OLYMPUS®

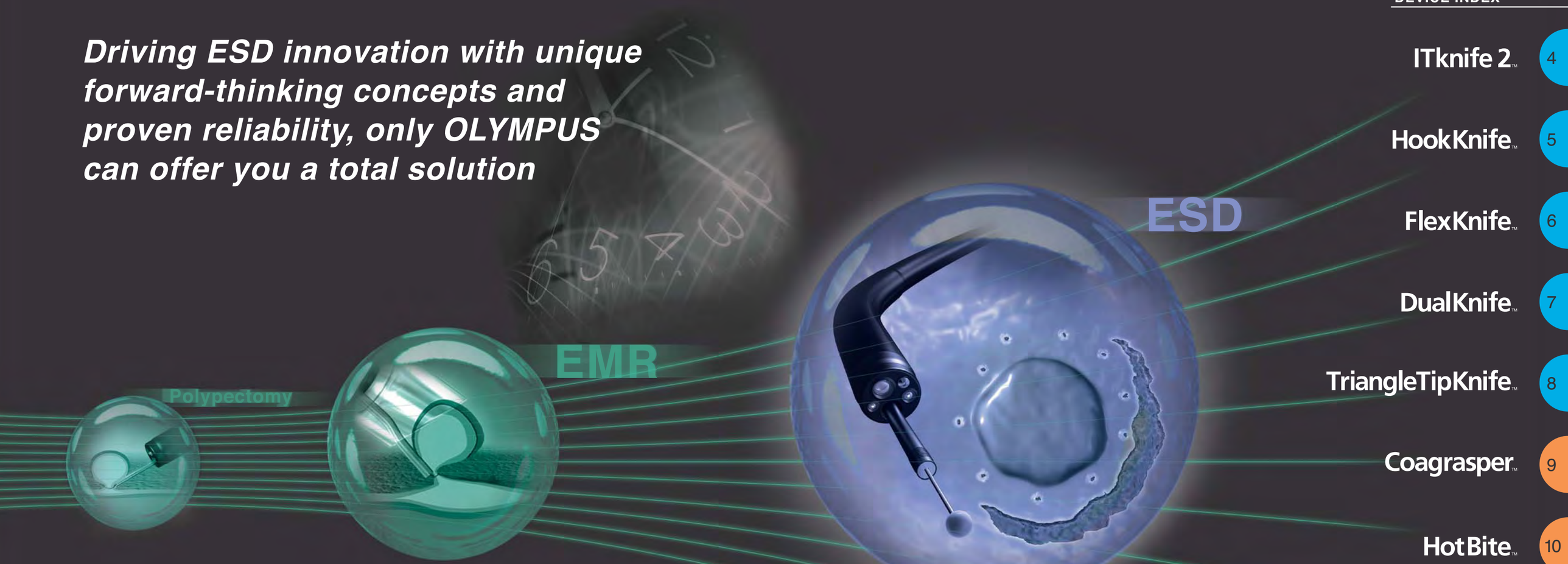
Your Vision, Our Future

EndoTherapy™

Endoscopic Submucosal Dissection Product Catalog

Leading the way to minimal invasive therapy

Driving ESD innovation with unique forward-thinking concepts and proven reliability, only OLYMPUS can offer you a total solution



Treatment with gastrointestinal endoscopy has evolved rapidly over the past few years. From polypectomy to EMR, and now to ESD, treatment has become both more effective and less invasive. With the remarkable ability to enable en-bloc resection of larger lesions, ESD clearly marks a major milestone in this evolution, offering an ideal substitute for open surgery. Everything you need to take advantage of this impressive new treatment modality is available from OLYMPUS. Incorporating the ideas and observations of pioneering ESD physicians, we have created a unique array of ESD devices. We are now expanding the lineup to bring the power of ESD to even more types of legions found in a range of areas in the GI tract.

DEVICE INDEX

ITknife 2™

KD-611L

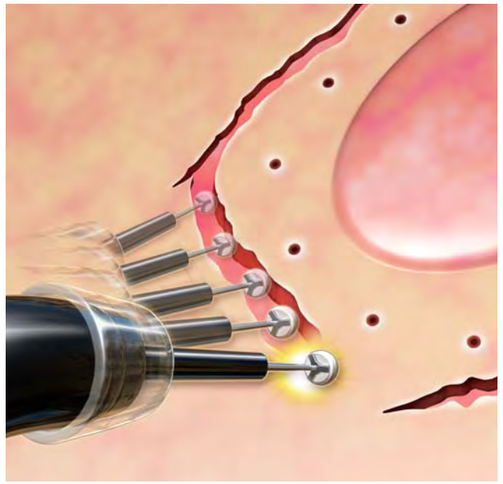
Unique electrode design on the proximal side of the tip minimises invasiveness whilst maximising cutting versatility

Ceramic tip for increased assurance
The ceramic tip at the distal end of the device is insulated to provide you with the support to perform incisions and dissections more effectively.

