

SURGICAL VISION EUREKA™

PRODUCT CATALOGUE

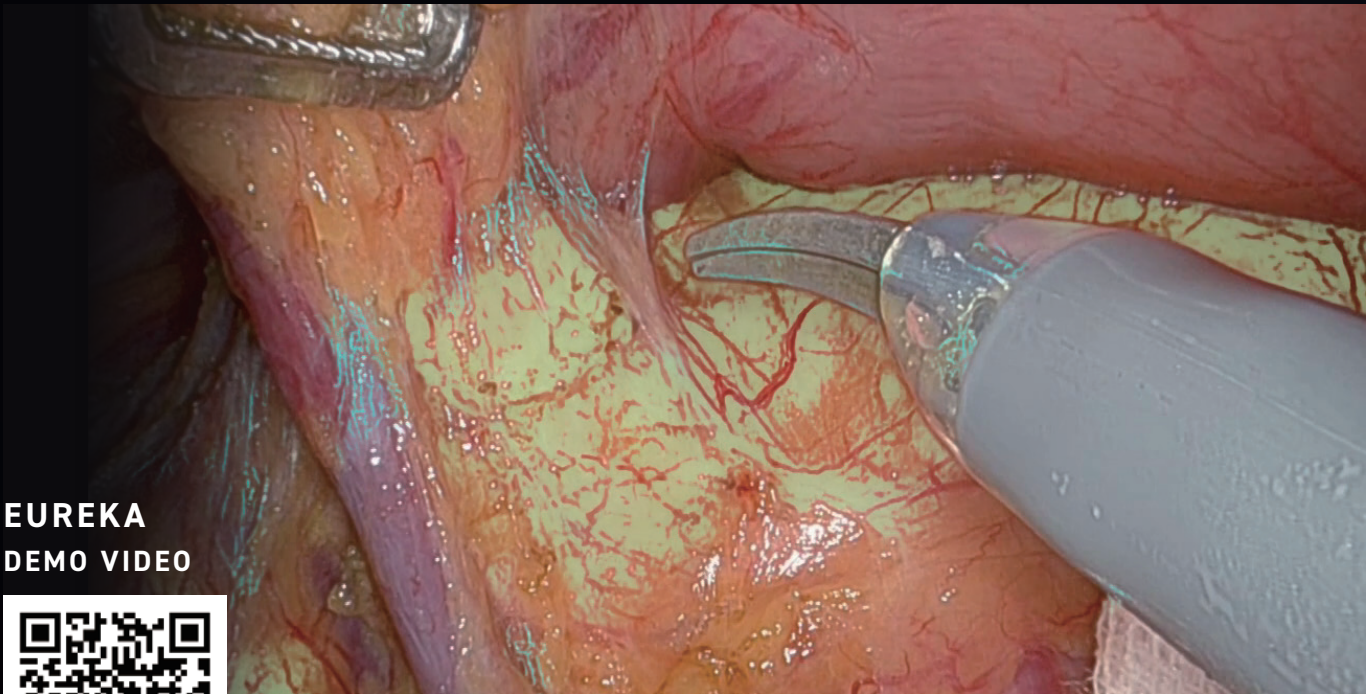
NON-MEDICAL DEVICE / EDUCATIONAL USE ONLY



