



3D LASER SCANNER LPX RE Series



Complete Reverse Engineering Solutions



Achieve superior product development by turning hand concepts into dimensionally perfect models

Revolutionary advances in reverse engineering software will change the way you work

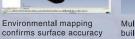


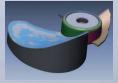
Powered by RAPIDFORM Technology Pixform Pro II Included with every LPX RE model

Roland Pixform Proll software will drastically reduce product development time thanks to its unique and intuitive solid modeling approach.

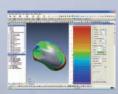
- Generates high quality parametric solid and surface CAD compatible models
- Features user friendly interface similar to major CAD applications
- Shows deviation analysis between scanned data and finished part using the Accuracy Analyzer™ feature in Pixform Proll
- Exports models directly to CAD, with modeling history







Multiple CAD-type functions build perfect models



Accuracy Analyzer[™] confirms scan/model deviation

Lower product development costs and reduced time to market

The LPX RE series are complete packages offering a range of easy-to-use high performance compact 3D scanners with fully-featured professional software and easy to follow tutorials. LPX laser scanners include everything you need for fast, intuitive reverse engineering solutions.









Accurate and intuitive scanning with Roland's exclusive software Included with every LPX RE model





High resolution one-touch automated scanning with Roland LPX EZ Studio™ software controls the entire process from the initial scan to the creation of 3D CAD/CG data. Designs are saved in a range of 3D CAD formats, including STL (Stereolithography), GSF (Geometry Systems native file format), 3DM (Rhinoceros file format) and PIX (Roland Picza format).





Roland's Dr. PICZA 3™ software enables full user control of both rotary and indexed scanning features for objects with complex forms and undercuts. Exports data as STL, 3D-DXF, Polyline, Point Cloud and PIX.

■ Specifications

			LPX-60RE	LPX-600RE	LPX-1200RE
Table size			Diameter 203.2 mm (8 in.)	Diameter 254 mm (10 in.)	Diameter 130 mm (5 in.)
Maximum scanning area	Plane scan	ning	Width 203.2 mm (8 in.), height 304.8 mm (12 in.)	Width 254 mm (10 in.), height 406.4 mm (16 in.)	Width 130 mm (5 in.), height 203.2 mm (8 in.)
	Rotary scanning		Diameter 203.2 mm (8 in.), height 304.8 mm (12 in.)	Diameter 254 mm (10 in.), height 406.4 mm (16 in.)	Diameter 130 mm (5 in.), height 203.2 mm (8 in.)
Scanning pitch	Plane scan	ning	Width direction 0.2 to 203.2 mm, height direction 0.2 to 304.8 mm	Width direction 0.2 to 254 mm, height direction 0.2 to 406.4 mm	Width direction 0.1 to 130 mm, height direction 0.1 to 203.2 mm
	Rotary scanning		Circumference 0.2 to 3.6 degrees, height direction 0.2 to 304.8 mm	Circumference 0.18 to 3.6 degrees, height direction 0.2 to 406.4 mm	Circumference 0.18 to 3.6 degrees, height direction 0.1 to 203.2 m
Repeat accuracy			±0.1 mm (This figure reflects standard scanning conditions established by Roland DG.)	±0.05 mm (This figure reflects standard scanning conditions established by Roland DG.)	±0.05 mm (This figure reflects standard scanning conditions established by Roland DG.)
Maximum table load weight			5 kg (11 lbs.)		
Lance	Wavelength		645 to 660 nm		
Laser	Maximum output		Less than 390 µW (maximum output of the laser light emitted inside housing is 5 mW)		
Sensor			Noncontact laser sensor		
Scanning method			Spot-beam triangulation		
	Table rotation speed		10.06 rpm	9 rpm	9 rpm
Operating speed	Head rotation speed		4.98 rpm	4.48 rpm	4.48 rpm
	Maximum head movement speed		50 mm/sec.	37 mm/sec.	7.58 mm/sec.
Interface	70			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 1.5 A		
		Output	DC 19 V, 2.1 A		
Power consumption			Approx. 20 W (including AC adapter)		
Dimensions			500 [W] x 382 [D] x 619 [H] mm (19-11/16 [W] x 15-1/16 [D] x 24-3/8 [H] in.)	630 [W] x 506 [D] x 761 [H] mm (24-13/16 [W] x 19-15/16 [D] x 29-15/16 [H] in.)	443 [W] X 396 [D] X 609 [H] mm (17-7/16 [W] X 15- 9/16 [D] X 24 [H] in.)
Weight			32 kg (71 lbs.)	63 kg (139 lbs.)	35 kg (78 lbs.)
Foulance	Temperature		10 to 40 °C (50 to 104 °F) (25 °C [77 °F] or more recommended)		
Environment	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, Roland LPX EZ Studio, and Pixtorm Proll	AC adapter, power cord, AC adapter holder, cable clamps, USB cable, CD-ROM, clay, user's manual, Roland LPX EZ Studio, and Pixform ProII	AC adapter, power cord, CD-ROM, clay, user's manual, Roland LPX EZ Studio, and Pixform Proll

[.] Never use a USB hub or the like.

■ Pixform®Proll System Requirements

Operating system	Windows Vista® Ultimate/Business/Home Premium/Home Basic (Service Parck 1, 32-bit or 64-bit edition), or Windows® XP Professional (Service Pack 2 or x64 Edition)/Home Edition (Service Pack 2
CPU	Intel®: 3.0 GHz dual-core or above recommended, AMD: Athlon™ 64 dual-core or above recommended
RAM	2 GB recommended
Display	1,280 x 1,024 resolution recommended, 32-bit true color required
Graphic card*	OpenGL 2.0, NVIDIA GeForce 6600 or above, or ATI Radeon X1650 or above recommended
Free hard-disk space for installation	10 GB or more recommended

^{*}For more information about certified graphic cards, please refer to the LPX-RE specifications listed on the Roland DG web site. www.rolanddg.com

■ Roland LPX EZ Studio and Dr. PICZA 3 System Requirements

Operating system	Windows Vista® (32-bit edition), Windows® XP (SP2 or later), or Windows® 2000 (SP4 or later)	
CPU	Intel® Pentium® 4 2.4 GHz or faster recommended	
RAM	512 MB or more recommended, 1 GB or more recommended for Windows Vista®	
Display/Graphic Card	EZ Studio: 1, 024 x 768 resolution and 16-bit colors (High color) or more recommended (video card compatible with OpenGL 1.4 recommended) Dr. PICZA 3: 800 x 600 resolution and 16-bit colors (High color) or more recommended (OpenGL-compatible accelerator board recommended)	
Free hard-disk space for installation	EZ Studio: 100 MB or more Dr. PICZA 3: 20 MB or more	

About scanned objects:

LPX 3D scanner scans objects using a laser light beam. Scan quality may vary depending on the materials or colors of the objects. The LPX 3D scanner cannot scan around the top of an object where the laser beam either hits at too shallow an angle or cannot hit the object at all. Objects that are transparent, translucent, or have surfaces which are fuzzy, clossy, or highly reflective, made of fabric, or of dark colors such as black, blue, or green, may not produce good results. In these instances, using a white matte-finish coating or other temporary surfacing agent is required.

ISO 14001:2004 and ISO 9001:2008 Certified

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



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. Three-dimensional shapes may be protected under copyright. Customers are responsible for observing laws and ordinances when scanning. RAPIDFORM logo and Accuracy Analyzer are trademarks of Rapidform, Inc. All other trademarks are the property of their respective owners. Roland DG Corp. has licensed the MMP technology from the TPL Group.





AUTHORIZED DEALER:



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