

**Desktop Engraver** 

# EGX-300

A New Dimension in Digital Engraving Technology



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### **A New Dimension** in Digital Engraving Technology

Roland's innovative EGX-300 offers versatile professional engraving in a desktop format, from engraving simple nametags and nameplates to creating attractive, awards and signs with reliefs. All functions have been carefully engineered to facilitate user-friendly operation while providing first-rate capabilities. The EGX-300 is the most advanced digital engraving system at its attractive price range. By adding an EGX-300 to your operation, you can offer uniform and precision quality products to your customers with predictable delivery.



#### Roland Reliability and Innovation

Since Roland introduced our first engraver in 1987, we have focused on what professional engravers want for their businesses. The EGX-300 was developed by incorporating all the results of our research.

#### Complete, User-Friendly Package

The EGX-300 includes everything you need to get started immediately, including a suite of engraving software applications and Windows driver. It is as simple to operate as a desktop printer.

\*Engraving software and Windows driver are compatible with Windows® 95/98/Me/NT® 4.0/2000/XP.

#### Safe, Sturdy Construction

The EGX-300 includes both an emergency stop switch and a front cover with an interlock switch which automatically pauses the machine when opened. The front cover also eliminates debris and reduces noise.

#### Perfect for Your Desktop

The 305 mm x 230 mm (12"x 9") work area, small footprint and enclosed environment allow you to handle a wide range of jobs right from

#### Handles a Wide Variety of Materials

Engrave, cut and scribe on a wide variety of materials including plastic, acrylics and even light metals such as brass and aluminum\*. \*An optional diamond cutter is required for such materials

#### Additional Advanced Features

- The standard top and optional bottom-loading collets support a wide variety of industry standard tool choices.
- With a spindle speed of up to 15,000 RPM, you can engrave materials faster.
- The EGX-300 comes with a 1 MB data buffer for guick replotting.
- The EGX-300 indicates spindle wear so that users know when to change worn spindles in order to maintain cutting quality.

#### Add Custom Signs and Reliefs to Your Work

Designing and producing eye-popping custom reliefs is easy with the EGX-300. The EGX-300 can control all three axes (X, Y and Z) simultaneously and successively to cut arcs and circles smoothly, even on a curved surface, for extraordinary signs and awards. You can even create signs in Braille.

The EGX-300 includes Roland's 3D Engrave, Virtual MODELA, and MODELA Player. 3D Engrave's easy-to-use but powerful tools allow you to add depth to text and artwork for signs and awards. It creates an optimal tool path automatically. Virtual MODELA enables simulation of finished shapes on your monitor for review by clients and to reduce time and materials. Lighting effects, material color or bitmap overlays can be added for accurate finished product representation. If you design in commercially available software that can save in 3-dimensional DXF or STL file format, MODELA Player reads the data and generates an efficient three-axis tool path for engraving with the EGX-300.



#### 3D Engrave

3D Engrave allows you to design 3dimensional letters and engrave them onto curves, or to create custom reliefs







#### **Engraving for Awards, Nametags and more**

Also included with the EGX-300 is Dr. Engrave software for creating awards, nametags, nameplates and much more. Dr. Engrave can convert Windows TrueType fonts into single line fonts for letter engraving. In addition to standard fills, it supports "island-fills." It also provides maximum flexibility in importing a variety of file formats, including Windows bitmap data, vector art, and scanned logos and photos. For nametags, you can import an Excel CSVformatted file and Dr. Engrave will layout your job optimally to fit the material.









#### Dr. Engrave

Included with the FGX-300 is a full suite of software. Dr. Engrave is an engraving program for creating nametags and nameplates etc.