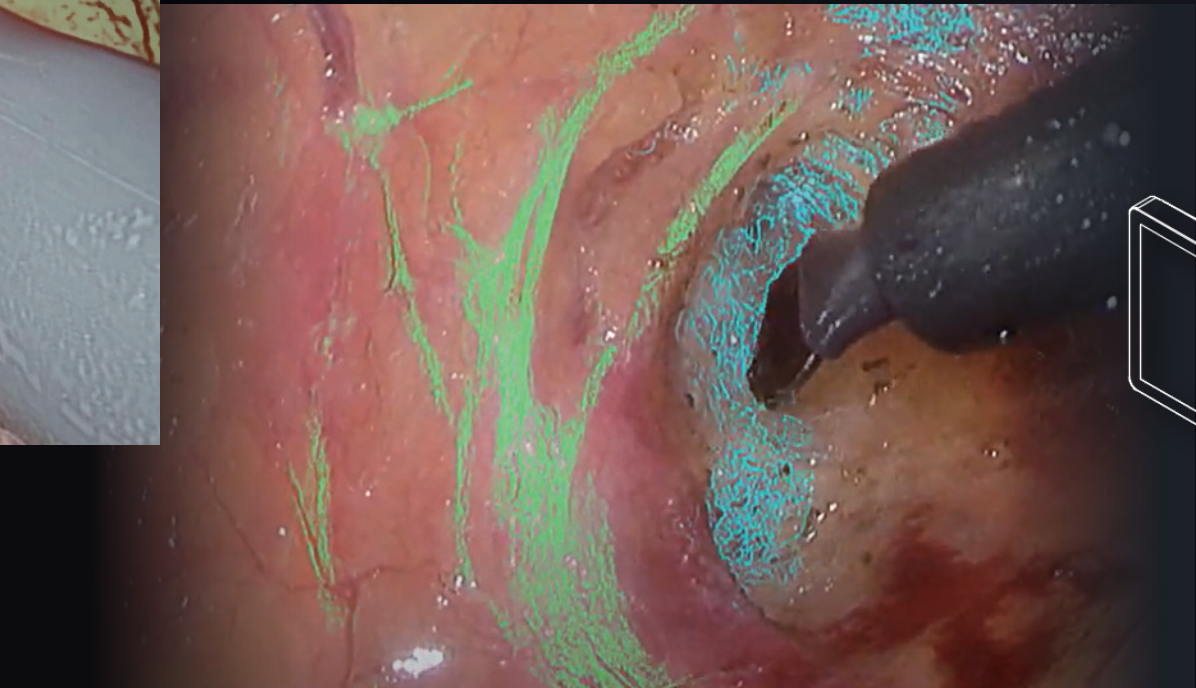
SURGICAL VISION EUREKA™

AI FOR SURGICAL TRAINING AND RESEARCH

Surgical Vision EUREKA™ (EUREKA) is an AI system that visualizes how surgical experts see anatomy and approach surgery. It is equipped with **Precision Mapping** technology, which analyzes complex anatomical structures and highlights microstructures which vary between individual patients. EUREKA will continue to evolve through deep learning — a class of machine learning algorithms — from a vast number of surgical videos. It will gradually expand its repertoire of analyzeable surgeries, such as operations in the thoracic, abdominal, and pelvic regions.



EUREKA
DEMO VIDEO



FUNCTIONS

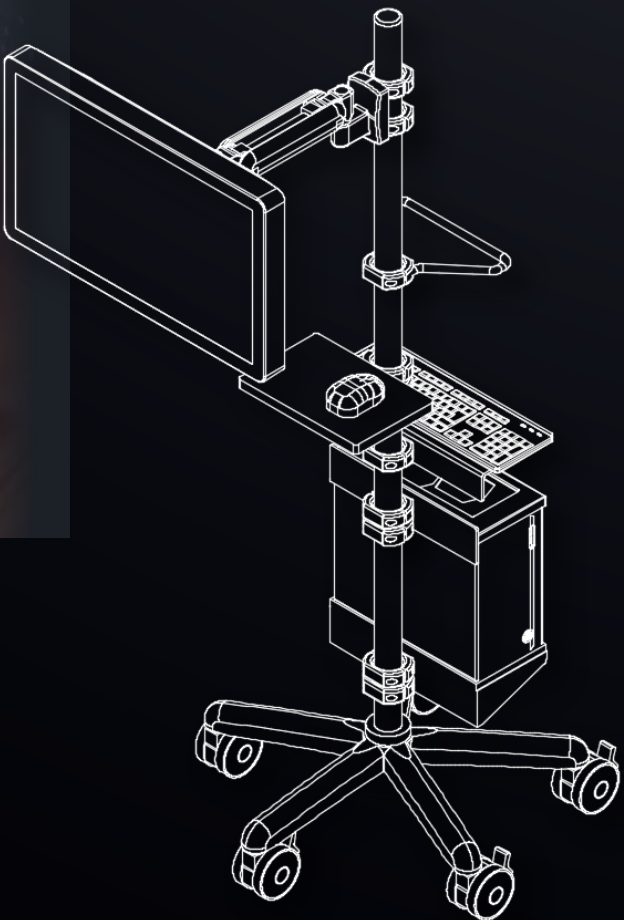
- Analysis of complex anatomical structures and microstructures which vary between individual patients
- Bleeding scene playback

TARGET REGIONS

Gastrointestinal (stomach, large intestine, inguinal hernia, gallbladder), respiratory regions

※Target regions will be expanded in future updates

The software is intended for research and educational purposes and cannot be used by operating surgeons during surgeries.



