

# Green Scan Laser Photocoagulator GYC-500 Vixi Green Laser Photocoagulator GYC-500



THE ART OF EYE CARE



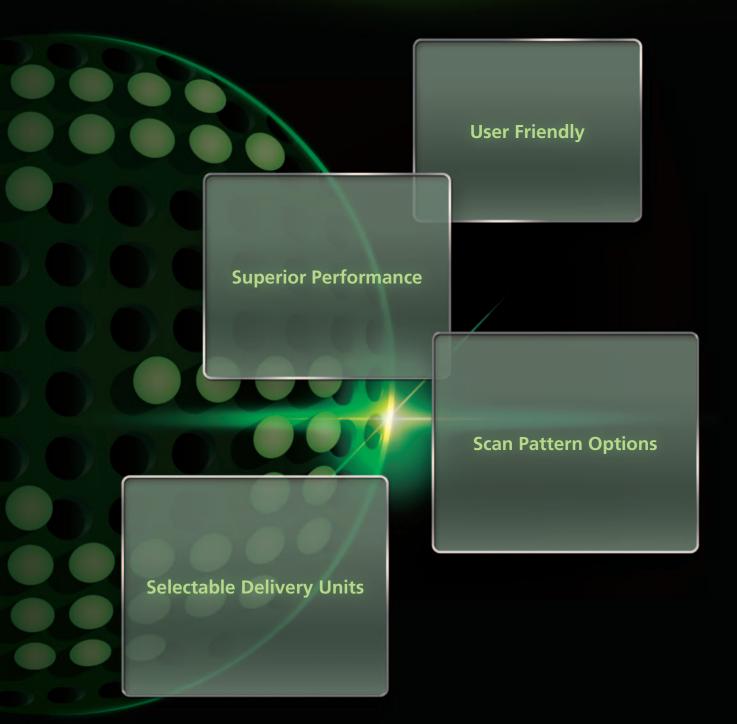
# The Small, Incredibly Versatile Green Laser Photocoagulator

The GYC-500 Vixi / GYC-500 is a solid state green laser that achieves stable treatment outcomes for multiple applications including retinal photocoagulation, trabeculoplasty and iridotomy.

The user-friendly features include a compact and lightweight design, and a wide range of delivery options allowing versatility for in-office use and the surgical suite.







# **User Friendly**

### Lightweight and Compact Design

This multifunction laser is housed in a small console. The space-saving design allows portability to virtually any room. The GYC-500 can be integrated into the NIDEK CV-30000, ophthalmic surgical system. This integration maintains sterile conditions and seamless installation and connection. The endophoto probes can be connected to the GYC-500 to simplify setup and treatments.





# 5.7-inch Color LCD with Touchscreen Control Box

An intuitive graphic user interface and easy-to-read touch screen color LCD allows quick and easy setup along with verification of the scan pattern and treatment parameters.



GYC-500 Vixi LCD screen



GYC-500 LCD screen

#### Pop-up Window

The pop-up window appears once the displayed value, such as POWER, TIME, or INT is selected. The surgeon can easily make changes to these laser values.

#### Stored Photocoagulation Data

For flexibility in treating different types of clinical cases, 10 sets of photocoagulation data (power output, emission time, interval time, scan pattern and spacing) can be stored. Each set can be quickly retrieved with one-touch operation.

# Registration of Contact Lens Magnification

Up to 5 contact lens magnifications can be registered. Confirmation of actual spot size on the retinal surface is easily performed by selecting the registered contact lens.

#### Treatment Summary

Photocoagulation data can be displayed on one screen for review and output in XML format for saving the treatment.



Scan: Memory 1/2						
No.	Nane	Pover		Intv1 sec	Ptn	SP
1	PRP	200	0.20	0.00	1	
2	PRP(Scan)	400	0.02		3×3	0.75
3	DME	100	0.02		Macr	1.00
4	LI	800	0.01	0.00	1	
5	LT	400	0.01	0.00	1	
			Next		U	Exit

Select	Act SPOT SIZE	Scan:Memory 1/2
2.00	Super Quad 160	1 PRP
1.44	Trans Equator	2 PRP(Scan)
1.96	Mainster PRP	3 DHE
0.94	Area Centralis	4 11
0.67	Abrahan YAG	5 1.1
		DLI
	Edit	Next
		Exit



#### Keycard

The SD card is used as a key to start the unit. It enables software upgrades and saves a summary of the treatments.



### B 3D Mouse (optional)

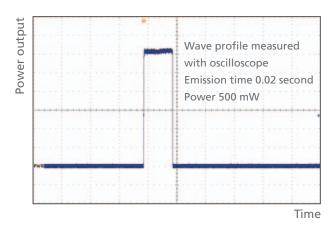
The 3D mouse allows intuitive operation for changing parameters. Up to 10 parameters can be preset with the 3D mouse.



