

SYNCHRO HP



MEDICINE AND AESTHETICS

SYNCHRO HP

Vascular Treatments
Hair Removal
Pigmented Lesions
Ablative and Non-Ablative Skin Rejuvenation
Pseudofolliculitis Barbae (PFB)
Acne

**A Complete Range of
Patient-Tailored Dermatological
and Cosmetic Applications**

**DEKA Intelligent Technologies:
Experts From the Start**



The Code of Excellence

SYNCHRO HP

SYNCHRO HP: ADVANCED TECHNOLOGY, POWER AND VERSATILITY

Synchro HP is an invaluable work tool. Its extreme flexibility means that a physician can meet all patients' dermatological and cosmetic needs, including vascular treatments, ablative and non-ablative skin rejuvenation, pigmented lesions, hair removal and the removal of tattoos, with consistently excellent results.

The continuous innovations introduced by DEKA led to this major breakthrough, and Synchro HP is now the best-performing system on the market and the only platform that combines Nd:YAG Long&Short Pulse laser source, pulsed light and Er:YAG handpiece.

"Synchro HP has improved my work in so many ways. Now i can offer my patients a wide range of treatments, tailoring each individual procedure to the specific features of their skin. By consulting the database before each treatment, I am certain that I can operate in complete safety and guarantee the expected results within the scheduled time.

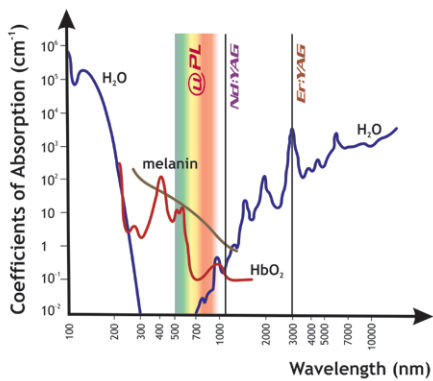
From the very first time I used it, I realized that the Synchro HP treatment protocol database is an invaluable tool. The treatment protocols, developed in close liaison with the manufacturer, have made this database not only an outstanding training instrument, but also a practical support that allows physicians to master all the functions of the platform in a natural manner, starting from day one.

High tech, power, flexibility and versatility: Synchro HP not only allows me to choose from a range of wavelengths, but also to use them in a simple and intuitive manner."

Prof. Paolo Bonan, MD
Department of Dermatology
University of Florence, Italy

MEDICINE AND AESTHETICS

SYNCHRO HP



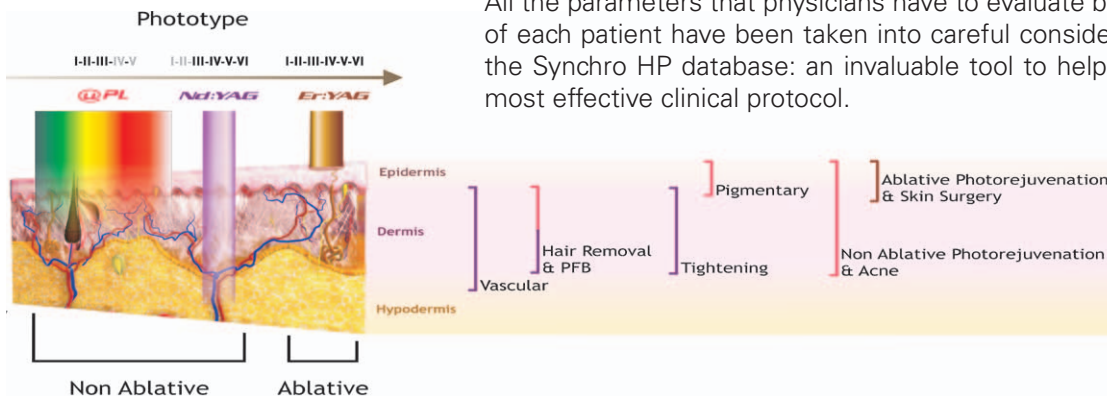
Main skin chromophores absorption spectrum:
Melanin, Water and Oxyhaemoglobin.

THE WIDEST RANGE OF CUSTOMIZED TREATMENTS ON THE MARKET

In 1998 DEKA launched the first long-pulse Nd:YAG laser on the market, and in 2001 the first pulsed light system with UPL technology. Now, after years of research and innovation, Synchro HP represents the outstanding synthesis of DEKA's technological paradigm: the first and only platform in the world that combines three different laser sources and nine pulsed-light handpieces.

Ideal for all dermatological and cosmetic treatments, Synchro HP makes it possible to select the most suitable wavelength, to define the pulse form precisely and to set the most appropriate spot size, depending on the area of treatment.

