B-mode and M-mode multipurpose ultrasound scanner

Urology
Surgery
Radiology / General
Obstetrics / Gynecology

Falcon 2101 EXL

Scanning System
The new Falcon 2101 EXL gives you the tools you need to excel. A host of new and improved features optimizes your imaging conditions by combining high image quality, convenience and ease of use. That way, you can focus on what is important: your patient and the diagnosis...

**Detector**
B-K Medical has developed a new frequency-controlled detector in cooperation with leading universities.

Your benefits:
- Vastly improved dynamic range
- Improved dynamic imaging, especially at low frequencies, for an improved ability to scan rapidly moving structures and compensation for patient motion artifacts.
- Improved contrast resolution

**Video encoder and image processing:**
The Falcon is equipped with a new standard industrial interface video encoder.

Your benefit: more display devices can be connected at the same time.

The image based on the VGA signal quality is much clearer. Gamma correction and gray scale have also been improved to take full advantage of the new electronics and monitor. Image-wise, this provides particularly relevant clinical improvements, the likes of which, until now, have only been associated with much more expensive high-end systems.

Your benefit: maintenance of high and low intensity details and optimal use of individual gray scales for sharper images and distinction of subtle nuances.
The Falcon 2101 EXL’s high image quality and versatility makes it useful for a variety of applications. With features like intuitive interface and user-defined settings, the Falcon optimizes your imaging conditions as well as the use of your time. The sleek, compact and mobile design provides ultrasound where you need it, precisely when you need it. And, it is equipped with the right tools: a comprehensive collection of transducers with corresponding puncture and biopsy equipment.

Superb imaging
The Falcon is the latest in a new generation of high-definition, very-high-frequency ultrasound scanning systems from B-K Medical. The essence of the superb image quality lies with a patented digital hybrid beam former, which enables the Falcon to reach frequencies of up to 15 MHz. With its proven Continuous Uniform Focus (CUF) feature, the Falcon provides excellent image quality and secures optimal, uniform resolution throughout the entire image. The intelligent Digital Noise Suppression system continuously measures the signal noise inside the system and subtracts this from the image signal, resulting in clear images with low noise and excellent penetration.

- The highest resolution in its class.
- Multitude of uses with an imaging frequency range of 1 to 16 MHz.
- Broad range of task-designed linear, convex and unique 360° rotating transducers for many special applications including ultrasound-guided biopsies.
- Full 15” flicker-free monitor provides optimum viewing.
- Ergonomic and compact design with height-adjustable keyboard and monitor and logically grouped controls.
- Fully integrated 3-D Package (option).
- Adjust and control ultrasound remotely with the PCU Palm Control Unit, e.g. within the sterile field (option).
- Convenient storage space on the unit itself, including a compartment under the keyboard for accessories.
- Simultaneous split screen feature lets you display two active ultrasound images on the monitor at the same time.
- Upgradability ensures long-term investment security.
- Archive over a DICOM compatible network (option).
Application-specific features meet your specific challenges

Urology

Here are just a few of the unique features and benefits B-K Medical has to offer urologists:

Extraordinary prostate scanning
- 7 different transrectal transducers.
- Features ranging from endfire, multiplane and simultaneous biplane, to transperineal and transrectal biopsy.
- Unique urology calculation packages.
- Transitional zone index calculation.

Simultaneous biplane
Transducer Type 8808 offers simultaneous transverse and sagittal views of the prostate – view both images at once on a split screen display. Thanks to the fine-pitch, high-density design, both images are always the same high quality.

Brachytherapy
B-K Medical equipment is compatible with all brachytherapy products on the market. Features include user-programmable seed matrices and a new and unique feature to facilitate implantation, which allows you to mark the position of the pubic arch on the screen while doing the volume study.

3-D and urology
Perform fast and easy volume studies, reduce exam time and increase patient comfort. And, invaluable for diagnostics: the coronal view of the prostate.
Radiology and General Ultrasound

- Excellent focalization in the far field ensures high-quality imaging for general abdominal applications.
- Extremely high frequencies provide superior near field focalization, making the scanner ideal for small part, breast, musculoskeletal and thyroid examinations.
- Widest range of transducers available.

Obstetrics and Gynecology

- Advanced calculation packages, offering a wide variety of internationally recognized measurement and calculation methods.
- Complete user customization of programs and tables.
- Highly specialized ultrasound guidance for invasive procedures like cyst drainage or IVF treatments*.

*S not an approved method in USA

Surgery

PCU
Our unique PCU palm control unit makes it easy for you to get a grip on ultrasound in the OR. This small, fully-sterilizable device permits you to control and manipulate the major scanner functions remotely from within the sterile field. You don’t have to rely on additional personnel to do it for you.

3-D and surgery
The Falcon, with the fully integrated 3-D package, and the 2050 transducer (true 360°) with built-in electronic movers and 3-D, comprise the best endocavity solution available. The 3-D views offer an unsurpassed source of information to use in evaluating and changing the surgical management of a patient. Because the examinations can be performed per- and postoperatively by a surgeon, they are less delicate, time-consuming and expensive than MR scanning.

The right tools
B-K Medical has a range of transducers as specialized as surgery itself, each of which is compatible with a variety of modern sterilization techniques. The 4-way laparoscopic transducer with biopsy is a B-K exclusive.
Interventional ultrasound
A tissue biopsy is often an important part of the diagnosis. And, it is B-K Medical’s strong commitment to and cooperation with leading specialists that have, with guarantee, resulted in the most effective tools available on the market today. For the entire spectrum of ultrasound-guided puncture and biopsy procedures, from cyst drainage and breast biopsy to radioactive seed implantation, the Falcon and its broad range of transducers and accessories meet all of your ultrasound needs.

The 3-D system with real diagnostic value
Compared with conventional scanning, 3-D gives access to a new, wider range of viewing planes. Lesions which may have gone undetected become clearly visible and spatial relationships much more tangible.

Unlike most other 3-D solutions on the market today, B-K Medical’s package can offer you much more than just ‘a pretty picture.’ Our system actually permits quantitative examinations, with measurement capabilities that are second to none. Fast and precise volume studies have never been easier. Additionally, the 3-D images used for diagnosis are completely reproducible. The images can be reviewed time after time or shared among colleagues.

Mobility
The compact, maneuverable design gives you the freedom to move the system from room to room – providing ultrasound where you need it, when you need it.

Flexibility
The Falcon 2101 EXL offers many levels of flexibility:
• user-definable features
• choice from a wide range of transducers
• extensive puncture and biopsy capabilities
• compatibility with modern sterilization techniques
• possibility for wall-mounting the system

Ergonomics
Personnel missing work because of repetitive stress injuries can be costly. The Falcon is specifically designed for ergonomically correct working positions, because it is adjustable in every way. Both the keyboard and monitor can be raised or lowered as necessary; the keyboard can even be detached. The transducers are also lightweight and ergonomically shaped, and feature unique handle-based controls.
Offering you the widest choice

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