I NATURAL

The transparency of the output is adjusted pixel-by-pixel and according to the degree of confidence, so that the surgeon's field of vision is unobstructed and the view is natural and stress-free.

I SIMPLE

To use EUREKA, simply connect the SDI cable to the endoscope system. No network connection, preoperative information, or presetting is required, making it easy for anyone to use.

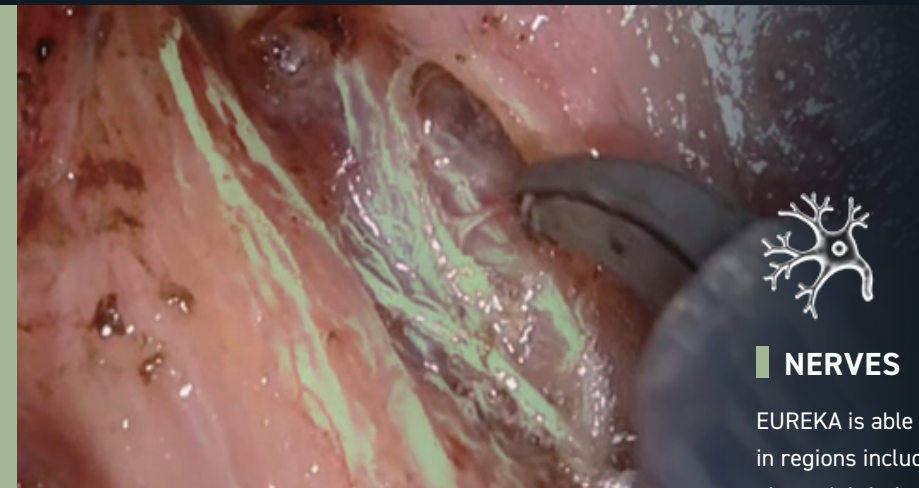
I POTENTIAL

Updates, such as improving accuracy, adding new models, and expanding functions, are made periodically. You can experience the evolution of AI with its unlimited possibilities.



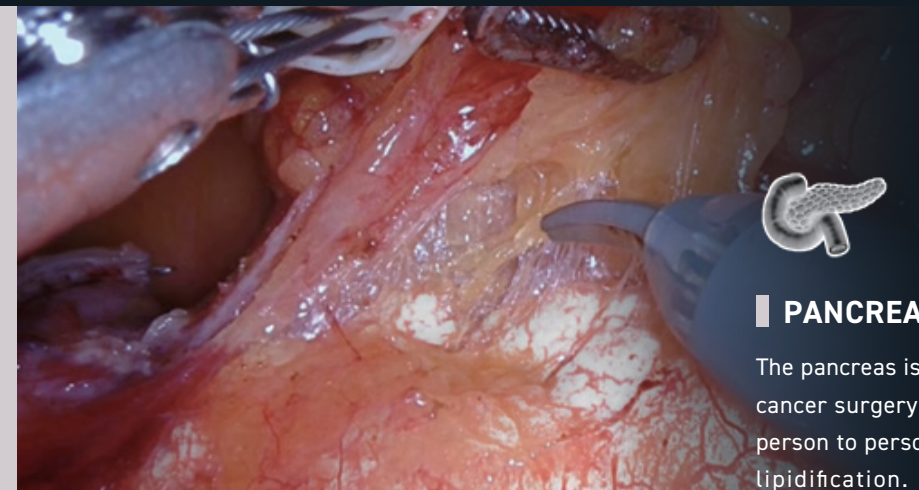
CONNECTIVE TISSUE

EUREKA is able to highlight individual strands of connective tissues, which are structures that connect organs and form layers that can be dissected (shown in **blue**). EUREKA is able to recognize loose connective tissue that has been strained by the unfolding maneuver, thereby helping the user understand the appropriate debridement maneuver.