All the parameters that physicians have to evaluate before treating the skin of each patient have been taken into careful consideration and included in the Synchro HP database: an invaluable tool to help physicians select the most effective clinical protocol.



The different types of treatment are determined by the interaction between different wavelengths and the skin layers.

4	Different types of sources available: Long Pulse & Short Pulse Nd:YAG lasers, UPL Pulsed Light, Er:YAG laser.
20 mm	Maximum spot size – Nd:YAG.
120 J	Maximum energy per pulse – Nd:YAG.
1500 J/cm²	Maximum fluence – Nd:YAG.
Over 27000 W	Maximum peak power – Nd:YAG.
0.2 - 300 ms	The broadest range for the selection of pulse length, enabled by Dual Switch Technology – Nd:YAG.
7	Handpieces with different spot sizes and "top hat" fluence emission – Nd:YAG.
Over 450	Protocols dealing with Dermatology and Aesthetic Medicine.

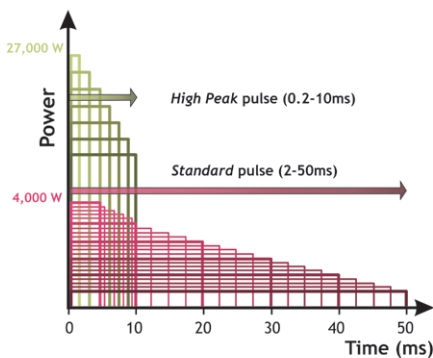
GREAT ENERGY YIELDS GREATER RESULTS

Technology Means Power

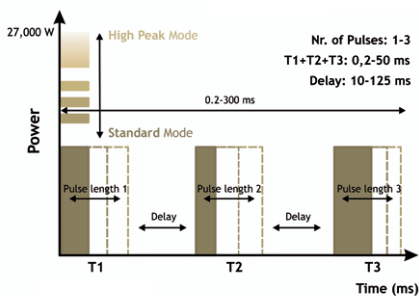
Dual Switch Technology is an exclusive technology developed by DEKA that enables physicians to utilize two different modes of energy emission.

High Peak – Short Pulse Mode The energy is delivered rapidly with high peak power: Synchro HP goes beyond 27,000 W, the top power for Nd:YAG systems. The high power allows to operate on fine, pale skin and on collagen fibers in non-ablative photorejuvenation.

Standard – Long Pulse Mode The emission of energy is controlled and calibrated to the duration of the longer pulses. Ideal for darker skin and for larger blood vessels, the Long Pulse mode is the perfect embodiment of a groundbreaking idea.



The Dual Switch Technology is particularly effective in the treatment of hair removal, vascular lesions and non-ablative photorejuvenation.



Fine Tuning Pulse Control.

Technology Means Flexibility

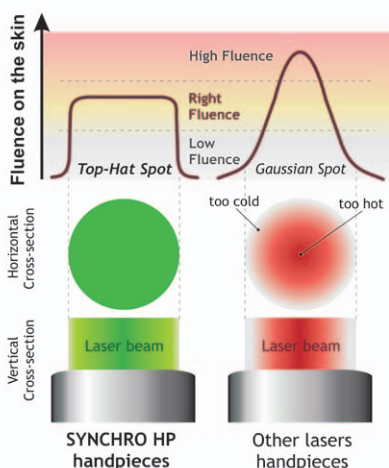
The exclusive Fine Tuning Pulse Control system allows to set all the treatment parameters with the greatest ease. Form, length, delay, quantity of energy and number of pulses can be set to suit the specific demands of each patient.

The tailoring of each treatment ensures the excellence of the result: from fine, fair skins to those that are thicker and darker, from slender superficial veins to those that are deeper and more extensive, from fair to darker phototypes.

Technology Means Safety

To reduce pain and side effects to a minimum, DEKA added the Top-Hat Spot Size to the benefits of Fine Tuning Pulse Control; another technological innovation that guarantees a consistently even fluence over the entire area of the spot.

Even when the dimensions of the spot vary, physicians can still operate in complete safety since there is never any risk either of overexposing the patient's skin or of not irradiating it sufficiently because the fluence is too weak.



Top Hat Spot Size.

U-SHAPE PULSED LIGHT: UNIQUE, EXCLUSIVE, PATENTED

The UPL handpieces boast the truly unique features of the exclusive patented UPL technology: longer bulb life, larger treatment area, more effective transfer of the energy from the source to the skin.

The UPL handpiece three different wavelengths further enhance the versatility of the hair removal and photorejuvenation treatments, making it possible to treat even darker phototypes. The integrated cooling system guarantees the patient's safety and comfort.

