# LPX Series

## Automated 3D Scanning at the Touch of a Button



Stop wasting hours cleaning up scanned data! With the touch of a button, LPX Series 3D laser scanners can generate a detailed CAD model with a 0.008-inch resolution and a watertight surface. Bundled LPX EZ Studio reverse engineering software automatically scans, fills holes, aligns, decimates and merges planes of 3D models. LPX EZ Studio then exports them as point cloud data that can be easily used directly in SolidWorks<sup>®</sup> 2007 Office Premium and other CAD software.

This integrated hardware/software solution offers affordable and automated 3D scanning for all popular CAD/CAM applications. The LPX-600 scans objects up to 16 inches tall and 10 inches in diameter, while the LPX-60 scans objects up to 12 inches tall and eight inches in diameter. Both enable designers to scan complex, organic shapes for hand-held consumer products, blister package design, hand-sculpted characters for feature animation, and face models for anaplastologists.

Roland LPX EZ Studio typically saves designers two to five hours on every scanned object. It exports CAD models in a wide range of data formats, including point cloud, STL, PIX and 3DM. STL files are used by the industry's most popular rapid prototyping systems, including those manufactured by Roland, 3D Systems, Stratasys, Z-Corp and Solidscape.



Completed scan/3D image.





the LPX work table.

Press the "Preview"

#### ■Specifications

## LPX Series 3D Laser Scanners

	LPX-600	LPX-60
Table size	Diameter 254.0mm (10 in.)	Diameter 203.2mm (8 in.)
Maximum scanning area	Plane scanning: Width 254.0mm (10 in.), height 406.4mm (16 in.) Rotary scanning: Diameter 254mm (10 in.), height 406.4mm (16 in.)	Plane scanning: Width 203.2mm (8 in.), height 304.8mm (12 in.) Rotary scanning: Diameter 203.2mm (8 in.), height 304.8mm (12 in.)
Scanning pitch	Plane scanning: Width direction 0.2 to 254.0mm, height direction 0.2 to 406.4mm. Rotary scanning: Circumference 0.18 to 3.6 degrees, height direction 0.2 to 406.4mm	Plane scanning: Width direction 0.2 to 203.2mm, height direction 0.2 to 304.8mm. Rotary scanning: Circumference 0.2 to 3.6 degrees, height direction 0.2 to 304.8mm
Repeat accuracy	±0.05mm (This figure reflects standard scanning conditions established by Roland DG)	±0.1mm (This figure reflects standard scanning conditions established by Roland DG)
Maximum table load weight	5kg (11lbs.)	
Laser	Wavelength: 645 to 660nm Maximum output: less than $0.39\mu$ W (maximum output of the laser light emitted inside housing is $0.1$ mW)	Wavelength: 645 to 660nm Maximum output: less than $390\mu$ W (maximum output of the laser light emitted inside housing is 5mW)
Sensor	Noncontact laser sensor	
Scanning method	Spot-beam triangulation	
Operating speed	Table rotation speed: 9rpm, head rotation speed:4.5rpm, maximum head movement speed: 37mm/sec.	Table rotation speed: 10.1rpm, head rotation speed:4.9rpm, maximum head movement speed: 50mm/sec.
Interface	USB (compliant with Universal Serial Bus Specification Revision 1.1)	
Power supply	Dedicated AC adapter. Input: AC 100 to 240 V ±10% 50/60 Hz 1.7A, Output: DC 19V, 2.1A	
Power consumption	Approx. 20W (including AC adapter)	
Dimensions	630 [W] x 506 [D] x 761 [H] mm (24.8 [W] x 19.9 [D] x 29.9 [H] in.)	500 [W] x 382 [D] x 619 [H] mm (19.7 [W] x 15.0 [D] x 24.4 [H] in.)
Weight	63kg (139 lbs.)	32kg (71 lbs.)
Environment	Temperature: 10 to 40°C (50 to 104°F) (25°C [77°F] or more recommended) Humidity: 35 to 80% (no condensation)	
Included items	AC adapter, power cord, AC adapter holder, cable clamps, USB cable, CD-ROM, clay, user's manual, scanning software	

### 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	Pentium 4 processor or better recommended

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