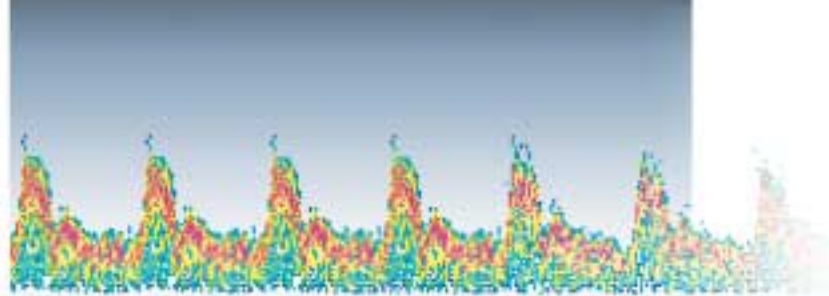


Doppler-Box

Doppler-Box



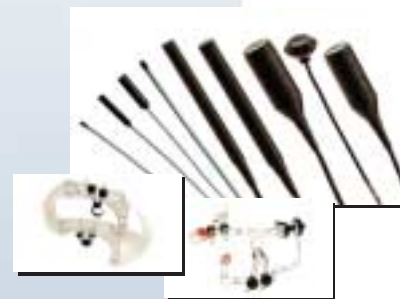
DWL Elektronische Systeme GmbH

Accessories and Disposables

- incl. Routine QL Software, Doppler M-Mode Display, Probe Holder and Ultrasound Gel

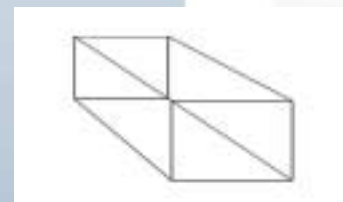
Additional Accessories:

- 1, 2, 4, 8, 16 MHz Probes and Monitoring Probes with DWL Fixations (Headband, LAM Racks, ...)
- Remote Control
- Medical Workstation (PC)
- Medical Network Insulation



Technical Data

- Dimension (D*W*H): 27*10,5*9 cm
- Weight: 1,8 kg
- Doppler Frequencies (MHz): 1/2/16 (pw), 4/8 (pw/cw)
- Channels: 2
- Connectors: 2 for each channel
- Spectra Windows: 1-8
- Gates: 1-40
- Doppler M-Mode: 32 Gates
- Ethernet 100 Mbit
- Analog in: 8 (in Monitoring Software)
- Analog out: 4
- Power Consumption: 24V, 1A, 24VA
- Power Supply: external, mobile, medical grade
- Input Voltages: wide range 100-240V AC 50/60 HZ



- Electrical Safety Class: I
- Applied Part: Typ BF (CF for 16 MHz)
- Safety Class acc. to MDD: IIB
- CE Mark: CE0123

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For more detailed Information about the Doppler-Box, please contact your local exclusive DWL Distributor (refer to www.dwl.de for details), or contact us directly at the address below.

Manufacturer



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Germany



DWL is certified according to
- ISO 9001:1994
- ISO 13485:1996
- EN 46001:1996

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Doppler-Box-e-revo / Technical specifications are subject to change without notice!

Doppler-Box

Your Digital Dream ...



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Innovations
for
People

... Becomes

Reality!



DOPLER-BOX

The Doppler-Box is the first Digital Doppler system which works in conjunction with an external computer. An isolated Ethernet connection allows the user to connect a suitably specified external computer to the Doppler-Box resulting in a cost effective option based on supreme high technology components ensuring optimal Doppler quality.

Compact, robust and multi-functional, the Doppler-Box offers 1, 2, 4, 8 and 16 MHz probes for the complete Doppler routine examination. The traditional DWL high quality Doppler has been matched and exceeded with the addition of digital technology, thus meaning valuable time saving tools for physicians and technicians alike.

The Doppler-Box has been specifically developed for routine diagnostics of the transcranial, extracranial or microvascular circulation. Intuitive monitoring software options and custom designed probe fixations ensure that the Doppler-Box is also the perfect solution for your transcranial Doppler monitoring needs.

Digital Doppler

The implementation of Digital technology in the Doppler-Box offers the user a wealth of advantages for clinical routine:

Improved Signal Quality: The Doppler signal to noise ratio is significantly and noticeably improved compared to a conventional analog Doppler, this means that it is easier to find good Doppler signals and allows you to save time during your routine clinical examinations.

Access to the Raw Data: The Doppler-Box also allows fast access to the complete raw data, including audio signals enabling clinical information to be post-processed, filtered, and pruned for archive in an efficient and timely manner. The data is available for complete signal analysis with ASCII export.

Doppler M-Mode

Doppler M-Mode means that Doppler signals are received and analyzed from a predefined range of depths simultaneously. The intensity, direction and depth information from these range of depths are then presented on the screen in the M-Mode Display. DWL's Doppler M-Mode presents this information continuously and in real time. The X axis shows the time and the Y axis shows the range of depths. The direction and intensity of flow are represented by color: Red indicates flow towards the probe and blue indicates flow away from the probe. Doppler M-Mode offers you the following benefits:

Graphical Representation: The M-Mode display represents the blood flow through any one plane of the entire circle of Willis (Doppler Window allowing!). The simple use of the cursor allows the user to navigate through the entire range of depths, thus easily selecting the best Doppler signals and most pertinent clinical information. It is of particular assistance with shortening the TCD learning curve as it is easier to find a Doppler window if signals from all depths are received and displayed at once.

Emboli Detection: The use of Doppler M-Mode in the field of Emboli Detection enables the user to observe the embolus "move" through the different depths. This allows positive confirmation of the presence of an embolus rather than an artifact. Although the traditional Multi-Depth technology offers a similar feature, as in the Multi-Dop® series, the representation of the information in pictorial form simplifies interpretation with the M-Mode.

Connectivity and Flexibility

The Doppler-Box can be connected to any existing, sufficiently specified, computer. An isolated Ethernet connection joins the Doppler-Box to your PC and ensures patient isolation. The ability to use a standard external computer ensures cost effectiveness and optimal use of existing resources. The Doppler-Box can be used with a laptop or desktop computer, thus ensuring that even the most confined of spaces can be used for Doppler examinations with the Doppler-Box.

QL Software

DWL have placed great emphasis on making the new generation of DWL software both intuitive and flexible. The QL is a modular Windows based software which will run with Windows NT®, Windows 2000® and Windows XP® operating systems. The modular aspect of the software means that new options and upgrades can be ordered at any time with maximum efficiency. The Routine Software is standard on the Doppler-Box and it includes the Doppler M-Mode Display. The other options available are:

- 1 Channel Monitoring
- 2 Channel Monitoring
- Emboli Detection and Discrimination
- CO₂ Reactivity and Vasomotor Tests
- Evoked Flow