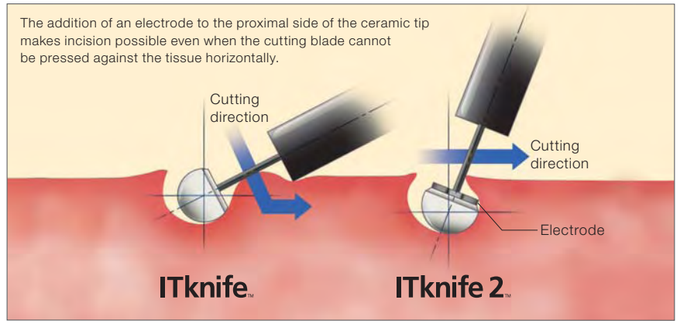
Innovative electrode design
The electrode incorporated on the proximal side of the ceramic tip features a unique new design that provides exceptional cutting performance.

Easy scope manoeuvring
This unique electrode design makes it possible to perform lateral cutting from a vertical approach, allowing the endoscope to be manoeuvred easily.

Fast, efficient cutting performance
Unlike other knives, the ITknife2's insulated tip enables you to take advantage of unique new cutting techniques using 4 mm of knife length.This allows much faster and more efficient incision and dissection.



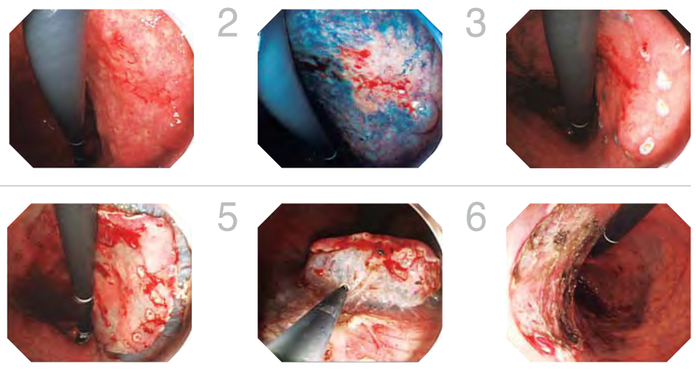
What is the difference between the ITknife™ and ITknife2™?



KD-611L

CLINICAL CASE

Upper GI



HookKnife™

KD-620LR/KD-620QR/KD-620UR

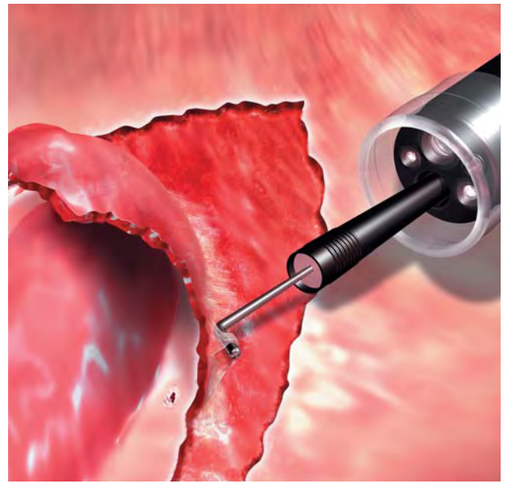
Distal L-shaped hook and rotation function for incision and dissection in longitudinal and lateral directions

L-shaped hook at the distal end
The knife is used to hook tissue and draw it away from the mucosa while diathermy is applied to cut. This drawing method minimises the risk of perforation as cutting always takes place away from the intestinal wall.

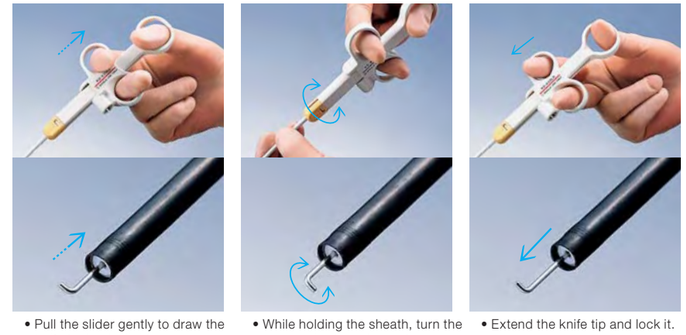
Turn and lock design
Simply turn the handle to point the tip of the hook in the direction you want, then lock it in position.

