

DEFINA System

Experience crystal clarity – High-Definition at its best





DEFINA System – an unmatched combination

The DEFINA system combines a state-of-the-art HD processor with PENTAX Medical i-scan technology, together with two HD bronchoscopes engineered to support the best clinical outcomes with superb image quality. The unmatched ergonomic design and flexibility of the bronchoscopes offer you ease of operation in daily use. Complying with increasing hygiene requirements and STERRAD® compatibility, the DEFINA system provides greater patient and user safety.

HD image: right upper lobe

i-scan 2 image: right upper lobe



Courtesy of Dr. Erik van der Heijden, RUMC Nijmegen, The Netherlands

A ground-breaking endoscopic advancement

The High-Definition DEFINA system merges sharp and clear image quality with i-scan technology for fast detection and precise demarcation supporting the adequate patient treatment.

1

Detailed visualization

The detailed visualization that HD and i-scan technology provides, facilitates the precise demarcation of suspicious areas and assists in the characterization of abnormalities, to provide information for the therapeutic decision.

2

Increased safety

For increased user and patient safety, the DEFINA system complies with increasing hygiene requirements through single-use accessories and STERRAD® compatibility.

3

Easy maneuverability

Unmatched ergonomics and lightness of the control body in combination with the excellent scope maneuverability ease operation.

EB15-J10 and EB19-J10 video bronchoscopes



Sharp imaging for detailed visualization

- Offers fast and detailed bronchial system investigation
- Leads to more precise detection of abnormalities
- Supports precise demarcation of lesions or tumors



Designed for precise sampling

- Facilitates smooth and easy insertion of accessories for diagnosis and treatment
- Efficient removal of secretion and control of bleedings
- Strong suction even with accessory in place



Reliable for increased user and patient safety

- New single-use suction valve ensuring no cross-contamination
- STERRAD® compatibility: clearing of multidrug resistant and extreme drug resistant Mycobacterium



Unmatched ergonomic design for ease of operation

- New-design lightweight control body with ergonomically positioned suction valve, angulation levers, and remote control buttons
- Soft light guide cable for easy handling
- Easy maneuverability thanks to a very small distal tip bending radius
- Easy access to right upper lobe due to 210° tip deflection

DEFINA video processor

HD image quality and i-scan technology – at a new level

The compact DEFINA processor offers state-of-the-art HD imaging for detection of epithelial changes. This is supported by i-scan, which by its smart usability further enhances mucosal and vessel patterns as well as tumor margins. i-scan technology guides the user to the area that needs to be biopsied and supports in determining the area to be treated.

Superior image quality for better orientation

- Brilliant, High-Definition images for a clear, fast and more detailed visualization of the mucosal structures
- Dynamic range expansion for excellent far-field illumination and better visibility of the distal area

Supporting diagnostic outcome

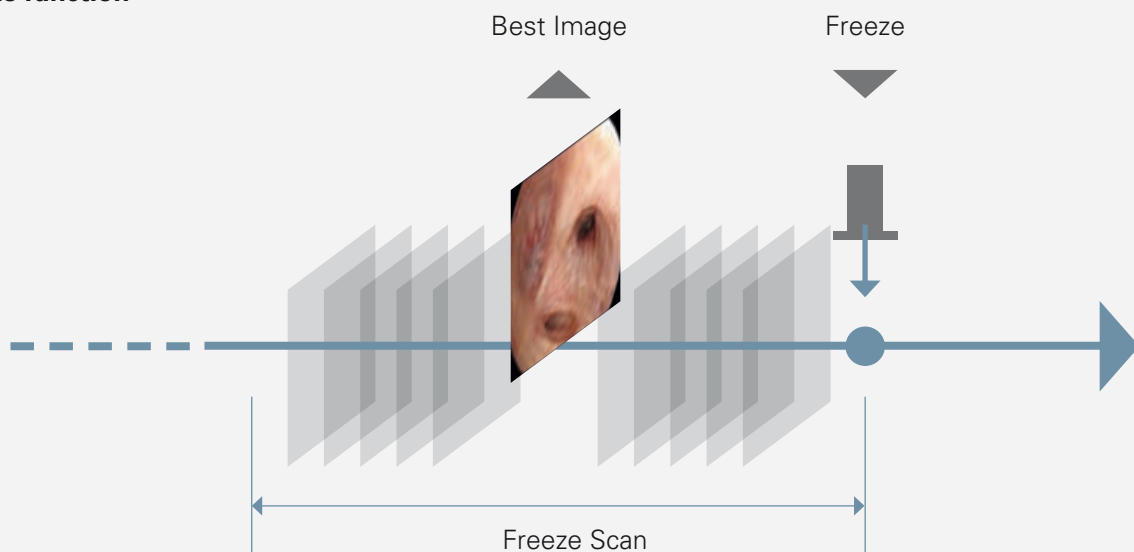
- HD image combined with i-scan technology for faster detection, easier demarcation and support in characterization

