# 3D LASER SCANNER



## LPX-1200

# QUICKLY AND ACCURATELY CONVERTS PHYSICAL OBJECTS INTO 3D MODELS FOR DESIGN, MANUFACTURING AND AUTOMATION

The LPX-1200 offers high-resolution laser scanning with minimal surface noise while the included Pixform Pro software streamlines and improves the data editing process. The hardware/software combination is ideal for all popular CAD, CAM and animation applications.

#### **SAMPLE APPLICATIONS**

- Manufacturing
- Medical
- Packaging
- Animation

#### **LPX-1200 FEATURES**

- Scans objects up to 5" (130mm) in diameter and 8" (203.2mm) high
- Converts objects into 3D data at highly-accurate 0.0039"
  (0.1mm) pitch
- Able to scan a wide variety of objects with Roland's revolutionary Dual Mode (rotary and planar) Scanning Technology\*
- The combination of precision optics and motion control with a rigid cast aluminum frame produces high quality scans
- Easy connection with USB 1.1 interface
- Attractive, compact design for office environment
- Complete workflow from input to output is available with the combination of a Roland SRP milling machine

#### **POWERFUL REVERSE MODELING SOFTWARE INCLUDED**

- Pixform Pro professional 3D editing software offers extended functionality
- Compatible with popular reverse modeling software including Rapidform, Raindrop Geomagic and GSI Studio
- Supports robust polygon to NURB surface conversion
- Powerful, new NURB surface editing tools allow you to perform sub-surface patch creation and editing
- Compatible with 3D CAD data export formats including DXF, STL, IGES, WRL, ASCII and 3DM, Rhino's popular native format
- Dr. PICZA3 operating software provides new point, line and curve scanning functions for automated surface lofting





### **SPECIFICATIONS**



#### LPX-1200

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Table size	Diameter: 5" (130 mm)		
Maximum scanning area	Plane scanning: width 5" (130 mm ), height 8" (203.2 mm)		
	Rotary scanning: diameter 5" (130 mm), height 8" (203.2 mm)		
Scanning pitch	Plane scanning: width direction 0.0039" to 5" (0.1 to 130mm), height direction 0.0039" to 8" (0.1 to 203mm)		
· ·	Rotary scanning: circumference 0.18 to 3.6 degrees, height direction 0.0039" to 8" (0.1 to 203mm)		
Repeat accuracy	±0.002" (±0.05mm)		
Maximum table load weight	11 lbs. (5 kg)		
Laser	Wavelength: 645 to 660 nm		
	Maximum output: less than 0.39 μW		
	(maximum output of the laser light emitted inside housing is 0.1 mW)		
Sensor	Noncontact laser sensor		
Scanning method	Spot-beam triangulation		
Operating speed	Table rotation speed: 9 rpm, head rotation: 4.48 rpm, maximum head movement: 0.2984"/sec. (7.58mm/sec.)		
Interface	USB interface (compliant with Universal Serial Bus Specification Revision 1.1)		
Power supply	Dedicated AC adapter		
	Input: AC 100 to 240 V $\pm$ 10% 50/60 Hz 1.0A		
	Output: DC 19 V, 2.1 A		
Power consumption	Approx. 20W (including AC adapter)		
Dimensions	17-7/16 [W] x 15-9/16 [D] x 24 [H]" (443 [W] x 396 [D] x 609 [H] mm)		
Weight	77.16 lbs. (35 kg)		
Packed dimensions	24-1/2 [W] x 21-5/8 [D] x 31-7/8 [H]" (620 [W] x 550 [D] x 810 [H] mm)		
Packed weight	94.8 lbs. (43 kg)		
Environment	Temperature: 50 to $104^{\circ}F$ (10 to $40^{\circ}C$ ) (77°F [25°C] or more recommended)		
	Humidity: 35 to 80% (no condensation)		
Included items	AC adapter, power cord, CD-ROM, clay, user's manual, Pixform Pro, Dr. PICZA3		

#### SYSTEM REQUIREMENTS FOR THE SOFTWARE

	DR. PICZA3 AND 3D EDITOR	PIXFORM PRO
Operating system	Windows® XP/2000/Me/98	Windows XP/2000/Me/98/NT.4.0 (SP6 or higher)
CPU	Pentium® II or higher	Pentium or AMD Athlon <sup>™</sup>
Memory	128 MB or more	512 MB or more (1 GB or more is recommended)
Free hard-disk space required for installation	Dr. PICZA3: 20 MB or more 3D Editor: 10 MB or more	800 MB or more (additional 400 MB for tutorial sample files)

#### SYSTEM REQUIREMENTS FOR USB CONNECTION

Windows XP/2000/Me/98 (Windows 95 and Windows NT4.0 are not supported.)	
einstalled with Windows 98/Me/2000/XP at the time of purchase (This includes computers later Windows Me/2000/XP.)	
n which USB operation is assured by the computer manufacturer	

Whether a USB connection is possible depends on the specifications of the computer. To determine whether the computer you're using is capable of correct USB operation, check with the computer manufacturer. Use a shielded USB cable having a length of three meters or less. Do not use a USB hub.

Roland reserves the right to make changes in specifications, materials or accessories without notice. Your actual output may vary. For optimum output quality, periodic maintenance to critical components may be required. Please contact your Roland dealer for details. No guarantee or warranty is implied other than expressly stated. Roland shall not be liable for any incidental or consequential damages, whether foreseeable or not, caused by defects in such products. All trademarks are the property of their respective owners.



RDGA-LPX-02

Built with precision. Backed with passion.™

<sup>\*</sup> Scan quality may vary depending on the materials or colors of the objects. Objects that are transparent, translucent, or have surfaces which are fuzzy, glossy, or highly reflective, made of fabric or of dark colors such as black, blue or green may require using a matte-finish overcoat or other temporary surfacing agent.