

SYNCHRO REPLA:Y

THE FASTEST AND MOST POWERFULL ALEXANDRITE LASERS IN THE WORLD: 3 HZ AND 125 WATTS

Physicians worldwide agree that the Alexandrite and Nd:YAG wavelengths are the most efficacious for hair removal treatments. Today DEKA anticipates the future introducing a NEW Alexandrite source: the fastest and most powerful in the world. The fastest laser because it works up to 3 Hz, while the standard is still 2 Hz!

The most powerful laser because it reaches 125 watts, at least 25% more than any other laser in the market! Other than these increased performances the Alexandrite laser source can deliver energetic pulses with pulse length under 2 ms, down to 0.2 ms. Another incredible advantage for skin rejuvenation and pigmented lesions treatments.

"I have been a laser dermatologist for more than 10 years and I started utilizing the Synchro REPLA:Y platform for my practice lately. I previously used a KTP laser for vascular pathologies and a Diode laser for hair removal. I firmly believe that having more than a wavelength allows me to expand treatment indications: Alexandrite and Nd:YAG wavelengths are complementary for getting fast and safe results with any type of skin color, especially with tanned skin. Furthermore, superficial heliodermatitis and vascularities can be easily treated with pulsed light. Finally, I consider Synchro REPLA:Y as an indispensable tool to provide the widest range of hair removal treatments, given the unrivalled power levels, speed, and spot sizes. Synchro REPLA:Y flexibility allows me to address all patients needs and to expand my practice at once!"

Marc Patarin, MD
Dermatologist - Challans - France

TECHNICAL DATA

Alexandrite Laser Modules

Models	One 0.7 and 1.7	Premium 1.4 and 2.4
Laser Type	Alexandrite	
Wavelength	755 nm	
Energy per Pulse	35.5 J (max.)	60 J (max.)
Laser Power	70 W (max.)	100 W (max.)
Pulse Duration	From 2 to 50 ms	
Delay between Pulses	From 2 to 50 ms (single pulse) From 2 to 40 ms (twin pulse)	
Number of Pulses	1 or 2	
Repetition Rate	1, 1.5 and 2 Hz	
Spot Sizes (Customized Selection)	From 5 to 16 mm	From 5 to 20 mm
Fluence	Up to 55 J/cm ²	

Nd:YAG Laser Module One 1.7 and Premium 2.4 Models

Laser Type	Nd:YAG	
Wavelength	1064 nm	
Energy per Pulse	58.5 J (max.)	
Laser Power	50 W (max.)	
Peak Power	Up to 5,000 W (High Peak Mode) or Up to 2,500 W (Standard Mode)	
Pulse Duration	From 0.5 to 12 ms (High Peak Mode) or From 2 to 35 ms (Standard Mode)	
Delay between Pulses	From 10 to 125 ms (single pulse) or From 2 to 40 ms (multiple pulse)	
Total Pulse Length	From 0.5 to 262 ms (High Peak Mode) or From 2 to 285 ms (Standard Mode)	
Number of Pulses	Up to 3	
Repetition Rate	From 0.3 to 10 Hz	
Spot Sizes	From 2.5 to 15 mm (Customized Selection)	
Fluence	Up to 700 J/cm ²	

FT Pulsed Light Handpiece (Optional for All One and Premium Models)

Source	Xe Lamp	
Spectrum of Emission	500-1200 nm; 520-1200 nm; 550-1200 nm; 600-1200 nm; 650-1200 nm	
Energy per Pulse	160 J (max.)	
Pulse Duration	From 3 to 8 ms	
Delay between Pulses	From 5 to 50 ms	
Total Pulse Length	From 3 to 124 ms	
Number of Pulses	Up to 3	
Repetition Rate	2 seconds (minimum)	
Treatment Area	48 x 13 mm (6.2 cm ²) 24 x 13 mm (3.1 cm ²) - optional	
Fluence	Up to 25 J/cm ²	
Skin Cooling System	Integrated Sapphire Cooling (Temp. down to 4°C)	

General System Specifications

Aiming Beam for Lasers	Green Diode Laser @ 532 nm - 4 mW	
Emission Control	Fingerswitch or footswitch	
Laser Handpiece Cooling	Choose between the Integrated Skin Cooling SmartCooler (with temp. down to 4°C) and the External Cool-air Generator SmartCryo 6 with the Handpiece Adapter	
Database Lines	More than 250	
Dimensions	120 (H) cm x 49 (W) cm x 100 (D) cm	
Weight	150 kg	
Electrical Requirements	230 Vac - single phase - 50/60 Hz 22 A (One models) 30 A (Premium models)	

