



# Educational Workbench Solutions

## Engineered To Boost Your Capability And Performance

The right tools can really make a difference especially for educators who must make every dollar count. High-performance, value-priced technical education solutions from Roland really go the distance. Time-tested, engineered for simplicity, yet fine-tuned to deliver the power and features you need to really make education come alive for your students.

### MDX-15 Product design and manufacturing educational bundle.

The MDX-15 product design and manufacturing educational bundle is a state-of-the-art training module that teaches students how to transform their ideas into real products. It focuses on creative problem solving and product design rather than G-code programming, making learning fun with easy-to-use tools. Students learn how to create multiple models using Rhino™ CAD software, generate manufacturing tool paths within Roland MODELA Player™ CAM software, and mill real prototypes out of wax. The Design & Manufacturing bundle is a complete semester worth of materials,

Including:

- Roland MDX-15 milling machine with work holding clamp
- Rhino CAD (Computer Aided Drafting) software
- Roland MODELA Player CAM (Computer Aided Manufacturing) software, Roland Virtual MODELA™ CAM simulation software, Dr. Engrave and 3D Engrave software
- Teaching Guides (Teacher and Student versions)
- Nine lessons developed by a veteran educator
- 40 Pieces of machineable wax and 2 end mill tools



### MDX-40 The performance SRP™ (Subtractive Rapid Prototyping) machine of choice.

Take a look under the hood of the mid-range MDX-40 performance milling machine and see why it's the ultimate choice for desktop prototyping, precision models and CO<sub>2</sub> car competitions. The high-speed 15,000 rpm spindle is perfect for prototyping parts in a wide variety of engineering plastics. Rotary four-indexed axis design makes unattended two through four-side milling fast and simple. An optional 3D scanning head using innovative Roland Active Piezo Sensor technology is ideal for reverse engineering.

- 15,000 rpm spindle
- Roland Active Piezo Sensor technology for reverse engineering
- Large 12" x 12" x 4.12" work area
- Bundled with MODELA Player CAM software, MODELA 3D Design software, Dr. Engrave, 3D Engrave, Dr. PICZA™ scanning software and Virtual MODELA CAM simulation software



### LPX-600 Laser Scanner Automated precision 3D scanning at the touch of a button.

The LPX-600 is the most automated 3D scanning system ever produced. With the touch of a button, the 3D laser scanner scans objects up to 16" tall and 10" in diameter. Its advanced non-contact laser sensor quickly generates precise models with a watertight surface and 0.008" scanning resolution.

- 0.2mm (0.008") scanning resolution
- 10" (diameter) by 16" (height) scanning volume
- Bundled with EZ Studio reverse modeling software, Dr. PICZA 3 scanning software and 3D Editor editing software
- Easy, precision 3D scanning at the touch of a button
- Attractive, compact design for office environment



**Roland**<sup>®</sup>  
Advanced Solutions Division



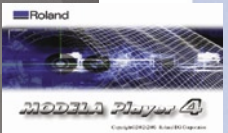


## EGX-300 The choice for versatility and performance.

Proven technology, functionality, and versatility in one of today's most advanced computerized engraving systems available. The EGX-300 makes it easy to engrave a wide variety of surfaces, from awards to ADA signage. The EGX-300 features an emergency stop switch and a safety cover with an interlock switch which automatically pauses the machine when opened. Enjoy a large enough work area for a diverse range of projects, yet small enough

to fit on any desktop.

- 30-watt, 15,000 rpm spindle
- Create and import reliefs from any source
- Emergency stop switch and safety cover
- 12" x 9" x 1.18" work area
- Bundled with Dr. Engrave™, MODELA 3D Text™, 3D Engrave™ and Virtual MODELA Player software.



## Supercharge your projects with powerful software tools.

Roland educational workbench solutions come with easy-to-use software that makes it simple to begin using your new scanning, milling, engraving, and cutting tools right out of the box. Each comes complete with step-by-step tutorials and all are designed to work with popular standards in a wide range of industries, from product design, sign- and display-making, and promotional engraving, to jewelry-making and animation.

**Dr. Engrave** gets you started fast, automatically sizing your job to fit the specified material. It comes with Windows® TrueType™ fonts and can convert them to single-line fonts for optimal engraving. Plus, it gives you the ability to import Excel™ and CSV database files — useful for nametags and nameplates.

**MODELA 3D Text** converts Windows TrueType fonts into MODELA Player or 3D DXF format for engraving reliefs.

**3D Engrave** transforms 2D graphics or bitmaps into 3D relief models.

**Virtual MODELA** simulates finished 3D models and accurately estimates machining production time. Add lighting effects, material color, and bitmap overlays to represent the finished product quickly and easily.

**MODELA Player 4** is a CAM software application that accepts IGES, DXF and STL files exported from the most popular industrial 3D CAD software programs. It is used to generate proportional 3D scaling, identify milling direction and automatically generate and display the tool path. MODELA Player 4 supports tool changing when used with the Automatic Tool Changer (ATC) and automatic side cutting when used with the Rotary Axis Unit.

**MODELA 3D Design** gives you the ability to create and add color to 3D objects, such as cylinders and spheres. Import files directly or export MODELA files in 3D DXF format.

**Rhinoceros™** is a 3-D modeling software capable of modeling any shape you can imagine, with all the accuracy to design, prototype, engineer, analyze, and manufacture anything from airplanes to jewelry. Best of all it is compatible with all your other CAD/CAM, rendering, animation, and illustration software.

**Dr. PICZA** is comprehensive, dedicated scanning software that reduces data volume by minimizing resolution on all or part of the captured data. It can also rescan part of the object at a finer scanning pitch and automatically combine it with the original data. It supports an array of data formats, including DXF, STL, 3DMF, gray scale BMP, and can export as IGES files.

**LPX EZ Studio** Roland's bundled LPX EZ Studio software streamlines the 3D scan and data editing process. Its powerful scan/align/merge function lets engineers generate watertight mesh surface models with the touch of a button. The software supports a wide range of data output formats, including 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.

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.

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