Choice of working lengths
Choose the working length appropriate for the technique you plan to use and the location — whether it is in the upper or lower gastrointestinal tract.

Optional distal attachment
To further minimise invasion while maintaining an open view field, an optional distal attachment is available for use with the HookKnife.

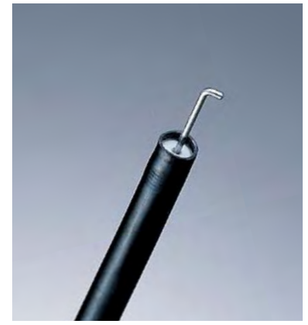


How to use the HookKnife™



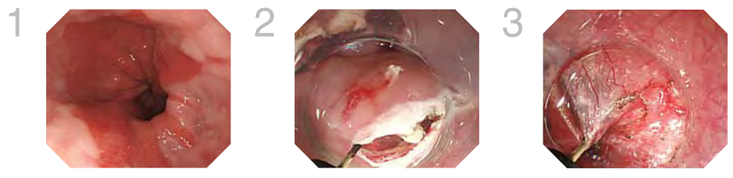
- Pull the slider gently to draw the knife tip back slightly.
- While holding the sheath, turn the handle slowly and align the direction of the hook.
- Extend the knife tip and lock it.

KD-620LR/QR/UR

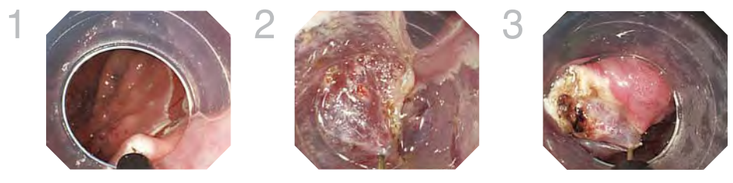


CLINICAL CASE

Upper GI



Lower GI



FlexKnife™

KD-630L

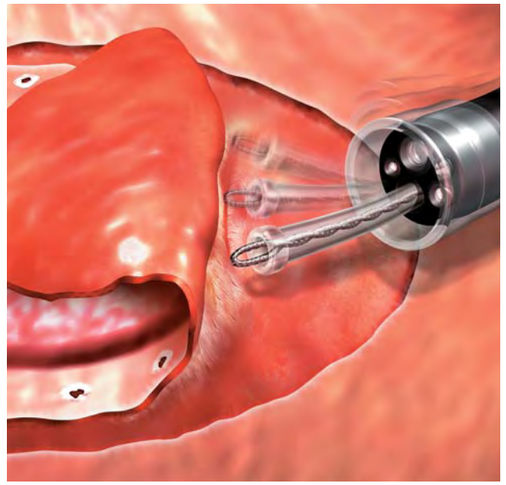
Surprisingly pliable design enables smooth incision and dissection in all directions

Smart sheath design
Combining a slim sheath with flexible stranded wire makes the knife pliable enough to enable incision and dissection in all directions.

Loop-design cutting section
The looped cutting section at the tip of the knife contacts a larger area of the mucosal surface, enabling you to achieve the correct cutting speed quickly and easily.

Buffer collar
The collar of the knife functions as a cushion and stopper, helping to prevent perforation by allowing precise control of the cutting depth.

Adjustable length
The knife length can be adjusted to different lengths suitable for marking, incision or dissection.

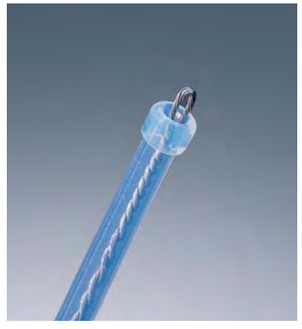


Extruded lengths of the FlexKnife™

• Placement of marks around lesion

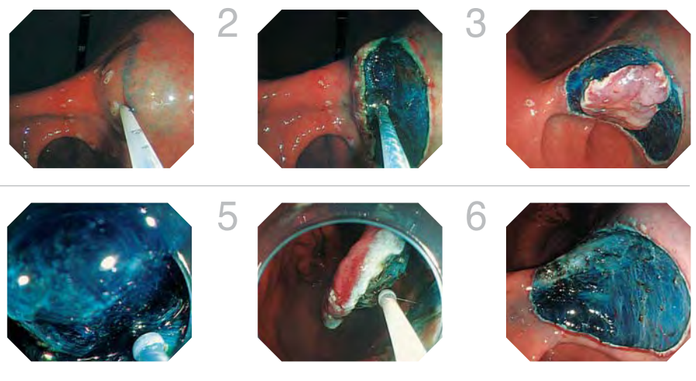
• Circumferential incision of mucosa around lesion
• Dissection of submucosal layer