**HAIR REMOVAL - VASCULAR TREATMENTS
PIGMENTED LESIONS - NON-ABLATIVE SKIN REJUVENATION - TOENAIL
FUNGUS (ONYCHOMYCOSIS) - PSEUDOFOLLICULITIS BARBAE (PFB) - ACNE**

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**SYNCHRO
REPLA:Y**
DEKA

The Code of Excellence



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DEKA The Code of Excellence
A spin-off of the E.E. 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 France, Germany, U.S., Japan, and Italy. 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.

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SYNCHRO REPLA:Y



MEDICINE AND AESTHETICS

SYNCHRO REPLA:Y
One 0.7 and 1.7, Premium 1.4 and 2.4

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

**The Newest Platform for Hair
Removal Specialists**

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

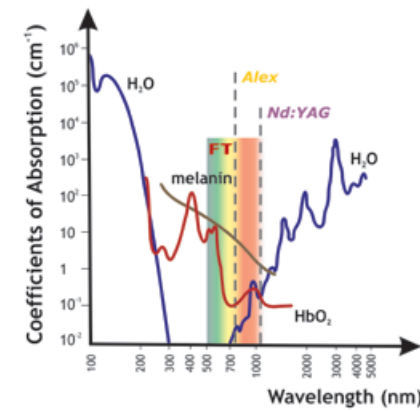
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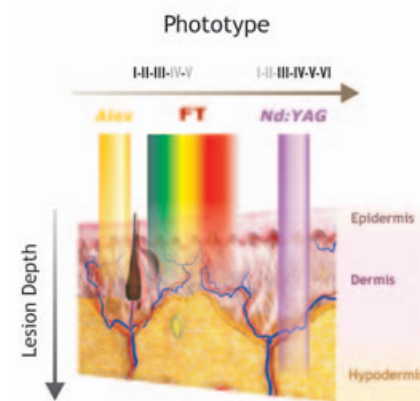
MEDICINE AND AESTHETICS

SYNCHRO REPLA:Y

One 0.7 and 1.7, Premium 1.4 and 2.4



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



The interaction of the different wavelengths and skin layers determines the appropriate treatment choice.

COMPLETE, VERSATILE, EASY TO USE: A PLATFORM FOR TRUE SPECIALISTS

Synchro REPLA:Y offers eight different configurations to specifically address the needs of medical clinics.

Synchro REPLA:Y Premium 1.4 and 2.4

These Premium main configurations involve the use of a powerful Alexandrite source (100 W) with the option of a 50 W Nd:YAG Long Pulsed laser (Model 2.4). The characteristics of a such energetic Alexandrite source are the best choice for accomplishing the safest and fastest hair removal procedures. Exploiting its technological leadership, DEKA was the first company to extend the fractioning of the pulse to the Alexandrite source. Choosing the top model Premium 2.4, with both Alexandrite and Nd:YAG lasers, physicians can therefore offer the broadest range of treatments in complete safety: hair removal in fair and dark phototypes, treatment of small to medium vascular lesions, non-ablative skin rejuvenation and removal of superficial pigmented lesions.

Synchro REPLA:Y One 0.7 and 1.7

Alexandrite is universally recognised as the most effective source for hair removal in fair phototypes. This configuration allows the professional to address the demands of the patient target utilizing an high performance Alexandrite laser system (with 70 W instead of 60 W usually available) with the option of a 50 W Long Pulse Nd:YAG laser (Model 1.7). The most effective technology on the market!

Synchro Repla:y Premium 1.4.2 and 2.4.2, Excellium 3.4 and HP

Other four and more powerful systems are available, please refer to the specific catalog.

4	Different types of source available: Alexandrite laser; Nd:YAG Long Pulse (Standard Mode of emission) laser; Nd:YAG Short Pulse (High Peak Mode of emission) laser; FT pulsed light.
20 mm	The largest spot size in the world for Alexandrite and Nd:YAG lasers.
1st	The first and only Alexandrite laser with fractioned emission of the pulse.
10	Choose up to ten handpieces on board for the laser sources (customized selection), with Top-Hat Spot Size technology and an automatic recognition system.
10	Interchangeable filters for the FT pulsed light handpiece. It takes only a moment to adjust the emission to the specific application and the patient's phototype.
Over 270	Protocols dealing with dermatology and aesthetic surgery.
Cooling	Choose between the contact skin cooling system integrated in all the laser and pulsed light handpieces and the external cool-air generator with the laser handpiece adapter.



