

CO₂ Fractional Laser

Model: PC040-D

FEATURES AND ADVANTAGES

- *Independently developed TEM₀₀ mode laser tube (patented)*
- *Magic, Single, Repeat pulse and CW. operation modes*
- *Fractional laser (scanner) technology*
- *Discrete scanning technology*
- *Smart variable treatment graphics*
- *Power-on self-test, automatic failure alarm and diagnosis*

Features of CO₂ Fractional Laser

Fractional laser treatment works by targeting both the epidermis and dermis. It does this by delivering a laser beam that is divided into thousands of tiny but deep columns of treatment into the skin. These are called microthermal treatment zones (MTZs). Within each MTZ old epidermal pigmented cells are expelled and penetration of collagen in the dermis causes a reaction that leads to collagen remodeling and new collagen formation. By using MTZs, the laser targets and treats intensively within the zone whilst surrounding healthy tissue remain intact and unaffected. This fractional treatment results in a faster healing process than if all tissue in the treatment area was exposed to the laser.

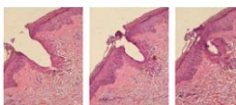
Fractional laser treatment can be used on any part of the body. It is usually used for the treatment of facial lines and wrinkles (rhytides) and skin pigmentation associated with photoaging, surgical and acne scarring, and chloasma.

CO₂ laser has good function of epidermis gasification, which is effective to epidermis resurfacing and the penetrability of CO₂ laser is deeper than that of Er:YAG Laser, the thermal stimulation is stronger, so CO₂ laser is the best choice for fractional laser treatment.

Magic Pulse: High energy, Short Pulse

- Ablates tissue quickly and provides hemostasis
- Delivers four times more energy per pulse than the super-pulse laser
- Results in more new collagen formation than the super-pulse laser

Immediate Volume Reduction



Each laser pulse ablates a column of tissue causing volumetric skin reduction. The ablation removes surface discolorations and deposits heat deep in the dermis. The deep heating causes immediate collagen contraction and long-term collagen remodeling.



Easy to Operate

The scanner is applicable for laser surgery, the doctor who operates the scanner is not required to have a complicate training course for operating steps. Instead, the doctor only needs to select the figure of treatment, then set up the most basic parameter and then start the treatment. The operation of scanner is easy so the doctor could serve the patient

Variable Treatment Graphics

Adjustable shapes, sizes and spacing

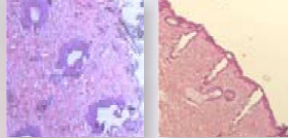


Discrete Scanning Technology

Discrete scanning means to scan out the selected figure randomly. When the laser beam radiates on the skin, heat will accumulate and may injure the surrounding normal tissue. Discrete scanning could help to release heat as quickly as possible and reduce the unwanted thermal effects to the greatest extent.

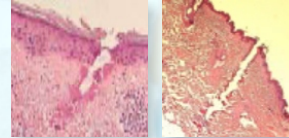
Customizable Treatment

Customized Coverage
5-100% ablation

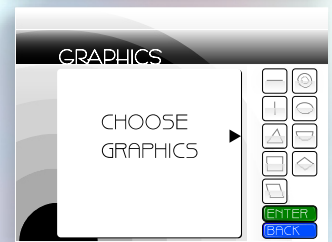


Customize treatments for each patient based on their needs by selecting the density of tissue treated. Only the Magic Pulse gives the flexibility of 5-100% coverage in a single pass.

Customized Depth
50-2000 um



Target dyschromia, fine lines, deep wrinkles and scars by choosing the depth of ablation.



Clinical Case Studies

Freckles / Spots Removal



SCAR



Wrinkle Removal



PC040-D (Fractional Laser)

Scanner Technical Specification

Wavelengths	10.6microns
Mode Structure	TEM ₀₀
Power to tissue	40W
Magic pulse peak power	500W
Laser operation modes	Fractional, Magic, Single, Repeat Pulse & CW.
Aiming beam	3mW Diode
Beam delivery system	7-joint spring-balanced articulated arm
Working radius	130cm
Cooling system	Water closed-cycle
Control system	LCD touch screen, footswitch
Warranty	1 year
Electrical	230VAC/50Hz or 120VAC/60Hz
Package dimensions	128x57x85cm ³
Gross weight by carton	95kg

Scanner Technical Specification

Dot quantity	1-10000 dots at most
Working mode	Fractional (Magic Pulse Technology)
Condenser focus	F=70mm
Spot size	Min: 0.15mm or 0.2at the focus
Interval Between 2 Centers	0.2-2mm
Scanner Graphics	Square, rectangle, round or circle
Duty time	100us-10ms (adjustable)
Idle time	0.01-1s
Treatment Size	20x20mm ² (adjustable)
Net weight	0.5kg

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Laser Applications and Safety

