

# **3D LASER SCANNER**



## Amazingly Easy To Use — LPX-600 laser scanner generates 3D digital data for 3D CAD/CG

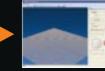
Roland's LPX-600 makes 3D laser scanning easier than ever. With the simplicity of operation similar to a standard 2D scanner, you can now quickly and accurately create digital data from an object for 3D CAD/CG applications. The LPX-600 sets up easily for professional results right out of the box. No special training is required.

- Includes Roland LPX EZ Studio scanning software.
- Features USB connection for easy setup.
- Benchtop size and quiet operation make the LPX-600 ideal for any office environment.

### Scan your object in three easy steps



on the LPX-600 work table



Press the 'Preview' button to confirm scanning time



Press the 'Scan' button to begin scanning







## LPX-600



## Easy-to-use Roland LPX EZ Studio scanning software included

Roland LPX EZ Studio scanning software controls the entire process from the initial scan to the creation of 3D CAD/CG data in a range of file formats including STL (Standard Tessellated Language, industry standard 3D CAD), GSF (Geometry

Systems native file format) and 3DM (Rhinoceros file format). EZ Studio automatically eliminates extra polygons and fills holes for smooth, continuous surfaces.\*

\*The ability to fill holes automatically depends on the shape of the object and whether the laser can reach all sides including front and back.



## Large working area and high-quality scanning as precise as 0.2mm (0.008") scanning-pitch

The LPX-600 allows you to scan a wide variety of objects as large as 254mm (10") in diameter and 406.4 (16") mm in height. The laser scans a maximum of 20 surfaces at right angles at a scanning pitch as fine as 0.2mm (0.008"). Once scanning starts, the laser travels vertically up the rotating object to generate a 3D file.



## A choice of two powerful packages for advanced users — Dr. PICZA 3 Scanning Software included or Pixform Pro Surface Software available as an option

The LPX-600 operates with either of two powerful software packages for advanced applications. Dr. PICZA 3 allows users to scan a designated area of an object by specifying the height, width, offset distance from the center, and the scanning angle required. In addition, it exports poly-line or point scanning data as 3D CAD data.

The LPX-600 can also be purchased with optional Pixform Pro software which supports robust polygon to NURB surface conversion and features numerous editing functions. With Pixform Pro, users can merge data scanned at different angles into one continuous surface, free of holes and undercuts. It can also smooth polygon data for even surface

editing, curve generation and Boolean operations. Pixform Pro supports a wide array of 3D CAD/CG software as well.





Dr. PICZA 3
 Pixform

#### ■ Specifications

LPX-800					
Table size	Diameter 254mm (10 in.)	Operating speed	Table rotation speed: 9rpm, head rotation speed: 4.48rpm,		
Maximum scanning area	Plane scanning: Width 254mm (10 in.), height 406.4mm (16 in.) Rotary scanning: Diameter 254mm (10 in.), height 406.4mm (16 in.)	Operating speed	maximum head movement speed: 37mm/sec.		
		Interface	USB (compliant with Universal Serial Bus Specification Revision 1.1)		
Scanning pitch	Plane scanning: width direction 0.2 to 254mm, height direction 0.2 to 406.4mm. Rotary scanning: circumference 0.18 to 3.6 degrees, height direction 0.2 to 406.4mm	Power supply	Dedicated AC adapter Input: AC 100 to 240 V $\pm 10\%$ 50/60 Hz 1.7A, Output: DC 19V, 2.1A		
Repeat accuracy	$\pm 0.05$ mm (This figure reflects standard scanning conditions established by Roland DG.)	Power consumption	Approx. 20W (including AC adapter)		
Maximum table load weight	5kg (11 lbs.)	Dimensions	630 [W] x 506 [D] x 761 [H] mm (24-13/16 [W] x 19-15/16 [D] x 29-15/16 [H] in.)		
	Wavelength: 645 to 660nm Maximum output: less than 0.39µW (maximum output of the laser light emitted inside housing is 0.1mW)	Weight	63kg (139 lbs.)		
Laser		Environment	Temperature: 10 to 40°C (50 to 104°F) (25°C [77°F] or more recommended) Humidity: 35 to 80% (no condensation)		
Sensor	Noncontact laser sensor	Included items	AC adapter, power cord, AC adapter holder, cable clamps, USB cable, CD-ROM, clay, user's manual, scanning software		
Scanning method	Spot-beam triangulation				

System Requirements for Included Software			
Operating system	Windows XP/2000/Me/98 SE (Second Edition)		
CPU	Pentium 4 processor or better recommended		
Memory	512MB or more recommended		
Free hard-disk space required for installation	Dr.PICZA 3: 20MB or more 3D Editor: 10MB or more		
Display	800 x 600 resolution and 16 bit color (High color) or more recommended.  OpenGL-compatible accelerator board recommended.		

System Requirements for USB Connection				
Operating system	Windows XP/2000/Me/98 SE (Second Edition)			
Computer	Computers preinstalled with Windows 98/Me/2000/XP at the time of purchase (This includes such computers later upgraded to Windows Me/2000/XP.)     Computers on which USB operation is assured by the manufacturer of computers			
USB Cable	Use the included USB cable. Do not use a USB hub or the like.			

#### ■ Options

Item	Description
Pixform Pro	Surface Software for LPX-600

#### ISO 14001 and ISO 9001:2000 Certified

Roland pursues both environmental protection and continuous quality improvement. Under the philosophy of preserving the environment and human health, Roland DG is actively working to abolish organic solvents in production, to reduce and recycle waste, to reduce power use, and to purchase recycled products. Roland DG constantly strives to provide the most highly reliable products available.





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