Ease of operation

- Compact design for a better fit in the existing clinical environment
- User-friendly interface for easy and quick settings adjustment
- Capture the best still image during the procedure with freeze scan function. When activating the freeze function, the processor searches for the best image among the past images by automatically comparing the sharpness:

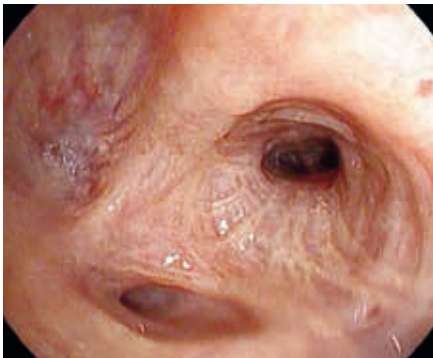


Freeze function



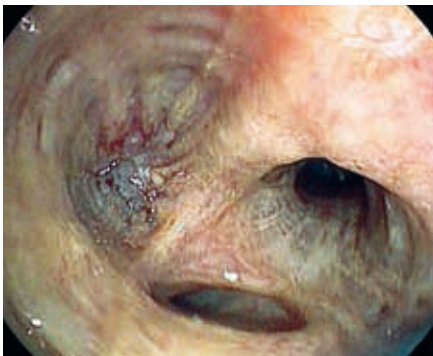
i-scan technology: your diagnostic support

i-scan technology is a digital, image-enhanced endoscopy (IEE) technology by PENTAX Medical. As a virtual chromo-endoscopy tool, i-scan provides an enhanced view of the bronchial mucosal structures and vascular patterns, supporting early detection, easier demarcation, and characterization.



Detection and delineation support with i-scan 1 (SE):

- i-scan 1 (SE) retains natural colour tones
- Accentuates epithelial structures in the central airways
- Enhancement of (lesion) margins and vessel patterns and support of the detection of epithelial changes



Support in demarcation and characterisation with i-scan 2 (SE and TE):

- Specific imaging technology for further assistance in endoscopic procedures
- Enhances endoscopic outlines and margins of necrotic areas, non-neoplastic and neoplastic, or inflammatory bronchial lesions
- Allows better evaluation of the accentuated vascular pattern, which can support characterisation of visible abnormalities



Characterisation and localisation support with i-scan 3 (SE and TE):

- Colour mode further highlights the vascular pattern
- Supports characterisation and localisation of safe biopsy sites
- Beneficial setting for physicians at the beginning of their learning curve or colourblind users

Exchange and expand your knowledge of i-scan by visiting the i-scan website

www.i-scanimaging.com



Manufacturer's premium service

We keep your endoscope in the best condition

A special sensibility regarding reprocessing is needed because of the rising occurrence of nosocomial infections and resistant pathogens. To meet your sterilization requirements, we developed sterilizable bronchoscopes. After a long period of research and testing, we are now using materials compatible with STERRAD® NX® and 100NX®.

PENTAX Medical bronchoscopes are capable of withstanding the wear and tear of STERRAD® sterilization up to 100 cycles. After 100 examinations the bronchoscopes should be returned to the PENTAX Medical service facility for inspection and component replacement.

A premium service concept has been designed to offer you a smooth process to keep your scope performing at its best.

- Our cycle counter simplifies replacement process planning
- During servicing we will provide you with loaner bronchoscopes
- We provide an efficient maintenance procedure with renowned premium PENTAX Medical service quality



Premium Service Portfolio



Premium Consulting Quality



Original PENTAX Medical Parts



Premium Repair Standard

EB15-J10 and EB19-J10

	EB15-J10	EB19-J10
Distal end diameter [mm]	5.4	6.1
Insertion tube diameter [mm]	5.2	6.4
Instrument channel diameter [mm]	2.0	2.8
Working length [mm]	600	600
Field of view [°]	120	120
Depth of field [mm]	3-100	3-100
Angulation up/down [°]	210/130	180/130

DEFINA EPK-3000 Video Processor

HD video output*	DVI-D
Standard video output	RGB, Y/C, composite
User interface	Control panel, keyboard
i-scan virtual chromoendoscopy	Quick access via i-scan keys 1, 2, 3
Light source	150W Xenon
Dimensions (W x H x D / weight)	350 x 180 x 485 mm / 13.0 kg

*HD image quality in conjunction with J10 endoscopes

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