



## **SYNCHRO REPLA:Y**

**First Alexandrite at 5 Hz.  
Now Even Faster with  
Moveo Technology!**

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

**DEKA**  
Innate Ability



**Synchro REPLA:Y**

**New:  
Alex at 5 Hz!**



## **The fastest and most powerful Alexandrite laser in the world: 5 Hz and 125 W**

DEKA has anticipated the future introducing the fastest and most powerful Alexandrite source ever created! The fastest laser because it works up to 5 Hz using the exclusive Moveo Technology and up to 3 Hz in traditional mode, while the standard is still 2 Hz! The most powerful laser because it reaches 125 W, at least 25% more than any other laser in the market! Aside from these increased performances 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 15 years and started utilizing the Synchro REPLA:Y platform for my practice many years ago. 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 enables 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 patients' needs and expand my practice at once! ”*

Marc Patarin, M.D.  
Dermatologist - Challans, France



## World's Most Powerful Systems for Hair Removal

**Synchro REPLA:Y** is a breakthrough laser platform offering maximum safety and management options for all skin type patients by using an Alexandrite laser and/or a high power Nd:YAG laser, in combination with the flexible and optional pulsed lamp DEKA FT source. The benefits of **Synchro REPLA:Y** enables physicians to adapt the characteristics of all its available sources for a multi-applications approach (mainly for hair removal, vascular and pigmented lesions treatments).

**Synchro REPLA:Y** is a product especially designed for reaching the right range of energies and frequencies for the most effective and fastest hair removal treatment. In brief, *the top worldwide laser system for speed and power!*

DEKA is constantly seeking ways to fulfil its commitment for technical and clinical innovations.

**A complete  
wavelengths range  
at physician's  
fingertips.**



### Synchro REPLA:Y's PLUS

5 Hz working frequency	The most powerful Alexandrite laser source worldwide is today even faster with the innovative <b>Moveo Technology!</b> Moreover, in traditional hair removal mode the incredible repetition rate arrives up to 3 Hz while standard working frequency for competitors is still 2 Hz! Speedier for faster treatments.
125 W	More power for the Alexandrite laser to reach higher fluences with new repetition rates up to 3 Hz! At least <b>25%</b> more powerful than any other system on the market!
180 W	More power also for the new Nd:YAG laser source, <b>40%</b> more than any other systems on the market!
24 mm	The largest spot size in the world for Alexandrite and Nd:YAG lasers.
12+1	Choose up to twelve handpieces on board for the laser sources (customized selection) besides the <b>Moveo handpiece:</b> the newest DEKA proprietary technology for even faster hair removal treatment.
4	Different types of source available: Alexandrite laser; Nd:YAG Long Pulse (Standard Mode Emission) laser; Nd:YAG Short Pulse (High Peak Mode of emission) laser; FT pulsed light with 10 interchangeable filters.
1	The first and only Alexandrite laser with fractionate pulse emission.
Over 300	Protocols for dermatology and aesthetic surgery.
Cooling	Choose between the contact skin cooling system integrated in the laser and pulsed light handpieces and the external cool-air generator with laser handpiece adapter.



## Powerful, Fast, Complete: Platform for True Specialists

Synchro REPLA:Y has nowadays the most powerful (125 W) and fastest (5 Hz) Alexandrite laser for the first time together with unrivalled DEKA Nd:YAG lasers characteristics (180 W - 24 mm spot size).  
Synchro REPLA:Y offers four different configurations to meet the needs of medical clinics. All of them are available with **Moveo Technology**.

