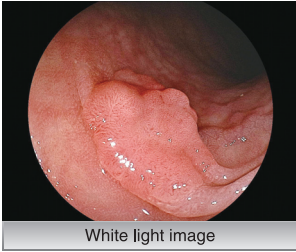


FUJIFILM's image processing technology

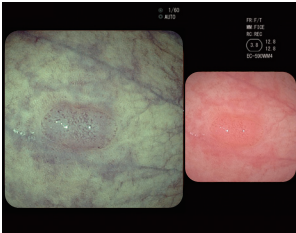
FICE (Flexible spectral Imaging Color Enhancement)

The Flexible spectral Imaging Color Enhancement (FICE) uses high-resolution color distinction technology, similar to that used for analysis of satellite images, to assist in the diagnosis of endoscopic examinations. The FICE extracts specific wavelength components from an endoscopic image, and displays them in pseudocolor to improve observations, and enhance more precise endoscopic examinations and diagnoses.



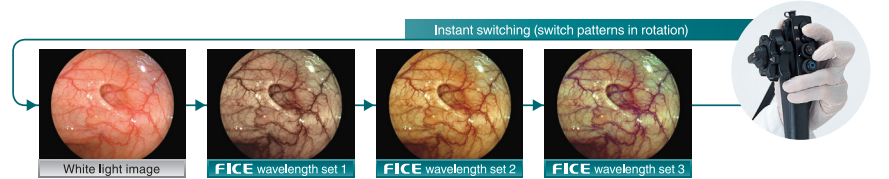
Dual mode*

By having a dual view of a FICE image and white light image on the same monitor, you can collect more information for examination and diagnosis.



Change the FICE preset pattern with the endoscope switch in real-time*

Use the endoscope button to select up to three wavelength patterns from presets. You can switch quickly, moving to the next FICE image with a single push of a button which allows selection of the best pattern for the respective diagnosis.



* Only when using the EPX-4450HD

FICE overview

Endoscopes display images on the monitor by directing white light of undulating spectrum (400nm to 700nm) from a xenon lamp onto the tissue and capturing reflected light with CCD device.

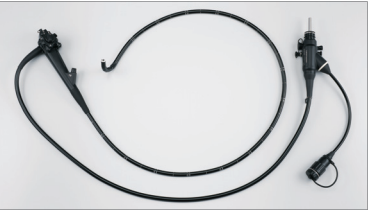
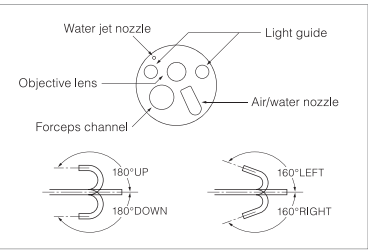
FICE furthermore processes the conventional image into spectral images composed from rays having specific wavelengths and displays them in real-time.



Specifications

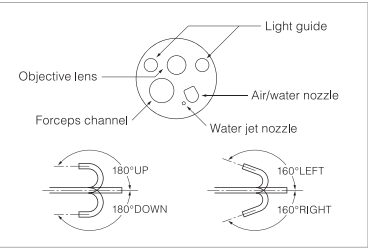
	EC-590ZW3/M	EC-590ZW3/L
Viewing direction	0°(Forward)	
Field of view	WD:140° / TL:55°	
Observation range	WD:6 - 100 mm / TL:2 - 3 mm	
Distal end diameter	12.8 mm	
Flexible portion diameter	12.8 mm	
Bending capability	UP 180° / DOWN 180° RIGHT 160° / LEFT 160°	Image area & Forceps entry position
Working length	1330 mm	1690 mm
Total length	1630 mm	1990 mm
Forceps channel diameter	3.8 mm	

Generic Name: Flexible video colonoscope



	EC-590WM4	EC-590WL4	EC-590WL4
Viewing direction	0°(Forward)		
Field of view	140°		
Observation range	3 - 100 mm		
Distal end diameter	12.8 mm		
Flexible portion diameter	12.8 mm		
Bending capability	UP 180° / DOWN 180° RIGHT 160° / LEFT 160°	Image area & Forceps entry position	
Working length	1330 mm	1520 mm	1690 mm
Total length	1630 mm	1820 mm	1990 mm
Forceps channel diameter	3.8 mm		