# **Superior Performance**

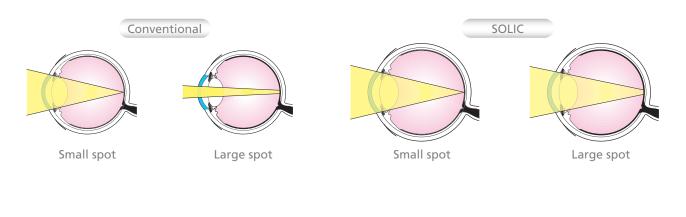
#### Stable and Reliable Green Laser

The GYC-500 Vixi / GYC-500 ensures stable laser output by using a solid state laser. Two cooling fans in the console maintain the correct internal temperature. The maximum room temperature during use is 35°C (95°F) which is within the range to treat retinopathy of prematurity cases which requires ambient room to be approximately 30°C (86°F).



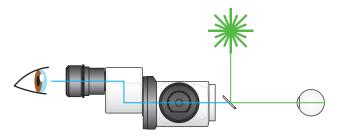
#### SOLIC (Safety Optics with Low Impact on Cornea)

The SOLIC optical design is incorporated into all delivery units, ensuring low energy density on the cornea and lens, even for large spot sizes.



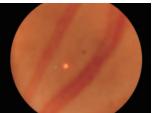
#### Optimal Design of Optical Axis

The optical axes for observation and the laser are coaxially aligned. Coaxial alignment results in precise laser delivery, increasing safety and maximizing treatment effect.

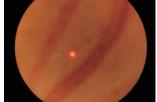


#### Protective Filter

A fixed protective filter for the GYC-500 reduces the risks of backscatter laser irradiation maximizing surgeon safety during treatment. A special coating on the filter ensures that the surgeon's view of the fundus is completely clear during examination and photocoagulation.



Without protective filter



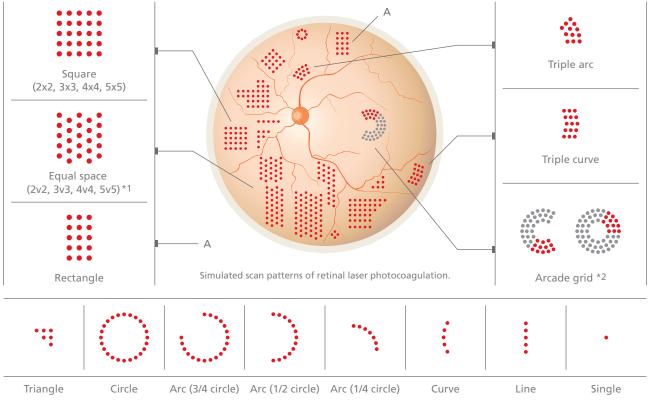
With protective filter

# **Scan Pattern Options**

Incorporating Vixi, scan delivery units, into the GYC-500 enables laser treatments with various scan patterns. The GYC-500 Vixi enhances treatment efficiency and reduces patient chair time.

#### Multiple Scan Patterns

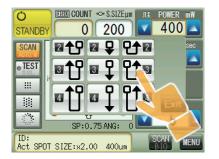
The GYC-500 Vixi has 22 preprogrammed scan patterns to allow treatment of varying retinal pathologies.

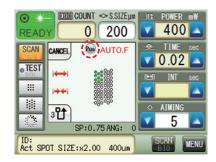


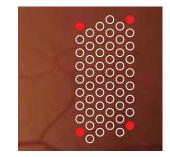
 \*1 For equal space patterns, No. v No. indicates the number of spots in horizontal and vertical directions.
\*2 The arcade grid pattern is used for treatment of the periphery of macula in one-sixth units. The inner diameter is fixed and spot sizes range from 100 to 200 μm.

### Auto Forward

Once photocoagulation is completed in one region, the GYC-500 Vixi allows automated advancement to the next region for delivery of the next scan pattern during photocoagulation. This feature allows the surgeon to concentrate on focus adjustment.







Repeat mode with the auto forward function enables consecutive regions to undergo photocoagulation on a selected path without repeatedly pressing the foot switch.

The treatment area can be confirmed by selecting the "Pos" (Position) button which displays each corner of the emission area on the patient's eye with the aiming light.

\*The auto forward function is available for the equal space (2v2, 3v3, 4v4) and the square (2x2,3x3,4x4) patterns. The number of times auto-forwarding can occur differs depending on the scan pattern, spot size, and spacing.

# Wide Range of Selectable Delivery Units

In addition to conventional single delivery units, the scan delivery units are added to the wide range of green laser delivery systems. Both the scan and single delivery units include attachable models\* for the NIDEK SL-2000 and SL-1800, the ZEISS SL 130 and ZEISS 30SL/M, and the HAAG 900BQ, all of which provide the existing slit lamps with a new stage for scan and single laser treatment.

\*Prior confirmation of attachment to an existing slit lamp model is required.



