

PENTAX Europe GmbH
LIFE CARE
Julius-Vosseler-Straße 104
22527 Hamburg
Germany
Tel.: +49 40 / 5 61 92 - 0
Fax: +49 40 / 5 60 42 13
E-mail: medical@pentax.de

PENTAX U.K. Limited
LIFE CARE
Pentax House
Heron Drive, Langley
Slough SL3 8PN
United Kingdom
Tel.: +44 17 53 / 79 27 23
Fax: +44 17 53 / 79 27 94
E-mail: lifecare.info@pentax.co.uk

PENTAX France S.A.S.
LIFE CARE
112 quai de Bezons
P. B. 204
95106 Argenteuil
France
Tel.: +33 1 / 30 25 75 75
Fax: +33 1 / 30 25 75 76
E-mail: medical@pentax.fr

PENTAX Nederland B.V.
LIFE CARE
Lage Mosten 35
4822 NK Breda
Netherlands
Tel.: +31 76 / 5 31 30 31
Fax: +31 76 / 5 31 30 00
E-mail: lifecare@pentax.nl

PENTAX Italia S.r.l.
LIFE CARE
Via Dione Cassio, 15
20138 Milano
Italy
Tel.: +039 / 02 50 99 58 1
Fax: +039 / 02 50 99 58 60
E-mail: marketing.lifecare@pentaxitalia.it

**S.I.M. - Sistemas Integrales
de Medicina, S.A.**
LIFE CARE
Sistema Solar 25
28830 San Fernando de Henares · Madrid
Spain
Tel.: +34 91 / 301 62 40
Fax: +34 91 / 751 31 15
E-mail: sim@simmedica.com

HOYA Corporation
PENTAX Tokyo office
2-36-9, Maeno-cho
Itabashi-Ku
174-8639 Tokyo
Japan
Tel.: +81 33 / 9 60 51 55
Fax: +81 35 / 3 92 67 24

LCM/04/11/09/20066/02



HD+ endoscopy system

Progress at its best.

New visual precision.

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.



Setting tomorrow's standards.

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.



Lesion in HD+ view.



i-scan Surface Enhancement: for support of detection of lesions.



i-scan Tone Enhancement: for support of characterization of 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.



Intelligent system design.

PENTAX Hi Line offers you a unique combination of modern imaging and image processing technology with a flexible system compatibility. Your complete PENTAX Hi Line system is all you need to achieve the best performance every day - ranging from diagnosis and staging to therapy.



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, minuscule structures, identify the margin of lesions, and perform improved pit pattern classifications. Virtual chromo-endoscopy is now possible at the simple touch of a button.



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.

HD+ new lead in technology.

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.

"Why we work with PENTAX HiLine?
Because of shortest application times
and highest possible visual quality!"

The new PENTAX 90K series.
Your high-class system for advanced
diagnostic and therapeutic applications.



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

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

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

Technical data for the 90i* series

Type	Gastroscope		Colonoscopes	
	EG-2990i	EC-3490Mi/Fi/Li	EC-3890Mi/Mi2 ¹ , Fi/Fi2 ¹ , Li	
Angle of view (°)	140			
Focal range (mm)	5-100	4-100		
Tip deflection (°) up/down right/left	210/120 120/120	180/180 160/160		
Ø Insertion tube (mm)	9.8	11.6	13.2	
Ø Instrument channel (mm)	2.8	3.2	3.8	
Working length (mm)	1050	1300/1500/1700		
Total length (mm)	1373	1623/1823/2023		

* 90i scopes only compatible with EPK-i

¹ Insertion tube with increased rigidity in comparison with standard equipment

Technical data for the EPK-i processor

Type	EPK-i
HD+ video ²	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

² HD+ images only in conjunction with EPK-i and 90i scopes

Technical data for the 90K series

Type	Gastroscopes						Duodenoscope
	EG-1690K	EG-2490K	EG-2790K	EG-2990K	EG-3490K	EG-3890TK	ED-3490TK
Angle of view (°)	120	140					100 (retro 10)
Focal range (mm)	4-100						4-60
Tip deflection (°) up/down right/left	210/120 120/120				180/120 120/120		120/90 105/90
Ø Insertion tube (mm)	5.4	8.0	9.0	9.8	11.6	12.8	11.6
Ø Instrument channel (mm)	2.0	2.4	2.8		3.8	3.8/2.8	4.2
Working length (mm)	1100	1050					1250
Total length (mm)	1423	1373				1383	1573

Technical data for the 90K series

Type	Colonoscopes		
	EC-3490MK/FK/LK	EC-3890MK/MK2 ¹ , FK/FK2 ¹ , LK	EC-3890TFK/TLK
Angle of view (°)	140		
Focal range (mm)	3-100		
Tip deflection (°) up/down right/left	180/180 160/160		
Ø Insertion tube (mm)	11.6	13.2	13.2
Ø Instrument channel (mm)	3.8	4.2	
Working length (mm)	1300/1500/1700		1500/1700
Total length (mm)	1623/1823/2023		1823/2023

¹ Insertion tube with increased rigidity in comparison with standard equipment