#### Desktop Engraver EGX-300 SPECIFICATIONS

Table size	305 mm x 230 mm (12 in. x 9 in.)				
Max. cutting area	305 mm (X) x 230 mm (Y) x 30 mm (Z) (12 in. (X) x 9 in. (Y) x 1.18 in. (Z))				
Feed rate	X, Y-axis: Max. 3600 mm (141 in.) /min. Z-axis: Max. 1800 mm (70.8 in.) /min				
Software resolution	0.01 mm (0.00394 in.) /step or 0.025 mm (0.000984 in.) /step (XY axes only)				
Mechanical resolution	X, Y and Z-axis: 0.00125 mm (0.0000492 in.) /step (micro-step control)				
Spindle motor	30 W (DC motor)				
Revolution speed	5,000 to 15,000 rpm				
Tool chuck	Cutter holder and collet system				
Interface	Parallel (in compliance with the specification of Centronics) Serial (under RS-232C standard)				
Buffer size	1 MB (960 Kbyte for replot buffer)				
Instruction system	CAMM-GL I (mode1, mode2)				
Power consumption	1.8 A / 117 V 0.9 A / 220 to 230 V 0.9 A / 230 to 240 V				
Acoustic noise level	During no-load operation: 70 dB (A) or less Standby mode: 30 dB (A) or less (According to ISO 7779)				
External dimensions	598 mm (W) x 545 mm (D) x 357 mm (H) (23-9/16 in. (W) x 21-1/2 in. (D) x 14-1/16 in. (H))				
	When cover is open: 598 mm (W) $\times$ 545 mm (D) $\times$ 685 mm (H) (23-9/16 in. (W) $\times$ 21-1/2 in. (D) $\times$ 27 in. (H))				
Weight	28.5 kg (62.8 lb.)				
Operation temperature	5 to 40°C (41 to 104°F)				
Operation humidity	35 to 80 % (no condensation)				
Accessories	Power cord: 1, Depth regulator nose: 1, Character cutter $\phi$ 3.175 mm (with Cutter Holder) : 1, Wrenches: 2, Collet (for $\phi$ 4.36 mm) : 1, Collet (for $\phi$ 3.175 mm): 1,				
	Hexagonal screw driver: 1, Hexagonal wrench: 1, Spare tool securing screw: 1, Adhesive sheet: 1, Clamps: 3, Vacuum adapter set: 1, Motor brushes : 2, User's manual: 1,				
	Roland Software Package CD-ROM: 1				

#### **■** OPTIONS

dia = shank diameter, L = overall length, W = blade width

dia = flute diameter, R = flute radius,  $\,\ell$  = flute length, L = overall length, d = shank diameter, NT = number of flute