**Single Delivery** Units (GYC-500)



Scan slit lamp delivery unit (NIDEK SL-2000)



Scan slit lamp delivery unit (NIDEK SL-1800)



Slit lamp delivery unit (NIDEK SI -1800)



Scan attachable delivery unit (NIDEK SL-2000/SL-1800)



Scan attachable delivery unit (ZEISS SL 130, ZEISS 30SL/M)



delivery unit (ZEISS SL 130, ZEISS 30SL/M)



Scan attachable

delivery unit

(HAAG 900BQ)



Slit lamp

delivery unit

(NIDEK SL-2000)

BIO delivery unit (Keeler All Pupil II)



BIO delivery unit (HEINE OMEGA 500)



Endophotocoagulation delivery unit (ZEISS, LEICA)

#### Automated Recognition of **Connected Delivery**

The GYC-500 Vixi / GYC-500 automatically recognizes the types of connected delivery unit and changes the setting according to the delivery unit. This can be visually confirmed on the control box.





**Dual Delivery Port\*** 

The dual delivery unit connectors enable simultaneous connection with two delivery units, such as slit lamp delivery and BIO delivery units. They eliminate the inconvenience of connecting and disconnecting units and provide easy cable management.



\*The dual delivery port is available for the dual delivery model.



(NIDEK SL-2000/SL-1800)

Attachable delivery unit





## Main Body Specifications

Wavelength	532 nm	
Power output	50 to 1,700 mW (Except for scan delivery)	
	50 to 1,500 mW (Scan delivery)	
Output type	Continuous wave, Pulse 0.01 to 0.2 s	
Emission time	0.01 to 3.00 s	
Interval time	0.05 to 1.00 s	
Aiming beam	Laser diode, 635 nm, max. 0.4 mW	
Power supply	100 to 240 V AC, 50/60 Hz	
Power consumption	250 VA	
Dimensions/mass	237 (W) x 318 (D) x 90 (H) mm / 6.2 kg*1	
	9.3 (W) x 12.5 (D) x 3.5 (H)" / 13.7 lbs.*1	
Optional accessories	Power foot switch, Dual unit, Expansion box, CB top plate attachment unit,	
	Safety goggles, 3D mouse, Barcode scanner, Magnetic card reader	

\*1 276 (W) x 318 (D) x 90 (H) mm / 7.15 kg, 10.9 (W) x 12.5 (D) x 3.5 (H)" / 15.8 lbs.

with the expansion box, which is an optional accessory to connect the scan delivery unit to the main body.

#### Scan / Single Delivery Unit Specifications

Model	Scan delivery unit (GYC-500 Vixi)	Single delivery unit (GYC-500)	
Spot size	100 to 500 μm (scan mode, auto manipulation mode)	50 to 1,000 µm (slit lamp, attachable deliveries)	
	50 to 500 μm (single mode)		
Emission pattern	Single	Single	
	Square (2×2, 3×3, 4×4, 5×5), Equal space (2v2, 3v3, 4v4, 5v5)*2,		
	Rectangle, Triple arc, Triple curve, Arcade grid,		
	Triangle, Circle, Arc (3/4 circle, 2/4 circle, 1/4 circle), Curve, Line		
Туре	Scan slit lamp delivery unit (NIDEK SL-2000/SL-1800)	Slit lamp delivery unit (NIDEK SL-2000/SL-1800)	
	Scan attachable delivery unit	Attachable delivery unit (NIDEK SL-2000/SL-1800,	
	(NIDEK SL-2000/SL-1800, ZEISS SL 130, ZEISS 30SL/M, HAAG 900BQ)	ZEISS SL 130, ZEISS 30SL/M, HAAG 900BQ)	
		BIO delivery unit (HEINE OMEGA 500, Keeler All Pupil II)	
		YAG laser combination delivery unit (NIDEK YC-200/YC-1800)	
		Endophotocoagulation delivery unit (ZEISS, LEICA)	
Protective filter	Electrically-powered	Fixed	
Dimensions/mass	760 (W) x 450 (D) x 1,300 to 1,500 (H) mm / approximately 45 kg*3	760 (W) x 450 (D) x 1,290 to 1,490 (H) mm / approximately 45 kg*	
	29.9 (W) x 17.7 (D) x 51.2 to 59.1 (H)" / approximately 99.2 lbs.*3	29.9 (W) x 17.7 (D) x 50.8 to 58.7 (H)" / approximately 99.2 lbs.*3	
	(NIDEK SL-2000 scan slit lamp delivery with table)	(NIDEK SL-2000 slit lamp delivery with table)	

\*2 For equal space patterns, No. v No. indicates the number of spots in horizontal and vertical directions.

\*3 The dimensions and mass differ depending on delivery types.



Product/model name: GREEN LASER PHOTOCOAGULATOR GYC-500 Brochure and listed features of the device are intended for non-US practitioners. Specifications may vary depending on circumstances in each country. Specifications and design are subject to change without notice. All brand and product names are trademarks or registered trademarks of their respective companies.



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