KD-630L



CLINICAL CASE

Upper GI



DualKnife™

KD-650L/KD-650Q/KD-650U

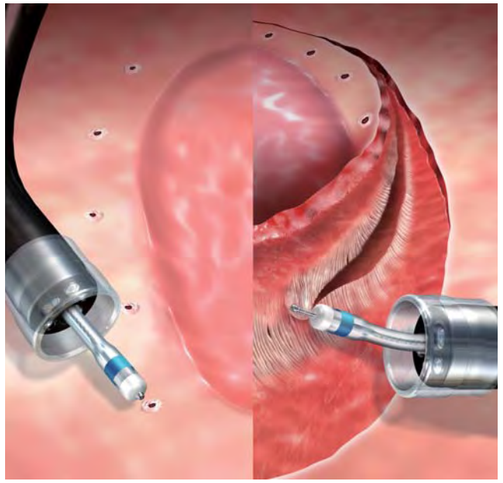
Knife length can be fixed at either of two positions — retracted or extended — for reliable, confident cutting

Two-step knife length adjustment
Easy two-step knife extrusion length adjustment with no need for confirmation under endoscopic view.

Knob-shaped needle knife tip
The 0.3 mm needle tip is shaped like a doorknob. This design makes the needle less likely to slip, simplifies marking and haemostasis, and increases scope manoeuvrability, thereby facilitating a wide variety of cutting techniques.

Dome-shaped ceramic sheath tip
The insulated ceramic tip ensures that it is safe even when the tip is brought in to contact with tissue. It also improves approach capability in a tangential direction.

Slim sheath with just the right degree of rigidity
The narrower sheath enhances suction capability, while sheath rigidity has been increased to make it easier to hook the needle on tissue.



How to use the DualKnife™

Pull the slider to retract the cutting knife.

• Retracted position (0.3 mm) for marking and haemostasis

Push the slider to extend the cutting knife.

• Extended position (2 mm with KD-650L or 1.5 mm with KD-650Q/U) for incision and dissection

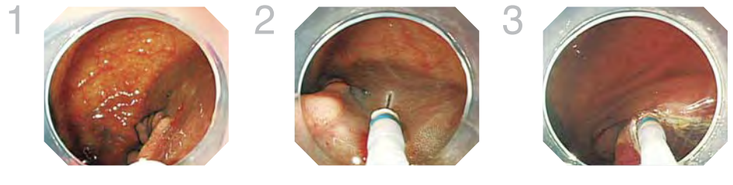
KD-650L&KD-650Q/U

KD-650L KD-650Q/U

CLINICAL CASE

Upper GI

Lower GI



TriangleTipKnife™

KD-640L

Triangular tip at the distal end for all procedures from marking to incision and dissection

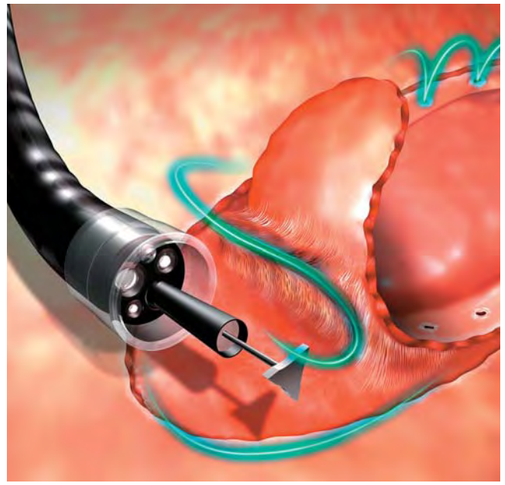
Unique triangular tip design
A specially designed tip with a unique triangular shape enables you to snag and hook tissue more easily. Once you've hooked the tissue, electric current can be applied. The efficiency of this design prevents thermal damage to the tissue.