### Synchro REPLA:Y Excellium Systems

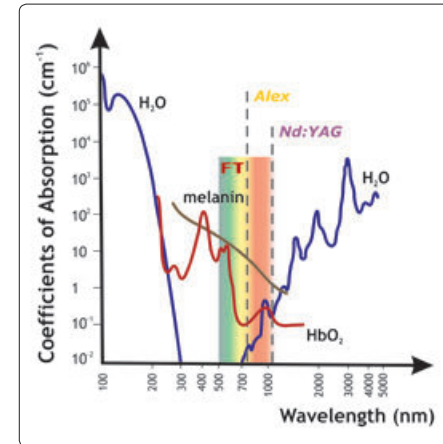
The two most powerful systems of Synchro REPLA:Y's series:

- **Excellium 3.4**, the most powerful worldwide system for hair removal offering an incredible laser platform with the fastest Alexandrite laser (frequency of traditional emission up to 3 Hz where competitors are still offering 2 Hz; with Moveo up to 5 Hz) together with a 180 W Nd:YAG laser;
- **Excellium HP**, newest version of Synchro HP, a 180 W Nd:YAG laser with incredible pulse characteristics. Both systems can work along with a large number of handpieces, from 2.5 (only for Nd:YAG) to 24 mm and the proprietary Moveo handpiece. Customizable treatment parameters to match patients' clinical needs and for any skin type.

### Synchro REPLA:Y Premium 2.4.2 and 1.4.2

These new Premium configurations offer the most optimal and powerful Alexandrite source (125 W) with the option of a 70 W Nd:YAG Long Pulsed laser (Model 2.4.2):

- **Premium 2.4.2**, a combined system with the most powerful Alexandrite source (3 Hz / 5 Hz - 125 W) together with a 70 W Nd:YAG laser. For all users willing to get the maximum performances in Alexandrite hair removal and an efficient vascular Nd:YAG.
- **Premium 1.4.2**, a system offering only the most powerful Alexandrite laser (3 Hz / 5 Hz - 125 W).



### Ease of 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.



## Moveo Technology: Simply Extraordinary!

The **Moveo** handpiece with the sapphire tip, developed by DEKA's R&D, is the killer application in medical laser hair removal. It is a new idea based on 4 fundamental concepts:



effectiveness



speed



safety



simplicity

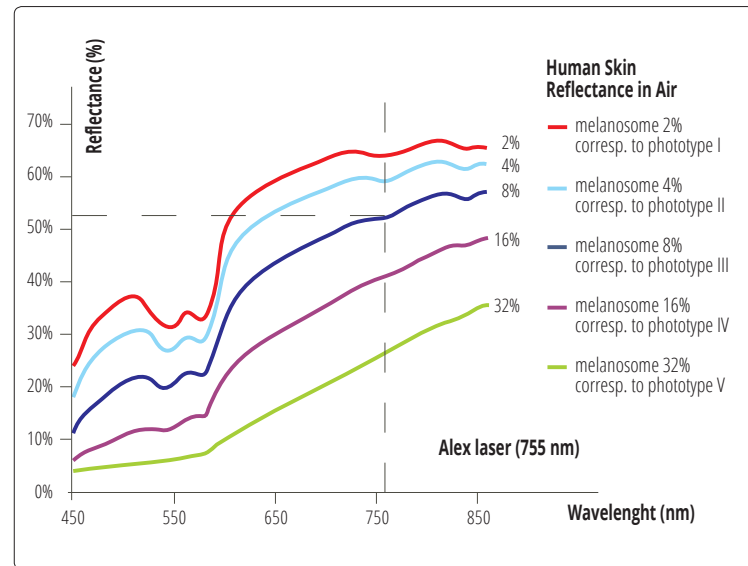
### The Effectiveness of Technological Innovation

Moveo handpiece for hair removal application is available for both Alex and Nd:YAG laser, but it is at 755 nm that it shows its extraordinary innovation. The energy emitted by a laser system with wavelength visible and near infrared radiation is largely reflected by the skin. The graph illustrates the reflectivity of the skin at various wavelengths and melanin content. For instance, the 755 nm Alexandrite laser wavelength demonstrates the percentage of reflection with melanin content of 8% (corresponds to phototype III) is over 50%. This is a significant portion of energy lost during the treatment, which cannot be used for therapeutic purposes.