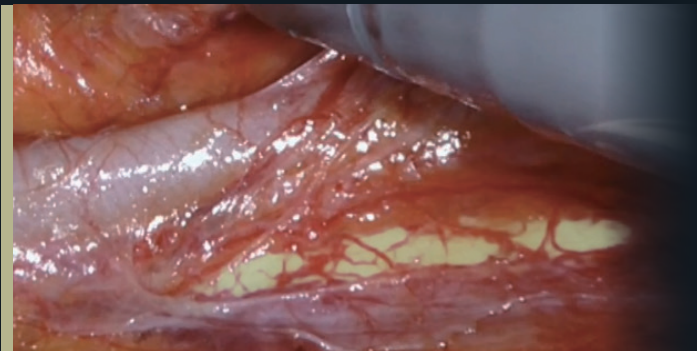
NERVES

EUREKA is able to colorize nerve networks (shown in **lime green**) in regions including the celiac plexus in gastrectomy, the lumbar visceral, inferior abdominal, and pelvic plexus in colectomy, the vagus, recurrent, and diaphragmatic nerves in pneumonectomy.



PANCREAS

The pancreas is an important organ to be preserved in gastric cancer surgery. The morphology of the pancreas varies from person to person, including its irregular shape and degree of lipidification. EUREKA is able to highlight the pancreas depending on the degree of confidence and is able to delineate the pancreas (shown in **white**) from the surrounding fat.



URETER

Ureters are important organs that span the gastrointestinal, urologic, and gynecologic regions. EUREKA is able to detect and highlight ureters (shown in **yellow**) in the abdominal and pelvic regions.

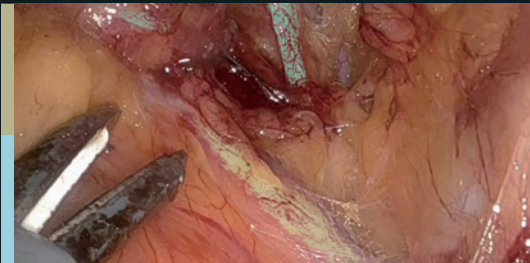


MICROVESSELS

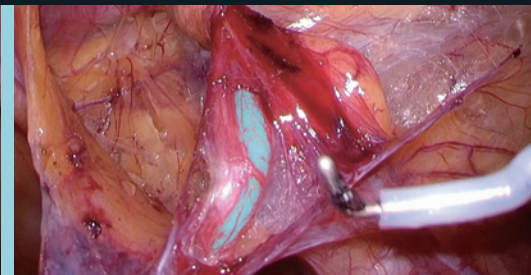
Small vessels are often the cause of bleeding during surgery, due to inadvertent traction or dissection, and must be correctly recognized and handled. EUREKA is able to detect networks of unnamed microvessels (shown in **pink**) distributed throughout the body, down to the very smallest branches.



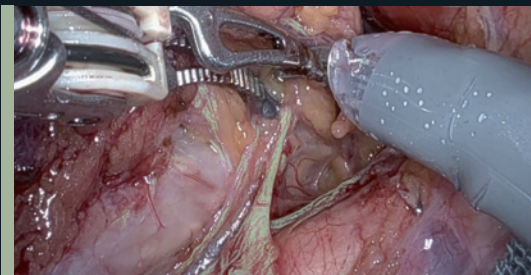
Vein (green) recognition in liver resection



Gynecology: Ureter (yellow) & the internal iliac artery and its branches (blue) recognition in total hysterectomy



Vas deferens (blue) recognition in laparoscopic inguinal hernia repair



Recognition of nerve network (lime green) in esophagectomy

EUREKA DEMO VIDEOS BY SURGICAL AREA

※ Demo videos can be viewed from the QR code.

