

# SDZ X-linker

## Corneal Collagen Crosslinker



*The SDZ X-Linker  
Integrated colour monitor with 30  
min countdown timer ensures  
accurate positioning and provides  
correct exposure.*

### BEST features

- Integrated colour camera in the delivery head to monitor the treatment and ensure correct positioning
- 30min (programmable) countdown timer automatically stops the treatment, and can be paused or reset at any time.
- Converging beam optics for uniform treatment over a curved surface, avoiding the central hot spot of a parallel beam
- Video output for remote viewing

### BEST value

- Designed from the ground up by an ophthalmic surgeon and electronic engineer
- Simplified design focussed on performance, with quality components throughout
- Provides a homogenous and accurate dosage of UVA light, with inbuilt safety mechanisms
- Expensive non-essentials avoided (such as individualised casing)

### BEST support

- New Zealand based sales, repairs and design support.
- 1 year warranty
- No compromise on quality
- Advanced support is available, including emergency dispatch of "loaner" units.
- Individual design work available if required

### What is Crosslinking?

- Corneal Collagen Crosslinking is an emerging treatment for corneal ectatic disorders, keratoconus being the most common
- It has the potential, in one treatment, to freeze the progression of these conditions
- All that is required is one 30min exposure with UVA light at 365nm, following treatment of the cornea with riboflavin
- *In-vitro* studies have shown corneal strength increases of 3-4 times.

### The design

- Designed and prototyped by an ophthalmologist with experience in optoelectronics
- [www.sdz.co.nz](http://www.sdz.co.nz)
- Custom-built circuits for this crosslinker designed and assembled by an experienced electrical and electronic engineer
- [www.adx.co.nz](http://www.adx.co.nz)

### Supplied with

- Controller module
- Power supply
- Delivery head
- Instructions
- Padded carry-case

### Product details

#### QUALITY

- Intelligent design, quality components
- Each unit individually calibrated
- Guaranteed performance

#### USABILITY

- Simple control layout
- Ability to pause during treatment
- Background lighting in the delivery head to assist with alignment prior to treatment, even in a dark room
- Simple alignment – when it is in focus on the screen, it is at the correct distance

#### SAFETY

- Low UVA level comparable to a sunny day ( $3.0\text{mW}/\text{cm}^2$ )
- Converging beam optics avoid the central hot spot associated with a parallel beam
- Automatic cut-out after 30 minute treatment
- Video monitor built-in for alignment even during treatment
- Converging beam design – too close or too far from the treatment zone the beam is less powerful to avoid the possibility of overdose
- Constant current circuit ensures stable UVA output
- No laser alignment devices aimed into the eye for the 30 minute exposure as in some other products

### Product specifications

Power supply	110-240VAC switchmode universal voltage, medical approved
Power consumption	5W
Display	High resolution colour LCD
Timer	Fully electronic 30min programmable countdown, start, stop, reset, brightness adjustable
Delivery head	UVA 365nm at $3.0\text{mW}/\text{cm}^2$ , integrated colour video camera and LED backlight, sealed unit

### Distributor