This is due to the high variation of reflectance between the skin and the surrounding air. The Moveo handpiece was designed to solve this problem. DEKA has developed a technology using a sapphire tip that **drastically reduces the amount of energy reflected by the skin**, with an **efficiency that has never been seen until now!**

### All the Advantages but without Limitations!

DEKA has overcome limitations and difficulties of the traditional Alexandrite for hair removal while retaining all the advantages. The Moveo Technology uses simple, even movements over specific areas, removing unwanted hair due to its **20 mm sapphire tip size**. The repeated passes over small areas, cause gradual heating of the vital parts of the hair leading to its destruction in a way **that is totally painless for the patient and side-effects free such as burning or discolouring**.





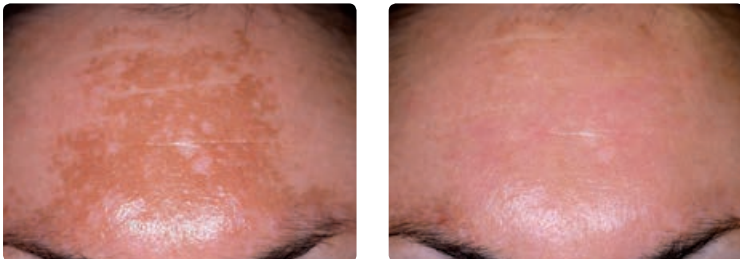
## Clinical Cases



Alexandrite Laser – Moveo Technology. Before and a month and a half after only one treatment. You can clearly recognize the treated area (hairless) from the untreated contiguous to tattoo (with hair).  
*Courtesy of P. Bonan, M.D. and M. Troiano, M.D. – Florence, Italy.*



Alexandrite Laser  
*Courtesy of M. Patarin, M.D. – Challans, France.*



FT Pulsed Light Melasma.  
*Courtesy of M. Patarin, M.D. – Challans, France.*



Nd:YAG Laser – Moveo Technology. Before and two months after only one treatment.  
*Courtesy of P. Bonan, M.D. and M. Troiano, M.D. – Florence, Italy.*



Nd:YAG Laser and FT Pulsed Light Vascular lesion.  
*Courtesy of M. Patarin, M.D. – Challans, France.*

### **Synchro REPLA:Y with 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 cm<sup>2</sup>) which can be cooled down to 4° C. Special filters reduce the surface treatment to 3.1 cm<sup>2</sup> in order to adapt the emission to smaller areas. It takes a moment to change the filter, chosen among the 5 available ones, and adjust the emission to the specific application and patient's phototype.