Stomach



Colon



Hernia



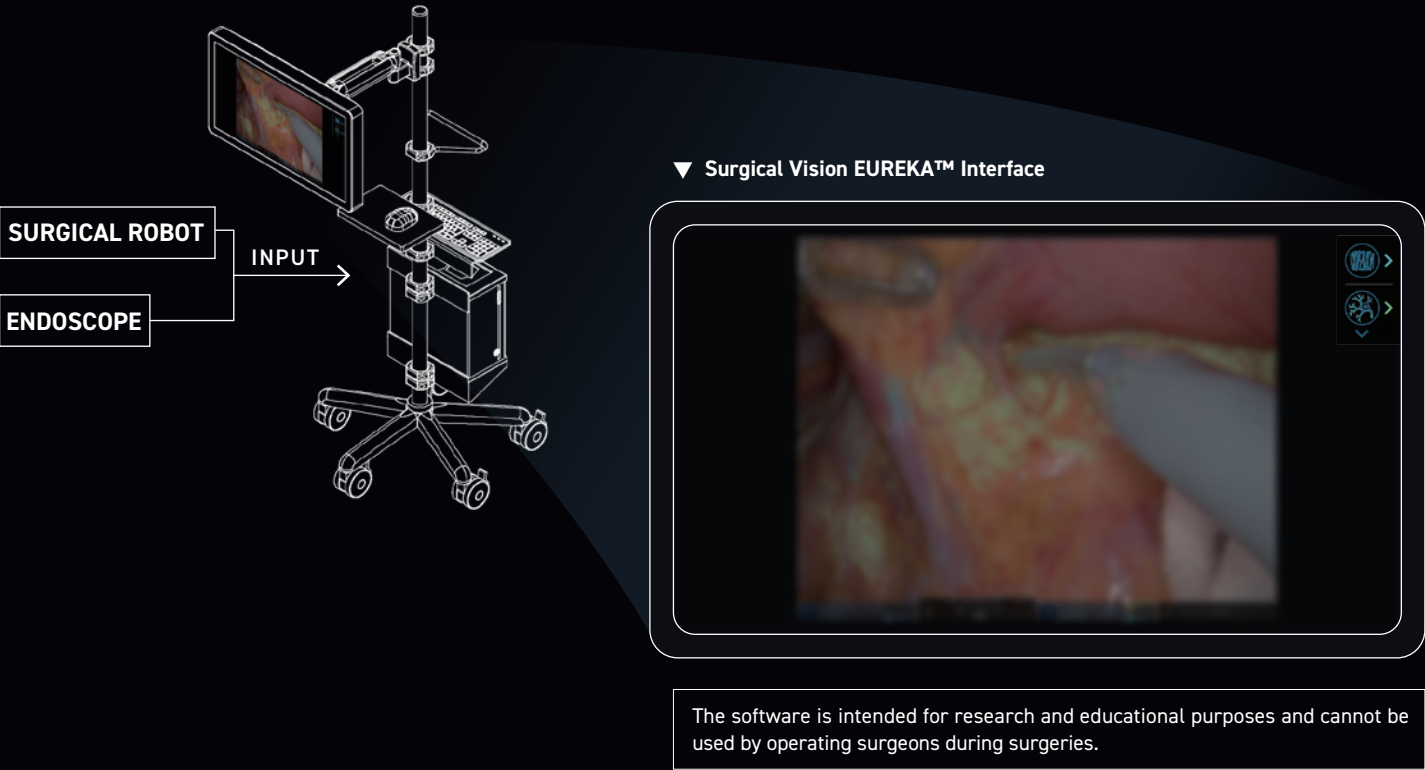
HPB



Gynecology



SETUP & FUNCTIONALITY



VIDEO MODE

Analysis of past surgical videos is also possible by inputting recorded videos via USB.

STRUCTURE SELECTION

Up to two types of structures can be selected from the list and analyzed simultaneously.



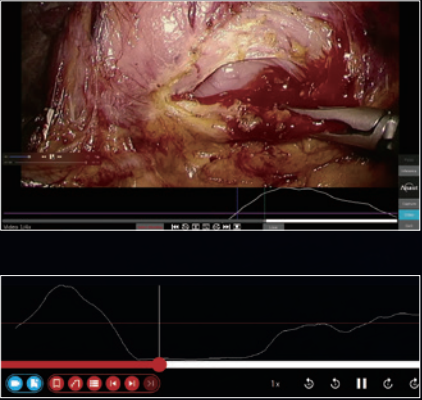
DISPLAY METHOD

The display method of structures (Opacity, Pulse, Enhance, Color) can be adjusted.



REAL-TIME BLEEDING ANALYSIS

EUREKA records bleeding incidents by continuously measuring the area with blood in real time. Scenes with bleeding that exceed certain conditions can be replayed at any time. By selecting a bleeding scene from the thumbnails and reviewing it again, it is possible to verify where and why the bleeding had occurred. Users can select normal playback or slow playback to review the bleeding scene.

