





### Overview

## **MDX-40A & ZCL-40A**

We are pleased to announce the latest advancement in Subtractive Rapid Prototyping technology: the new MDX-40A desktop milling machine. New features of the MDX-40A include a user-friendly virtual panel, all new ClickMILL<sup>™</sup> software, a larger rotary axis unit (optional), G-code compatibility and new exterior colors.

Like the MDX-40, which is being discontinued, the MDX-40A is a desktop Subtractive Rapid Prototyping (SRP) system that offers product designers a means to create their own prototypes out of a wide variety of non-proprietary materials with greater precision and better surface finish at a lower cost.

The new ZCL-40A rotary axis unit is now available as an option for the MDX-40A and also compatible with the MDX-40 and MDX-40K, offering existing users a larger work area than the previous rotary axis unit allowed. Like the previous model, the MDX-40A can be converted from a milling machine to a scanning machine for reverse engineering applications using the optional ZSC-1 contact scanning head.

## **Built on Roland's Legendary Ease-of-Use**

The MDX-40A is easier to use than ever before and includes a variety of new features.

- New Virtual Panel
  - o New real-time cutting and spindle speed override capability
  - Separate rotary axis detection button to avoid confusion
  - o Move to user-specified location command
  - Increased control when manually moving the tool

## • New G-Code Compatibility

- Now capable of accepting industry standard G-Code
- Compatible with popular CAM software programs such as Mastercam, EdgeCAM, SurfCAM, GibbsCAM and VisualMill

## • New Optional ZCL-40A Rotary Axis Unit

- All new rotary axis design
- Larger work area than previous rotary axis unit: 4.7" diameter x 10.6" long (120mm x 270mm)
- o New spring loaded tool sensor for reliable operation
- New ClickMILL Software
  - Can quickly create pockets, drill holes, surface workpieces, cut slots, and chamfer edges
  - o Operates independently from CAD or CAM software
- User Friendly Improvements
  - o Advanced machine operations for efficient use
  - An intuitive interface and increased control of the machine streamline the milling process









## MDX-40A Key Features

## **New Virtual Panel**

The MDX-40A includes an all new Virtual Panel, or VPanel, that allows users to easily perform a variety of functions using a simple mouse click. Users can now easily move the cutting tool to the location they desire at the speed they select. They can also control the cutting speed and spindle speed during machine operation, saving time and avoiding unnecessary interruptions. Existing users of the rotary axis unit will appreciate the fact that the new VPanel now treats rotary axis detection function separately from the origin setting functions, streamlining the milling process and making operations more efficient.

# ZCL-40A Rotary Axis Unit

The all new optional ZCL-40A rotary axis unit supports material that is over 3 times the volume of the previous model. This larger area, 10.6" long x 4.7" dia (270mm x 120mm), is enough to mill a 16.9 oz (500ml) PET bottle. In addition to the larger cutting area, the ZCL-40A includes a spring loaded tool sensor, a more robust rotary axis motor and improved structural rigidity for improved performance.

# **G-Code Compatibility**

In addition to using Roland Machine Language NC code, or RML, the MDX-40A is now capable of using industry standard G-Code which makes it instantly compatible with a wide variety of CAM software products including Mastercam, GibbsCAM, EdgeCAM, SurfCAM, and VisualMill. This is useful for professionals and also for educators interested in teaching G-Code fundamentals.

# **Scanning Probe for Reverse Engineering**

The optional ZSC-1 adds the power of reverse engineering to the MDX-40A. Using

Roland Active Piezo Sensor technology, the MDX-40A transforms into a powerful and accurate tool for digitizing an existing part or mold for your CAD software. This technology gives the MDX-40A that ability to scan a wide variety of objects including soft objects like modeling clay. It can even scan glass or acrylic objects without making a scratch. Add Roland's Pixform Pro II software for combining multiple scans and manipulating the scan data as you wish.

# **MDX-40** Performance Upgrade

# Free Performance Upgrade for Existing Customers

For existing MDX-40 and MDX-40K customers, Roland has announced a free performance upgrade, allowing existing customers to update their MDX-40 milling machine with the all new software, firmware, features and capabilities of the MDX-40A, free of charge. The free upgrade includes the latest firmware, an installer for the new Virtual Panel, a new Windows driver (32-bit), and an installer for ClickMILL software. Once the components are installed, the new, larger ZCL-40A rotary axis unit is compatible with the unit. The ZCL-40A is available at a list price of \$3,595.

To receive this free upgrade, users can register at <u>www.rolanddga.com/mdxupgrade</u>.







### Summary

Award-winning Roland Subtractive Rapid Prototyping technology offers several advantages over Additive Rapid Prototyping machines. Roland SRP milling machines support a wide range of non-proprietary materials, deliver smooth surface finishes, and offer low annual operating costs to maximize return on investment. Additionally, Roland milling machines are designed for ease of use and do not require machinist skills or special programming to operate.

The new MDX-40A builds on Roland's legendary SRP technology and makes the model creation process easier, more efficient and better than ever before. The MDX-40A can mill a wide range of low cost non-propriety engineering materials such as ABS, nylon, delrin or acetal copolymer, acrylic, tooling board, and wax. The MDX-40A is ideal for modeling and reviewing design concepts in house which lowers costs and shortens the product development cycle. This lets designers and engineers create functional prototypes to perform a wide range of real world tests such as fit, finish, feasibility, durability and production capability. Prototypes created on the MDX-40A will perform just like the final manufactured product.

## Pricing: MDX-40A Milling Machine, \$7,995, USD List Price

## **Optional Accessories:**

- ZCL-40A Rotary Axis, \$3,595, USD List Price
- ZSC-1 Scanning Probe & Software, \$495, USD List Price
- ZDX-40 Chip Collection Bin, \$495, USD List Price

### **Key Dates:**

June 30<sup>th</sup> Live on Roland DGA website, public announcement, and press release

- July 8th Upgrade available for current MDX-40/MDX-40K owners
- August Inventory available