Generic Name: Flexible video colonoscope



Compatible processors

Processor model name	FICE	Digital output
VP-4450HD / XL-4450 (EPX-4450HD)	Installed	HD-SDI: HDTV 1080i (2ch) DVI (Digital Visual Interface) (2ch)
VP-4400HD / XL-4400HD (EPX-4400HD)	Installed	HD-SDI: HDTV 1080i (2ch) DVI (Digital Visual Interface)
VP-4400 / XL-4400 (EPX-4400)	Optional	DVI (Digital Visual Interface)

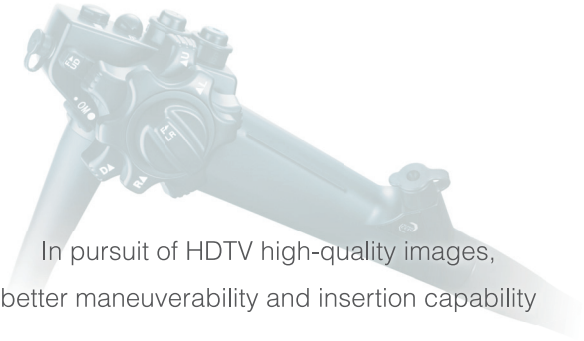
As for compatible LCD monitors, please ask our sales offices or distributors in each countries.

Specifications are subject to change without notice.



EC-590 SERIES
VIDEO COLONOSCOPE

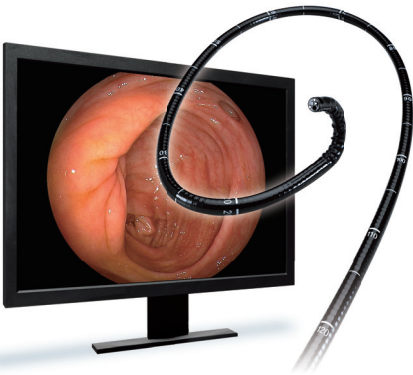
• HDTV high-quality image • Better insertion capability • Lightweight and compact grip



FUJIFILM Corporation

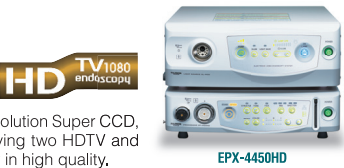
26-30, NISHIAZABU 2-CHOME, MINATO-KU, TOKYO 106-8620, JAPAN
<http://www.fujifilm.com/>

Improved endoscopic observation with HDTV high quality image



Delivering high-quality images using FUJIFILM's image processing and electronic technologies

Sharp, high-quality images are created using the advanced image processing technology. In endoscopic examinations, information acquisition must be accurate under various situations. As the dedicated processor is loaded with the HDTV output function, the HD monitor together with FUJIFILM's image processing technology can lead to earlier detection of a lesion.



High quality image provided by the HDTV and DVI outputs

When the EC-590 series video colonoscope, equipped with the high-resolution Super CCD, is used in combination with the full digital processor EPX-4450HD, having two HDTV and DVI output terminals each, details of a lesion are displayed more clearly in high quality.

What dose HDTV mean ?

HDTV means High Definition Television which has a 16:9 aspect ratio with 1080 or more effective scan lines with the interlaced scanning system, or 720 or more effective scan lines with the progressive scanning system. If the scan lines are fewer than as described, the images are classified as SDTV.

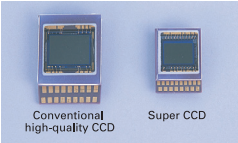
SDTV image

HDTV image

High quality image endoscope with SUPER CCD

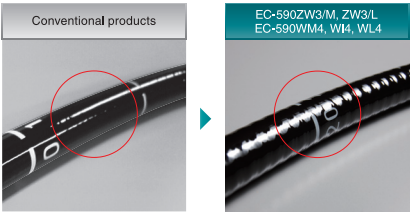
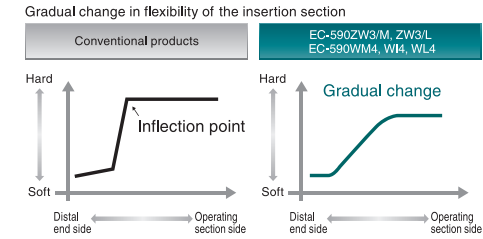
The quality of images taken by FUJIFILM's SUPER CCD are one rank higher than images from conventional high-quality endoscopes, which enables easier detection of minute lesions.