Cutting while coagulating
The triangular conductive tip generates electrical resistance that facilitates cutting of the tissue by applying coagulation to the site.

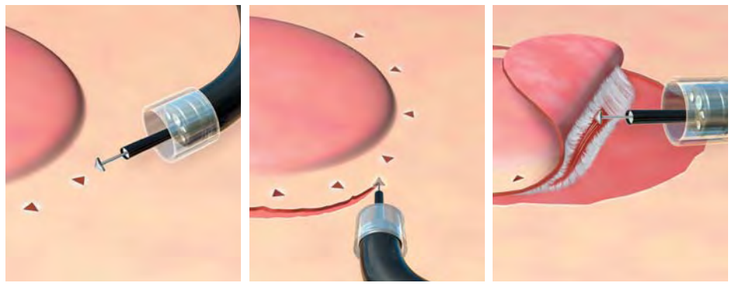
No need to rotate the knife
Thanks to the triangular tip design, there's no need to rotate the knife and it is easy to cut in the direction you want.

Versatile application
This knife can be used at any step of the ESD procedure, from marking and precutting to incision and dissection. It can even be used for haemostasis of minor bleeding.

Optional distal attachment
For best results, an optional distal attachment is available to keep the view field clear.



TriangleTip Knife™ can be used at any step of the ESD procedure

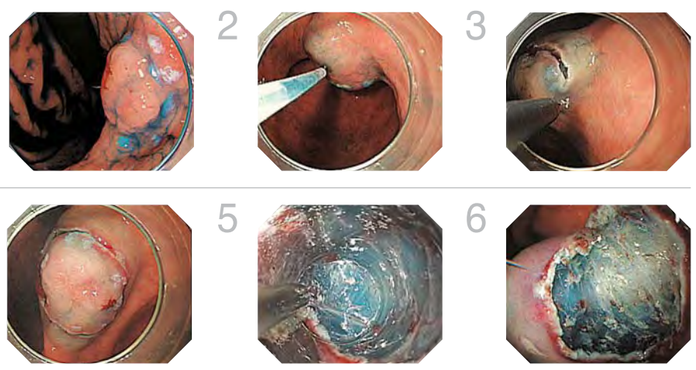


Marking | Incision | Dissection

KD-640L

CLINICAL CASE

Upper GI



Coagrasper™

FD-410LR/FD-411QR/FD-411UR

Unique forceps construction provides more reliable, effective haemostasis no matter where the site is located

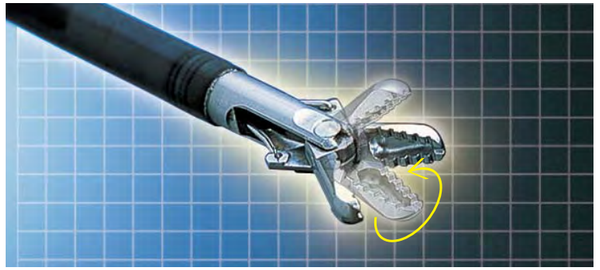
Unique way to achieve haemostasis
By grasping and lifting up the bleeding point or blood vessel, the Coagrasper enables effective and reliable haemostasis during or after dissection.

Two types of forcep cup shapes and opening widths
The Coagrasper is available in two versions specifically designed for haemostasis. The shape and opening width of each forceps has been optimised for its application — one model is designed for the upper GI tract and the other for the lower GI tract.

Rotation function
Precise approach and targeting is possible with the Coagrasper's rotatable design.

Anti-slip construction
The forcep cups of the Coagrasper boast a unique anti-slip construction that allows you to grasp bleeding points securely for faster and more reliable haemostasis.

Coagrasper™'s rotatable design for easy targeting

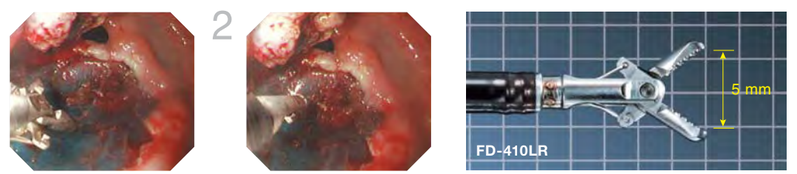


FD-410LR&FD-411QR/UR

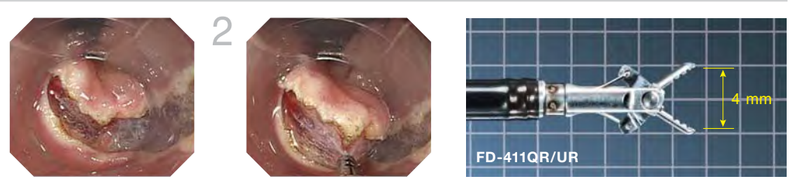
FD-410LR | FD-411QR/UR

CLINICAL CASE

Upper GI



Lower GI



HotBite™

FD-430L

Biopsy-style operation makes it easy to cut introduction holes for mucosal incision

