

Aesculap Electrosurgery Nelson[®] deluxe

Innovative electrosurgery



Nelson deluxe is new, cutting-edge and unique.

Nelson stands for "New Electrosurgical Solutions" and constitutes a new generation of Aesculap devices in the "crème de la crème" of electrosurgery.

The perfect cut

POWER CUT

This mode delivers four different coagulation effect options. The special output characteristics allow the user to make reproducible and tissue-sparing cuts.

MICRO CUT

What's outstanding about MICRO CUT is the automatic cutting control that protects tissues with absolutely minimum output – regardless of the type of tissue, cutting speed or electrode geometry.

BICUT

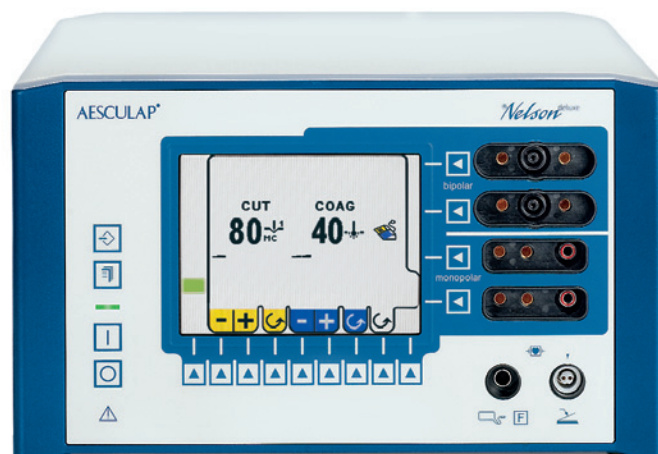
With BICUT precise bipolar cutting is achieved in the most delicate tissue structures. The innovative BiTOM instruments allow for optimal cutting in minimally invasive endoscopic surgery. The unique design of the AdTec® bipolar Metzenbaum scissors from Aesculap opens totally new horizons in the realm of bipolar cutting.

SEAL CUT

This special cut mode provides a safe and controlled cut for polypectomy/papillotomy.

Power Start Function

With conventional HF devices, if the working electrode is already touching the tissue when the device is activated, an undesirable time lag occurs during the initial cutting phase. Aesculap's Power Start Function is an intelligent initial cut 'helper' that appreciably reduces annoying time lags.





Nelson deluxe

When it comes to coagulation with the Nelson deluxe, the possibilities are virtually endless.

The device offers an optimal solution for each and every task.

It's the safest and most tissue-sparing coagulation available today.

Perfect coagulation

SOFT COAG

This is the safest and most tissue-sparing monopolar punctate coagulation technique. SOFT COAG eliminates adverse cutting effects, thereby achieving potent diathermy deep in the body, with minimal necrosis. The risk of the working electrode sticking to the tissue is drastically reduced. That's why SOFT COAG is the coagulation mode of choice in today's minimally invasive surgery.

CONTACT COAG

In this mode, large-surface standard coagulations are protected quickly and effectively with the aid of a broad-band output regulator. This goes both for direct hemostasis and for indirect coagulation with forceps or clamps.

FORCED COAG

This mode provides a quick and effective coagulation with a solid hemostasis.

SPRAY COAG

This mode allows for surface coagulation without contact at a shallow coagulation depth. This mode allows for effective coagulation of large haemorrhaging surfaces in parenchymatous organs.

ARGON SPRAY COAG

Contact-free coagulation with the aid of ionized argon gas is particularly suitable for surface coagulation in organs that are susceptible to perforation. To use this mode, you need the Nelson Beamer – the new Aesculap argon coagulation unit.

BICOAG

This mode allows for the most delicate bipolar coagulation with forcep tips that don't stick together. Large-volume coagulations can also be carried out just as effectively and reliably.

AUTO START

As soon as the electrode touches the tissue, the HF device automatically goes into BICOAG mode.

AUTO STOP

Nelson deluxe provides a preselectable automatic shut-off function for both monopolar and bipolar coagulation. This function delivers optimal coagulation without charring and at the same time greatly reduces the incidence of instrument tips sticking together.

Using AUTO START and AUTO STOP conjointly in bipolar coagulation mode eliminates the need to operate the foot pedal.

At Aesculap, nothing takes precedence over safety.

The Nelson deluxe is equipped with all the safety functions that you expect from today's top-quality medical equipment.

Safety

Automatic self-test

Each time the device is activated, it automatically runs a self-test of all functions. Attachments are also checked during this self-test.

Continuous output management

Continuous index vs. actual value comparison of HF output. If Nelson deluxe detects an error, HF activation is immediately blocked.

Permanent Dynamic Monitoring (PDM)

When divided indifferent electrodes are applied, the PDM system continuously monitors the connection between the indifferent electrode and the device as well as the correct application vis-à-vis the patient. In every instance, if Nelson deluxe detects an error, HF activation is immediately interrupted.

Output suppressor

No fluctuations in power output can occur while the HF device is in operation. Conversely, the HF device cannot be activated while device settings are being changed.

Shut-off following sustained operation

Following sustained operation of greater than 30 seconds, the device automatically shuts off. This time setting can be changed in the menu.

Handle monitoring

If both buttons are inadvertently pressed when the handle is activated, Nelson deluxe interprets this as an error.

