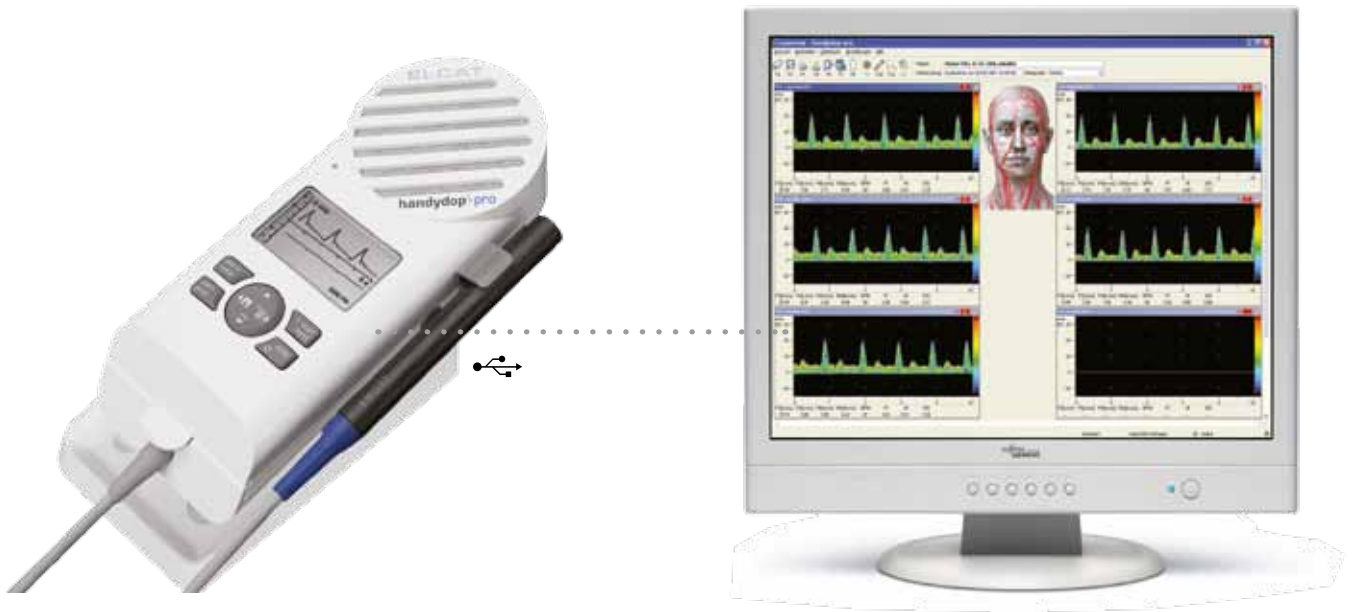
vasoview®
General information

With the vasoview-software you can connect the handydop-pro to a PC-system to transfer, analyse and print out examinations.

vasoview provides a high-capacity examination-data base where all relevant data can be stored.

With vasoview, examination-programs can be generated and transfered to the handydop-pro. This way examination-programs can always be adjusted to your individual needs.

BDT- / GDT- and DICOM interfaces realize the software connection to your clinic`s IT.

Transfering patient data and saving examination-results enhance the range of vasoview features.

vasoview®
ONLINE

Examination programs (Vessel list) help to carry out examinations.
Measurements can be guided either by PC or with the handydop-pro itself.

The Doppler signals are shown on the PC display during the examiation.

vasoview®
OFFLINE

Examinations which are saved in the handydop-pro can be transfered to a PC by using vasoview-software. During post processing examination-results can be analysed, printed and saved in the vasoview-data base.

suitcase

gel bottle

battery charger LG20

dektop charger (option)

4 MHz-Module with ultrasonic-probe

handydop®-pro basic device with 4 MHz-probe

handydop®-pro technical data (technical data is subject to change without notice)

Basic device

Basic equipment	Storrage function	Energy supply
- integrated speaker - LCD-display (with backlight) - headphone connection - USB-interface - connection for battery charger	100 examinations incl. voice messages can be stored.	4 pieces of AAA NiMH rechargeable batteries, 1,2 V, 1000 mAh, 3 h charging time, 2 h continuous operation, power management

4 MHz ultrasonic-probe	8 MHz ultrasonic-probe	Accessoires
Dimensions	**Dimensions**	**Printer**
11 x 95 mm (Diam. x Length)	9 x 95 mm (Diam. x Length)	Desktop charger
Sensitivity range	**Sensitivity range**	**Headphone**
15 - 55 mm	8 - 25 mm	

vasoview® (option) technical data (technical data is subject to change without notice)

Included in delivery	System requirements	
Software	**Processor**	**Hardware interface**
CD	Pentium III, 1,6 GHz or higher	USB interface
Cable	**Memory**	**Operating system**
Connection cable **handydop**®-pro / PC-system	500 MB of free disk space (Application)	Microsoft Windows
Additional	at least 500 MB (Database)	**Software interface**
Installation instructions and operating manual	at least 512 RAM	BDT, GDT 2.10 and DICOM

Are you interested in the **handydop**®-pro?
Then call us!
We would be pleased to tell you more about your possibilities with the **handydop**®-pro!

ELCAT GmbH
medical systems

presented by

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