Perfectly sized access ports
Specifically designed to go with the ITknife2, HotBite lets you create perfectly sized access ports to reach the submucosa.

Reduced risk of perforation
Plunge cut with HotBite enables the ceramic tip of ITknife2 to cut perpendicular to the mucosa. This may result in reducing the risk of perforation.

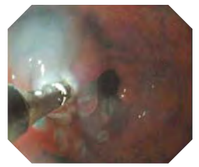
Excellent cutting capability
Featuring “stepped cups,” the HotBite boasts excellent cutting capability, even on flat mucosa.

CLINICAL CASE

Upper GI

1

2



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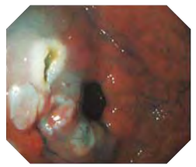


HotClaw™

FD-420LR

Claw-shaped tongs and rotation function for more efficient incision and dissection

Claws at the tip
Mucosal tissue can be grasped more securely with the claws at the tip.

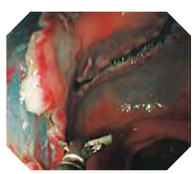
Rotation function
Rotatable tip enables you to approach or cut from any direction.

Minimal invasion of deeper parts
Since the mucosal tissue is grasped and lifted before incision, invasion of deeper parts can be kept to a minimum.

CLINICAL CASE

Upper GI

1



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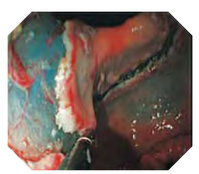

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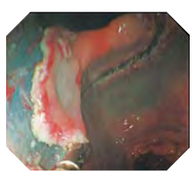


Distal Attachment

D-201-10704/11304/11802/11804/12402/
12704/13404/14304/15004/16403

Distal attachment helps keep the field of view clear throughout the procedure

Maintains the optimal field of view
By maintaining the appropriate distance between the endoscope tip and observation site, the distal attachment helps maintain the optimal field of view. The addition of a convenient side hole on the sleeve of the 4 mm working distance models ensures that any fluid inside can be drained at all times.

Rounded edge is easy on tissue
The edge of the distal attachment has a round shape to reduce damage to tissue.

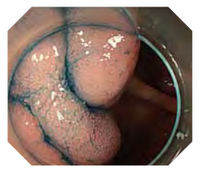
Versatile lineup for OLYMPUS GI endoscopes
Ten different distal attachments are available, ensuring that you can find one to match the outer diameter of your OLYMPUS upper or lower endoscope.

Models dedicated to magnification endoscopes
Three of the distal attachment models are specifically designed for use with magnification endoscopes, making it easier to keep an image in focus and achieve correct depth of field.

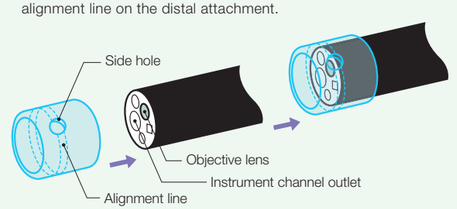
CLINICAL CASE

1

2



How to mount the distal attachment
1. Position the distal attachment so that the side hole is aligned with the endoscope’s objective lens.
2. Push the endoscope tip into the distal attachment as far as the alignment line on the distal attachment.



How to drain fluid
When fluid pooled in the distal attachment blocks the endoscopic field of view, bring the side hole of the attachment in contact with tissue. This enables fluid to be expelled.

ESG-100

Simply smart — exceptional performance with 120 watt output and a variety of monopolar and bipolar modes

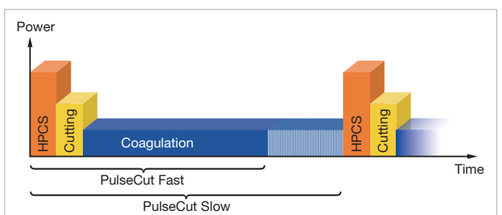
Suitable for ESD
Reliable and easy-to-use, the new OLYMPUS ESG-100 electrosurgical generator's smart versatile design and expanded performance offers procedural solutions that are suitable for state-of-the-art endoscopies such as ESD.