Error code documentation

Errors are automatically saved in the device memory. This function is helpful in quickly determining the causes of errors when performing monopolar or bipolar procedures.





® *Nelson* deluxe

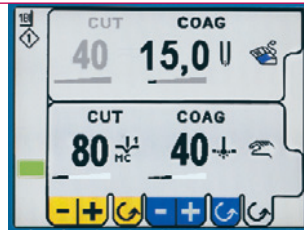
Comfort



The new Aesculap HF device delivers an unprecedented level of user friendliness. All device functions are controlled from a central task bar. A wide variety of integrated functions offers intelligent solutions that make daily work run smoothly.

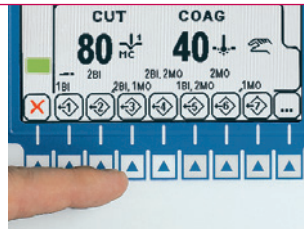
Central information display

The clearest Aesculap information display ever. With this display you have everything in view!



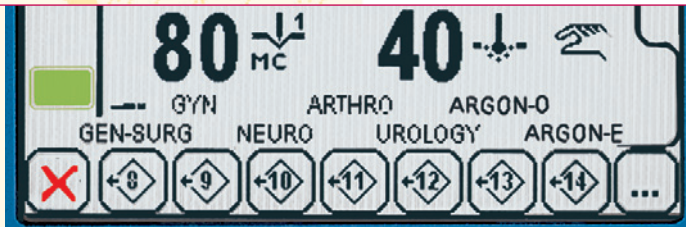
Program memory

Data can be saved separately in each of 14 programs. If the surgeon finds a device setting he or she particularly favours, the setting can be saved with the push of a button.



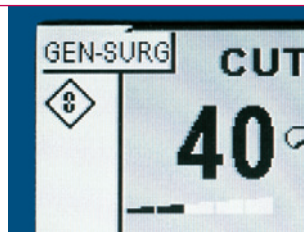
Standard programs

In order to make the surgeon's job easier, before the device leaves the factory it is equipped with seven different memories, containing pre set values provided by our reference surgeons for seven specific disciplines.



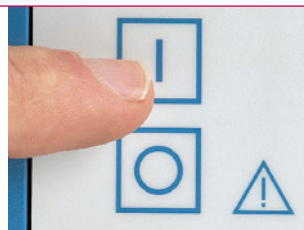
Name it!

An Aesculap world premier! For the first time ever, each individual 'save' can be given whatever name the user wishes (surgeon, discipline, indication...). That's what we mean by ease of use.



Memory functions

The device automatically saves the last settings used. When the device is turned back on, the surgeon can continue working with exactly these same settings.



Fit for the future

With Nelson deluxe, that goes without saying. New functions can be integrated at any time via the RS-232 interface. New technology on demand!



Attachments and ordering information

GN640	Nelson deluxe electrosurgical device, monopolar/bipolar, without power cord or attachments
GN325	Vario double foot switch, explosion-proof, cable 4 m
GN209	Electrode handle with double "fingertip" buttons
GN205	Cable for electrode handle, 5.0 m
GK174R	Set of electrodes containing 12 different electrodes, diam. 4.0 mm, rack and holder
GK107	Disposable split neutral electrode, (package of 50 pieces) for children and adults, 110 cm ²
GN245	Cable for disposable electrodes, 5.0 m
GN073	Cable for bipolar Aesculap instruments
GN202	Cable for monopolar Aesculap instruments with 4 mm connector

Apart from top quality equipment, HF attachments are also an important prerequisite for a successful O.R. Aesculap offers an exceptionally broad range of quality products that is continuously optimized and systematically expanded for new indications.

Our goal is to offer a tailor-made system solution for every need. It is for this reason that we offer a large selection of disposable products in addition to our reusable instruments.

For further information about Aesculap HF attachments, please ask for our special brochure C 304 81.



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Technical data

Article number		GN640
Utility supply		100-240 V \pm 10 %, 50/60 HZ
Max. Power Consumption		418 VA
HF output monopolar	MICROCUT 1 + 2 POWERCUT 1 POWERCUT 2 POWERCUT 3 POWERCUT 4 SEALCUT SOFTCOAG CONTACTCOAG FORCEDCOAG SPRAYCOAG	300 W across 500 Ohm 300 W across 500 Ohm 250 W across 500 Ohm 200 W across 500 Ohm 150 W across 500 Ohm 100 W across 150 Ohm 100 W across 300 Ohm 120 W across 500 Ohm 120 W across 1000 Ohm 120 W across 800 Ohm
HF output bipolar	BICUT 1 BICUT 2 COAG	100 W across 600 Ohm 100 W across 100 Ohm 100 W across 100 Ohm
Frequency		447 kHz
Weight		8.6 kg
Dimensions (W x H x D)		305 x 175 x 305 mm
Safety Class acc. to EN 60601-1		I
Classification acc. to directive 93/42/EEC		IIb
Protection level acc. to EN 60601-1		CF
EMV		EN 60601-1-2
Tested acc. to norm		EN 60601-1 EN 60601-2-2



AESCULAP®

B | BRAUN
SHARING EXPERTISE

Aesculap AG & Co. KG

Am Aesculap-Platz
78532 Tuttlingen
Germany

Phone +49 7461 95-0
Fax +49 7461 95-2600

www.aesculap.de

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