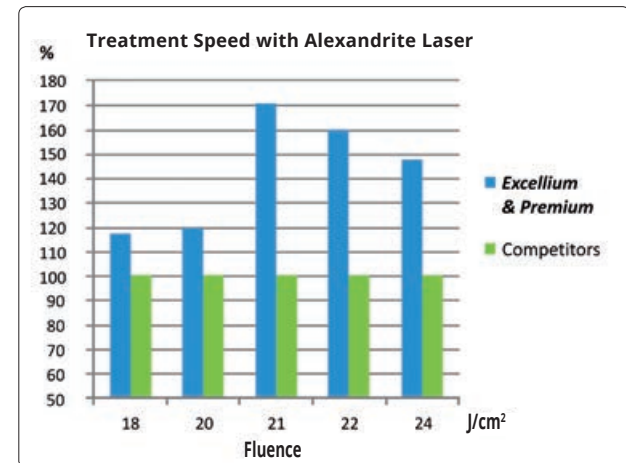
## Technical Data

Alexandrite Laser Module		Nd:YAG Laser Module	
Models	Premium 1.4.2 and 2.4.2; Excellium 3.4	Premium 2.4.2	Excellium 3.4 and HP
Laser Type	Alexandrite	Nd:YAG	
Wavelength	755 nm	1064 nm	
Energy per Pulse	63.5 J (max.)	70 J (max.)	120 J (max.)
Laser Power	125 W (max.)	70 W (max.)	180 W (max.)
Pulse Duration	From 0.2 to 50 ms (single pulse) From 0.4 to 80 ms (twin pulse)	From 0.2 to 10 ms (High Peak Mode) From 2 to 30 ms (Standard Mode)	0.2 – 10 ms (High Peak Mode) 2 – 50 ms (Standard Mode)
Delay between Pulses		From 10 to 125 ms	
Total Pulse Length	From 0.2 to 376 ms	From 0.2 to 260 ms (High Peak Mode) From 2 to 280 ms (Standard Mode)	From 0.2 to 260 ms (High Peak Mode) From 2 to 300 ms (Standard Mode)
Number of Pulses	1 or 2	Up to 3	
Repetition Rate	Up to 10 Hz	From 0.3 to 10 Hz	
Spot Sizes (optional)	From 5 to 24 mm; Moveo handpiece (Customized Selection)	From 2.5 to 20 mm; Moveo handpiece (Customized Selection)	From 2.5 to 24 mm; Moveo handpiece (Customized Selection)
Fluence	From 2 to 250 J/cm <sup>2</sup>	Up to 1,400 J/cm <sup>2</sup>	Up to 1,500 J/cm <sup>2</sup>

### Unrivalled Treatment Speed!

The new **Synchro REPLA:Y** offers the highest treatment speeds on the market.

“Treatment speed” is here defined as the ability of a hair removal system to cover a surface in a prefixed time. Considering 100% the speed to cover a fixed area by competitors alexandrite (green histogram), the REPLA:Y alex (blue histogram) always goes faster, with its speed ranging from about 20% more (when the selected fluence is 18 J/cm<sup>2</sup>) up to 70% when the selected fluence is 21 J/cm<sup>2</sup>. To better evaluate the importance of this greater speed take in consideration that a whole leg has an average surface of 3,000 cm<sup>2</sup>!



# Technical Data

## Moveo Handpiece

Laser Type	Alexandrite (main recommendation). Also suitable for Nd:YAG
Wavelengths	755 nm (main recommendation) & 1064 nm
Fluence Range	Up to 8 J/cm <sup>2</sup>
Frequency	Up to 10 Hz
Pulse Structure	3 simple pulses: Soft, Medium, High
Sapphire Tip Diameter	20 mm
Software	Integrated clinical database
Laser Handpiece Cooling	Integrated contact skin cooling
Weight	approx. 280 g.

## FT Pulsed Light Handpiece (Optional for All Synchro REPLA:Y Models)

Source	Xe Lamp
Spectrum of Emission	500-680 nm & 850-1200 nm; 520-1200 nm; 550-1200 nm; 600-1200 nm; 650-1200 nm..
Energy per Pulse	156 J (max.)
Pulse Duration	Single Pulse from 3 to 20 ms. Multipulse 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 (min.)
Treatment Area	48 x 13 mm (6.2 cm <sup>2</sup> ). 23 x 13 mm (3.0 cm <sup>2</sup> ) (Optional)
Fluence	Up to 25 J/cm <sup>2</sup>
Skin Cooling	Integrated Sapphire Cooling

## General System Specifications

Models	Premium 2.4.2 and 1.4.2, Excellium 3.4 and HP
Aiming Beam for Lasers	Green Diode Laser @ 532 nm - 4 mW
Emission Control	Fingerswitch or footswitch
Laser Handpiece Cooling	Integrated Skin Cooling
Protocols Database	More than 300
Dimensions	120 (H) cm x 49 (W) cm x 100 (D) cm
Weight	150 kg
Electrical Requirements	230 Vac - single phase 50/60 Hz; 32 A



**CAUTION** - Visible and invisible laser radiation. Avoid eye or skin exposure to direct or scattered radiation. Class 4 laser product.

This brochure is not intended for the market of USA.

**DEKA**  
Innate Ability

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**SYNCHRO**  
**REPLA:Y**

Dealer stamp



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### DEKA Innate Ability

A spin-off of the El.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, Japan and USA. DEKA manufactures laser devices in compliance with the specifications of Directive 93/42/EEC and its quality assurance system is in accordance with the ISO 9001 and ISO 13485 standards.

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