120 watt output and a variety of modes
With output power of up to 120 watts and a variety of monopolar and bipolar modes for cutting and coagulation, the ESG-100 supports all electrosurgical procedures in flexible endoscopy.

Rapid Spark Technology
Features High Power Cut Support (HPCS) to achieve immediate spark ignition and Fast Spark Monitor (FSM) to optimise cutting procedures in various tissue structures. This technology helps reduce leakage currents, ensures reproducible tissue effects, and provides enhanced protection for EndoTherapy instruments.

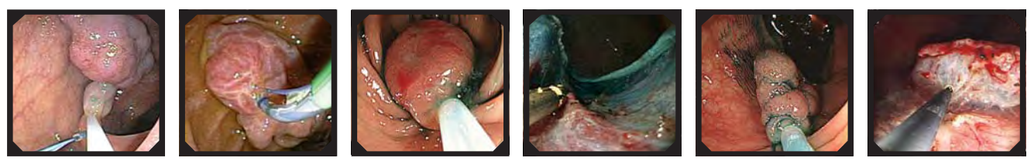
Versatile Coagulation Technology
Enables fast and effective desiccation as well as soft and deep tissue coagulation in monopolar and bipolar modes to ensure controlled haemostasis and effective coagulation.

Compact design
Fits perfectly onto an endoscopic workstation.



Different Cutting Modes to Meet All of Your Needs

CLINICAL CASE



PERISTALTIC PUMP

AFU-100

Peristaltic pump helps to maintain a clear view

When the optional AFU-100 is connected to the ESG-100, the generator's foot pedal can also be used to activate the pump. With flow of up to 600 ml/min, the treatment site can be thoroughly rinsed, ensuring a clear view is maintained.

UCR

Featuring easy operation, a selectable flow rate, and a compact design, this unit takes advantage of CO_2's ability to minimise luminal distention

Fast absorption to minimise distension
Carbon dioxide's rapid absorption properties keep abdominal distention and related pain to a minimum during the procedure and speed up recovery afterwards.

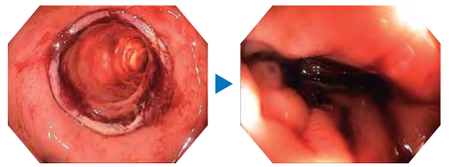
Easy operation
Easy, reliable one-button start/stop operation, pressure display, and timer function to automate CO_2 insufflation shutoff.

Selectable flow rate
Flow rates can be controlled by using the appropriate optional tubing. Three settings are available.

Compact design
Allows the UCR to fit easily onto an endoscopic workstation.

Rapid absorption of CO_2 gas
Carbon dioxide is absorbed by human tissue about 150 times faster than conventional air.

With CO_2 insufflation



Right after insufflation — 2 minutes later

Note: Sample image demonstrates absorption rate following CO_2 insufflation. Individual results may vary.

Knife Device Specifications

ITknife2™

Model	KD-611L
Channel diameter	2.8 mm
Working length	1,650 mm
Cutting knife length	4 mm
Electrode	0.7 mm ×3
Sterile, single-use	○
Built-in handle	○

HookKnife™

Model	KD-620LR	KD-620QR	KD-620UR
Channel diameter	2.8 mm	2.8 mm	2.8 mm
Working length	1,650 mm	1,950 mm	2,300 mm
Cutting knife length	4.5 mm	4.5 mm	4.5 mm
Hook length	1.3 mm	1.3 mm	1.3 mm
Sterile, single-use	○	○	○
Built-in handle	○	○	○

FlexKnife™

Model	KD-630L
Channel diameter	2.8 mm
Working length	1,650 mm
Cutting knife length	Adjustable
Cutting knife width	0.8 mm
Sterile, single-use	○
Built-in handle	○

DualKnife™

Model	KD-650L	KD-650Q	KD-650U
Channel diameter	2.8 mm	2.8 mm	2.8 mm
Working length	1,650 mm	1,950 mm	2,300 mm
Cutting knife length	2 mm	1.5 mm	1.5 mm
Tip thickness	0.3 mm	0.3 mm	0.3 mm
Sterile, single-use	○	○	○
Built-in handle	○	○	○