FT pulsed light handpiece with 5 interchangeable filters: A complete range of wavelengths at the physician's fingertips.



The colour touch screen of Synchro REPLA:Y has been restyled for enhanced user friendliness: All functions are clearly visible, accessible and easy to use.



Adapter for Cryo air cooling, smaller dimensions for an easier handling.

INNOVATION AT THE SERVICE OF SIMPLICITY

Synchro REPLA:Y with the FT Pulsed Light Handpiece

The versatile FT lamp can be added to the system at any time, enhancing the user capability in treating superficial vascular and pigmented lesions. The FT lamp covers a large treatment area (6.3 cm²) which can be cooled down to 4° C. In addition, a special system configuration allows the physician to change the filter of the wavelength to adapt the light emission to the treatment and the patient's skin type. There are also special filters that reduce the surface treatment to 3.1 cm² in order to adapt the emission to smaller areas.

Simple to Use and Know-How at your Fingertips with the Protocol Database

The clinical protocols included in the database cover a comprehensive range of treatments. By following the treatment settings validated by dermatologists and researchers, the physician can select the correct pulse parameters. In this way, the database guides professionals in the simple and safe selection of the most effective protocol.

Long & Short Pulse: Enhanced Potential of the Nd:YAG Laser

The Long & Short Pulse technology offers the physician the opportunity to work with two different pulse emission modes corresponding to the Standard Mode and the High Peak Mode. By selecting one of them, the professional can guarantee excellent results for patients in all applications: hair removal, vascular lesions and photorejuvenation.

Constant Fluence with the Top Hat Spot Size

The Top Hat Spot Size is an indispensable device for working in complete safety. Certain of a consistently even fluence over the entire area of the spot, the physician eliminates all risks of overexposing the skin or not irradiating it sufficiently because the fluence is too weak.

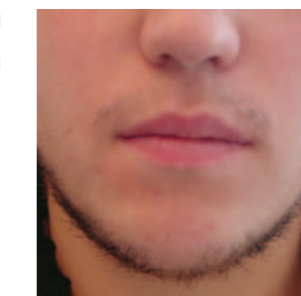
Total Comfort with the New Cooling System

DEKA has incorporated an extremely functional skin cooling technology in all its handpieces. Designed to innovative criteria, the Contact Skin Cooling system SmartCooler reduces recovery time, minimising the invasiveness of treatments and making them practically pain-free. Total comfort for the patient, maximum safety for the physician.

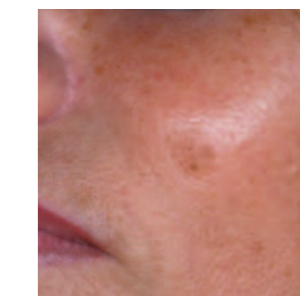
A special and small adapter for air cooling is available (see Figure).

LASER DEPTH AND PULSED LIGHT FLEXIBILITY COMBINED IN A COMPLETE PLATFORM

The deep action of the laser source is sustained and optimised on the surface by the FT pulsed light handpiece. The FT pulsed light features an innovative interchangeable filter system. Physicians can select the most suitable wavelength for the type of application or patient's phototype simply by replacing the filter, without changing the entire handpiece. Maximum versatility, maximum flexibility of use: changing the filter is a quick and simple operation which enables the physician to use this platform for all photorejuvenation and hair removal treatments.



Alexandrite Laser
Courtesy of N. Zerbini, MD - Pavia, Italy.



Alexandrite Laser
Courtesy of M. Patarin, MD - Challans, France



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



Nd:YAG Laser (Congenital angioma resistant to KTP laser treatment)
Courtesy of M. Patarin, MD - Challans, France.



FT Pulsed Light Handpiece
Courtesy of M. Patarin, MD - Challans, France.



FT Pulsed Light Handpiece
Courtesy of P. Campolmi, MD - G. Cannarozzo, MD - P. Bonan, MD. Florence, Italy.