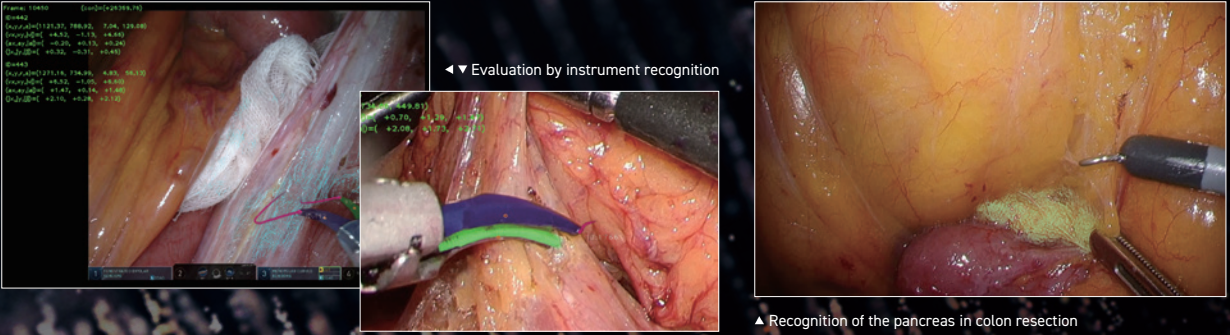


HISTORY OF SURGICAL VISION EUREKA™



PLANNED FUTURE DEVELOPMENTS

New models will be developed for structures and surgical areas that are currently unavailable for analysis. For those who purchased EUREKA, models can be customized according to the endoscopes in the operating room and the surgical concept of each facility.



■ NOTES ABOUT THE CATALOG

For product improvement, some specifications may change without notice. The color of the product may differ from the actual product.

■ SAFETY PRECAUTIONS

This product is not a medical device and should not be used during surgery. Please read the instruction manual carefully and use the product properly.

Please use the product from an outlet with a capacity greater than the power consumption. Failure to do so may cause a fire.

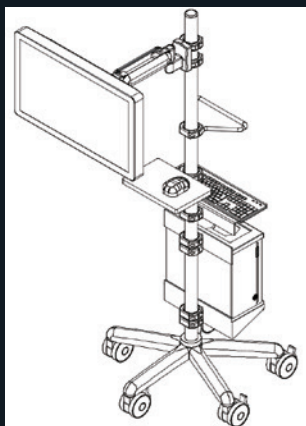
Do not block the exhaust or air intake ports as it may cause overheating, which leads to ignition or malfunction.

■ OTHERS

Installation and maintenance fees will be charged separately.

SYSTEM DIMENSIONS

MOBILE STAND
W x D x H:
674.7 x 804.6 x 1652 mm
(excluding monitor)



MOBILE WAGON
W x D x H:
660 x 550 x 1434.5 mm
(excluding monitor)



PRODUCT & MODEL NAME / SPECIFICATIONS

Product Name	Surgical Vision EUREKA™		
Model Name	Anaut Surgical System		
	ASS-01		
Interface	USB	2.0	2 (Front Side)
		3.0	4 (Back Side)
	Display	VGA	1
		HDMI	2
		DP	1
	Serial	RS-232	2
Power	Audio	Line-in/out, Mic-in	
	AC Input Voltage	100~240VAC ±10%	
	AC Frequency	50 ~ 60Hz ±3Hz	
Wattage		500W	
Operating Temperature Range			0°C~35°C
Operating Humidity Range			20~85% (Non-condensation)
Dimension			330 (W) X 360 (D) X 170 (H) mm

RECOMMENDED MONITOR SPECIFICATIONS

Recommended Specification

- Resolution : 1920 x 1080 pixels (Aspect Ratio 16:9) and above
- Color Depth: 10-bit color and above
- Input Interfaces: DisplayPort (HDCP 1.3), HDMI (HDCP 2.2/1.4), BNC (3G-SDI)

Anaut Inc.

MAIN OFFICE WeWork Hibiya Park Front 19F, 2-1-6 Uchisaiwai-cho, Chiyoda-ku, Tokyo, JAPAN 100-0011

<https://anaut-surg.com/en/>