- Progressive scan method**
Using the progressive scan method which prevents deteriorated resolution, the SUPER CCD captures still images in high definition.
- Low noise and fine still image**
The images have low chromatic noise and appear as real images even when the screen is frozen.
- High-resolution and high-quality images**
The SUPER CCD provides not just high-resolution images, but using the RGB filtering capability, it also provides vivid colors in the red spectrum which are important in endoscopic diagnosis.

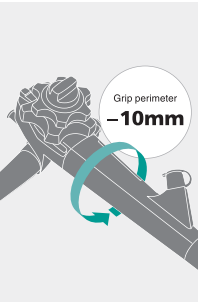


Enhanced insertion capability and improved maneuverability

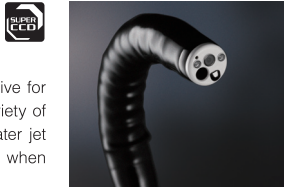
- Insertion section with gradual flexibility of the outer surface**
Newly designed insertion section with gradual flexibility enhances insertion capability. It prevents extension of the large intestine, leading to smoother insertion of the endoscope.
- Improved grip performance with newly-designed surface shape**
Newly created ribbed surface prevents slipping and improves handling of the endoscope. Colonoscopy can be performed more easily and comfortably even in long examinations.



- More comfortable fit with the lightweight grip**
20% less in weight and 10 mm slimmer than that of our conventional products. The angle operation knob accommodates the fingers more firmly with a better fit even for users with small hands.
- Easier lens cleansing**
Improved design of the nozzle shape and the structure around the lens have made the cleansing of the lens surface easier, providing a clearer image during endoscopic examinations.

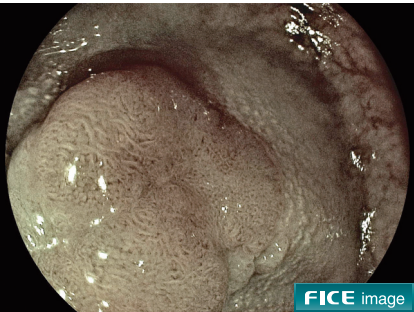
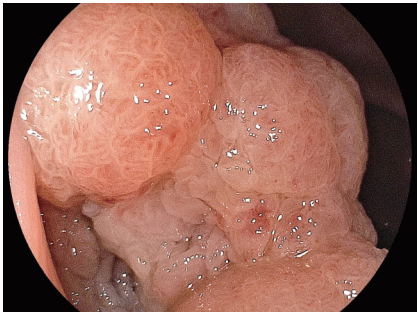
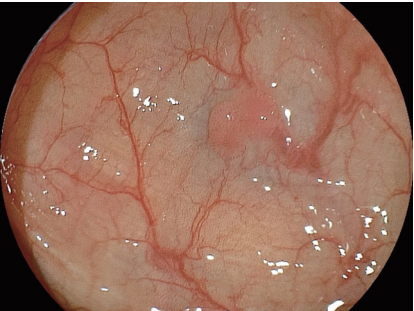
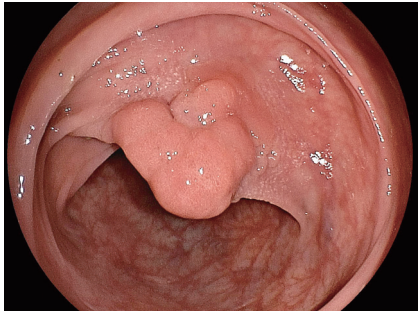


EC-590ZW3/M
EC-590ZW3/L



These optical magnifying video colonoscopes have a water jet function which is effective for washing off mucus and securing a better field of view. This endoscope has a wide variety of functions such as a large 3.8mm forceps channel, optical magnifying function and water jet function. This endoscope has maximum optical magnification levels of up to 135 times when viewed on a 19 inch monitor and also an excellent field of view.

Endoscopic observation



EC-590WM4
EC-590WI4
EC-590WL4



These video colonoscopes for routine examinations have a ultra wide 140°field of view, a large 3.8mm forceps channel and also a water jet function which is effective for washing off mucus.

Endoscopic observation