TriangleTip Knife™

Model	KD-640L
Channel diameter	2.8 mm
Working length	1,650 mm
Cutting knife length	4.5 mm
Tip thickness	0.4 mm
Sterile, single-use	○
Built-in handle	○

Support Device Specifications

Coagrasper™

Model	FD-410LR	FD-411QR	FD-411UR
Channel diameter	2.8 mm	3.2 mm	3.2 mm
Working length	1,650 mm	1,950 mm	2,300 mm
Opening width	5 mm	4 mm	4 mm
Sterile, single-use	○	○	○
Built-in handle	○	○	○

HotClaw™

Model	FD-420LR
Channel diameter	2.8 mm
Working length	1,650 mm
Opening width	7 mm
Sterile, single-use	○
Built-in handle	○

HotBite™

Model	FD-430L
Channel diameter	2.8 mm
Working length	1,650 mm
Opening width	7 mm
Sterile, single-use	○
Built-in handle	○

Distal Attachment

4 mm working distance type (10 pieces/pack)

Model	Outer diameter	Compatible endoscopes
D-201-10704	11.35 mm	GIF-XQ140/Q165/ XQ230/XQ240/SP240/ XQ260/Q260/V70/SIF-Q260/SIF-Q180
D-201-11304	11.8 mm	GIF-XQ30/40/V/130/140/Q160/Q240X/E3/ Q145/H260
D-201-11804	12.4 mm	GIF-Q140/H180/H180J/Q230/Q240/Q260J/ PCF-P240A/Q260J
D-201-12704	13.4 mm	GIF-Q30/40/PCF-140/Q150A/160A/1TQ160/ 230/240/Q260A/Q180A/H180A
D-201-13404	14.0 mm	GIF-2T240/2TQ260M/CF-240/240A/240D/ Q260A/Q260D/OSF-4/PCF-E3
D-201-14304	15.0 mm	GIF-XTQ160/2T160/CF-V70/130/140I/140L/ Q140/Q150/Q160/Q160A/Q165/Q240/Q240A/V/ Q145/Q160S/Q180A/H260A
D-201-15004	15.7 mm	CF-30/40/E3/Q160D/H180A/H180D/2T160/230/H260D

Magnification endoscope dedicated type (12 pieces/pack)

Model	Outer diameter	Compatible endoscopes
D-201-11802	12.1 mm	GIF-Q240Z
D-201-12402	12.7 mm	GIF-Q160Z/H260Z/FQ260Z
D-201-16403	16.7 mm	CF-Q160Z/Q240Z/FH260AZ

Ancillary Product Specifications

ESG-100

High frequency	330–380 kHz
Type,protection class	CF,Class I
Power supply	220–240 V(WB991036),100–120 V(WB991046),50/60 Hz,400 VA
Dimensions	295(W)×375(D)×115(H) mm
Weight	6.5 kg (without footswitch)

AFU-100

Flow rate	10–270 ml/min (pump tube ID3.2 mm)
	20–600 ml/min (pump tube ID4.8 mm)
Pump head	4 rollers,detachable
Type,protection class	CF,Class I
Power supply	100–240 V,50/60 Hz,40 VA
Dimensions	295(W)×430(D)×115(H) mm (incl. pump head)
Weight	5.6 kg (without footswitch)

MAJ-855: Connecting tube for OLYMPUS endoscopes with auxiliary water channel
MD-105, MAJ-807: Adapters for OLYMPUS endoscopes without auxiliary water channel

UCR

Power requirements	Voltage (AC)	100–120 V (USA), 100–240 V (other areas)
	Frequency	50/60 Hz
	Input	40 VA
	Voltage fluctuation	Within ± 10 %
Dimensions		125(W)×300(D)×150(H) mm (housing dimensions)
Weight		4.9 kg
Applicable gas	CO_2 gas for medical use (connectable to CO_2 cylinder or medical gas pipeline)	
Air feeding pressure	Maximum pressure feed	45 kPa

Cautions on use of the knives and supporting devices for ESD

Warning

Before use, thoroughly review the manual and use the instruments as instructed.
These instruments have been designed for use by physicians or medical personnel under the supervision of a physician.
In certain cases the use of these instruments could lead to perforation or haemorrhages and may require surgical intervention as an emergency measure.
Only use this product if you have received appropriate training in order to develop an understanding of the clinical application and the proper use of this product.
For information on training and other material, please contact OLYMPUS.

See instruction manual for further information.

Specifications, design and accessories are subject to change without any notice or obligation on the part of the manufacturer.

OLYMPUS®

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