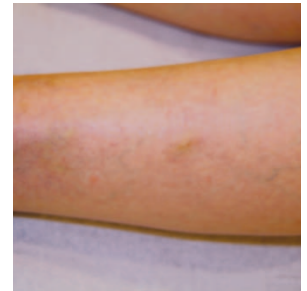
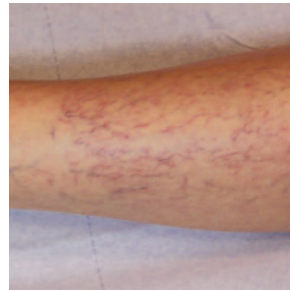
Laser Handpiece: Minimum Space, Maximum Technology

The miniature, ergonomic laser handpiece further enhances the range of Synchro HP applications. The Er:YAG source allows for targeted ablative rejuvenation and minor dermatological surgical treatments.



Telangiectasias of the nose with Nd:YAG

Courtesy of L. Mazzi, MD - Verona, Italy.



Telangiectasias of the lower limbs with Nd:YAG

Courtesy of L. Mazzi, MD - Verona, Italy.



Hirsutism treated with Nd:YAG

Courtesy of A. Le Pillouer - Prost, MD - Marseille, France.



Hair removal with Intense Pulsed Light

Courtesy of C. Dominici, MD - Perugia, Italy.



Hand Photorejuvenation with Intense Pulsed Light

Courtesy of: P. Campolmi, MD - G. Cannarozzo, MD - P. Bonan, MD. Florence, Italy.



Skin Resurfacing with Er:YAG

Courtesy of: P. Campolmi, MD - G. Cannarozzo, MD - P. Bonan, MD. Florence, Italy.

TECHNICAL DATA

Nd:YAG Laser Module

Laser Type	Nd:YAG LP & SP
Wavelength	1064 nm
Energy per Pulse	120 J (max.)
Peak Power	27,000 W (max.) – 500 W (min.) [Dual-Switch Technology]
Pulse Duration	From 0.2 to 10 ms (High Peak – Short Pulse) From 2 to 50 ms (Standard – Long Pulse)
Delay between Pulses	From 10 to 125 ms
Number of Pulses	From 1 to 3
Repetition Rate	Single pulse – 10 Hz (max.)
Spot Sizes	1,5 (optional), 2,5, 5, 7, 10, 15, 20 mm [Top-Hat Fluence Emission Technology and Automatic Spot Size Recognition System]
Fluence	700 J/cm ² (max.) [1.500 J/cm ² with the optional 1.5 mm spot size handpiece]
Control Panel	LCD Colour Touch Screen
Laser Emission Control	Footswitch and Fingerswitch
Aiming Beam	Green Laser, 3 mW @ 532 nm
Electrical Requirements	230 Vac / 28 A (max.) / 50-60 Hz
Dimensions & Weight	115 cm (H), 53 cm (W), 106 cm (D), 170 Kg

UPL Handpieces (U-shape Pulsed Light)

Source	Xe Lamp
Spectrum of Emission	500-950 nm; 550-950 nm; 650-950 nm
Pulse Duration	3-40 ms (1-3 pulses)
Delay between Pulses	10-100 ms
Repetition Rate	1-6 s
Treatment Area	46 x 18 mm (8.3 cm ²) 46 x 10 mm (4.6 cm ²)
Fluence	2.5 - 18 J/cm ² (8.3 cm ²) 4 - 32 J/cm ² (4.6 cm ²)
Contact Skin Cooling	Integrated
Guaranteed Pulses	60,000

Er:YAG Laser Handpiece

Laser Type	Er:YAG
Wavelength	2940 nm
Spot Sizes	2.5 / 4 mm
Pulse Duration	Short: 600 µs Long: 1000 µs
Fluence	2.4 – 15 J/cm ²
Repetition Rate	5 – 10 Hz
Energy per Pulse	Up to 1 J



VASCULAR TREATMENTS - HAIR REMOVAL - PIGMENTED LESIONS
ABLATIVE AND NON-ABLATIVE SKIN REJUVENATION
PSEUDOFOLLICULITIS BARBAE (PFB) - ACNE

SYNCHROHP

CE
0459



The Code of Excellence

Dealer stamp



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DEKA The Code of Excellence
A spin-off of the Ei.En. Group, DEKA is a world-class leader in the design and manufacture of lasers and light sources for applications in the medical field. DEKA markets its devices in more than 80 countries throughout an extensive network of international distributors as well as direct offices in Italy, France, Germany, Japan and USA. Excellence is the hallmark of DEKA's experience and recognition garnered in the sphere of R&D in over thirty years of activity. Quality, innovation and technological excellence place DEKA and its products in a unique and distinguished position in the global arena. DEKA manufactures laser devices in compliance with the specifications of Directive 93/42/EC and its quality assurance system, certified by is in accordance with the ISO 9001 and ISO 13485 standards.