



**HiLINE**  
**HD+** The new premium technology



**HD+ endoscopy system**

Progress at its best.

**PENTAX**



# HD+

**Setting tomorrow's standards**



**Hi LINE**  
**HD+**

The PENTAX Hi Line system sets new standards for state-of-the-art endoscopy. The system now features professional, high-definition HD+ technology. The HD+ images created by the combined PENTAX EPK-i processor and 90i endoscope currently provide the highest endoscopic image resolution available. Trust your experienced hands and eyes and enjoy exceptional visual quality and innovative operation.



### **HD+ means new visual precision**

Examination images in unique HD+ quality. The new Hi Line endoscopy in conjunction with the EPK-i processor's innovative technology sets new standards for modern endoscopic imaging.

### **i-scan - your diagnosis support**

Our new i-scan function is a software tool integrated in the EPK-i processor. Experience enhanced visibility of vessel architecture, miniscule structures, identify the margin of lesions, and perform improved pit pattern classifications. Virtual chromoendoscopy is now possible at the simple touch of a button.

## **Intelligent system design**



### **Open Software Architecture**

Open Software Architecture (OSA) ensures state-of-the-art technology at all times without the need to reinvest: with the OSA concept, software updates such as new i-scan tools can be downloaded to your EPK-i simply and directly.



### **Touch screen**

A new operating set-up ensures greater ease of use. Each function of the EPK-i processor can be controlled quickly and precisely with the aid of the intuitive touch screen.



### **Compatibility**

Flexibility at all times: the EPK-i processor is compatible with PENTAX K Series endoscopes.

All information and functions at a glance: the PENTAX EPK-i processor's innovative touch screen.

Ideal for state-of-the-art colonoscopic diagnosis and treatment: the new PENTAX 90i colonoscope.

Perfectly designed for routine gastroscopic use: the new PENTAX 90i gastroscope.



## Impressive technology

### Technical data for the 90i series

	Gastroscope	Colonoscope		
Type	EG-2990i	EC-3890Mi/Mi2*	EC-3890Fi/Fi2*	EC-3890Li
Angle of view (°)		140		
Focal range (mm)	5~100	4~100		
Tip deflection (°) up/down	210-120	180-180		
right/left	120-120	160-160		
Ø Insertion tube (mm)	9.8	13.2		
Ø Instrument channel (mm)	2.8	3.8		
Working length (mm)	1050	1300	1500	1700
Total length (mm)	1373	1623	1823	2023

\* Insertion tube with increased rigidity

### Technical data for the EPK-i processor

Type	EPK-i
HD+ video	SXGA (native) via DVI-D
Standard video outputs	RGBS, Y/C, DV
Colour correction	Red/blue ± 5 levels
Light source	300 W Xenon
Data management	50 patient records/50 users
Dimensions (W x H x D/weight)	430 x 205 x 485 mm/26.5 kg

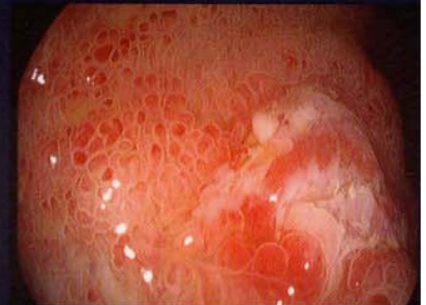
The new PENTAX 90i series is equipped with the world's first megapixel CCD, which together with the PENTAX EPK-i processor creates the unique HD+ image. The successful ergonomic operating system has been retained.

Professional high-definition image processing technology is the key to unlocking the fascinating world of HD+ imaging. The EPK-i processor, with its innovative features and i-scan advanced software, makes it possible to assess surface structures even more precisely.

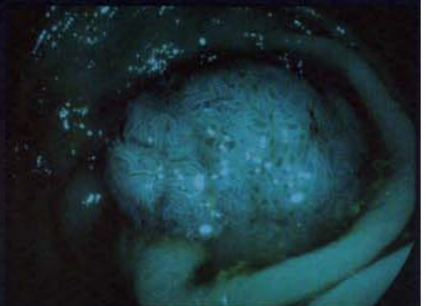
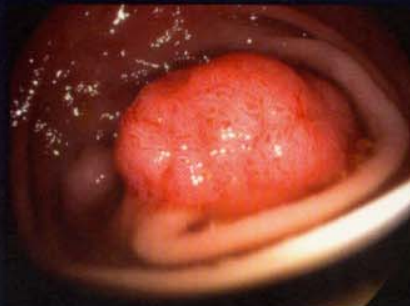
The new light distribution system is much more constant and even and eases the operator's eye to better orientate and detect.

Built-in surface and vessel enhancement (i-scan) to assist early detection of lesions while reducing the drawback of image falsifying staining systems.

The system's high definition resolution allows electronic zooming for significant improvement of visibility and evaluation of minute lesions.



## New visual precision



Lesion in HD+ view.

i-scan: for taking a closer look at superficial mucosal pattern.

i-scan: for improved vessel structure assessment at detected lesions.

### Visibly safer

Precision work to diagnose and treat in ever shorter time-frames is a huge challenge. With the Hi Line system's unique high-resolution HD+ images and image processing facilities, PENTAX offers clinical physicians and general practitioners a forward-looking technological platform, offering enhanced safety during visual assessment.