Item	Model number		Description
Engraving cutters (for plastic)		Cemented carbide	dia. = 3.175 x 114 (L) x 0.127 (W)
	ZEC-A2025	Cemented carbide	dia. = 3.175 x 114 (L) x 0.254 (W)
	ZEC-A2051	Cemented carbide	dia. = 3.175 x 114 (L) x 0.508 (W)
	ZEC-A2076	Cemented carbide	dia. = 3.175 x 114 (L) x 0.762 (W)
	ZEC-A4013	Cemented carbide	dia. = 4.36 x 165 (L) x 0.127 (W)
	ZEC-A4025	Cemented carbide	dia. = 4.36 x 165 (L) x 0.254 (W)
	ZEC-A4051	Cemented carbide	dia. = 4.36 x 165 (L) x 0.508 (W)
	ZEC-A4076	Cemented carbide	dia. = 4.36 x 165 (L) x 0.762 (W)
Engraving cutters	ZEC-A2013-BAL	Cemented carbide	dia. = 3.175 x 114 (L) x 0.13 (W)
(for aluminum or brass)	ZEC-A2025-BAL	Cemented carbide	dia. = 3.175 x 114 (L) x 0.25 (W)
	ZEC-A4013-BAL	Cemented carbide	dia. = 4.36 x 165 (L) x 0.13 (W)
	ZEC-A4025-BAL	Cemented carbide	dia. = 4.36 x 165 (L) x 0.25 (W)
Engraving cutters	ZEC-A2150	Cemented carbide	dia. = 3.175 x 114 (L) x 1.52 (W)
(Parallel, for plastic)	ZEC-A2190	Cemented carbide	dia. = 3.175 x 114 (L) x 1.91 (W)
	ZEC-A2230	Cemented carbide	dia. = 3.175 x 114 (L) x 2.29 (W)
	ZEC-A2320	Cemented carbide	dia. = 3.175 x 114 (L) x 3.175 (W)
	ZEC-A4150	Cemented carbide	dia. = 4.36 x 165 (L) x 1.52 (W)
	ZEC-A4190	Cemented carbide	dia. = 4.36 x 165 (L) x 1.91 (W)
	ZEC-A4230	Cemented carbide	dia. = 4.36 x 165 (L) x 2.29 (W)
	ZEC-A4320	Cemented carbide	dia. = 4.36 x 165 (L) x 3.175 (W)
	ZEC-A4380	Cemented carbide	dia. = 4.36 x 165 (L) x 3.81 (W)
	ZEC-A4430	Cemented carbide	dia. = 4.36 x 165 (L) x 4.34 (W)
Quarter round cutters	ZEC-A2013-QR	Cemented carbide	dia. = 3.175 x 114 (L) x 0.13 (W)
(for plastic)	ZEC-A2025-QR	Cemented carbide	dia. = 3.175 x 114 (L) x 0.25 (W)
	ZEC-A4013-QR	Cemented carbide	dia. = 4.36 x 165 (L) x 0.13 (W)
	ZEC-A4025-QR	Cemented carbide	dia. = 4.36 x 165 (L) x 0.25 (W)
Diamond cutters	ZDC-A2000	Diamond	dia. = 3.175 x 127 (L)
	ZDC-A4000	Diamond	dia. = 4.36 x 178 (L)

d = shank diameter, NT = number of flute				
Item	Model number	Description		
Square end-mill	ZHS-100	High speed steel dia. = 1 3 (ℓ) x 6 (d) x 50 (L) x 2NT		
	ZHS-200	High speed steel dia. = 2 6 (ℓ) x 6 (d) x 50 (L) x 2NT		
	ZHS-300	High speed steel dia. = 3 10 (ℓ) x 6 (d) x 50 (L) x 2NT		
	ZHS-400	High speed steel dia. = 4 8 (ℓ) x 6 (d) x 60 (L) x 2NT		
	ZHS-500	High speed steel dia. = 5 10 (ℓ) x 6 (d) x 60 (L) x 2NT		
	ZHS-600	High speed steel dia. = 6 15 (ℓ) x 6 (d) x 55 (L) x 2NT		
	ZUS-300	Cemented carbide dia. = 3 15 (ℓ) x 3 (d) x 60 (L) x 2NT		
	ZUS-400	Cemented carbide dia. = 4 20 (ℓ) x 4 (d) x 60 (L) x 2NT		
	ZUS-500	Cemented carbide dia. = 5 25 ( $\ell$ ) x 5 (d) x 60 (L) x 2NT		
	ZUS-600	Cemented carbide dia. = 6 25 (ℓ) x 6 (d) x 60 (L) x 2NT		
Ball end-mill	ZUB-150	Cemented carbide R1.5 10 (ℓ) x 3 (d) x 65 (L) x 2NT		
	ZUB-200	Cemented carbide R2.0 12 (ℓ) x 4 (d) x 65 (L) x 2NT		
	ZUB-250	Cemented carbide R2.5 20 (ℓ) x 5 (d) x 65 (L) x 2NT		
	ZUB-300	Cemented carbide R3.0 30 ( $\ell$ ) x 6 (d) x 65 (L) x 2NT		

Item	Model number	Description
Collet set	ZC-23	Diameter 6 mm, 5 mm, 4 mm, and 3 mm collets: 1 each
	ZC-23-3175	Diameter 3.175 mm collet: 1
	ZC-23-6	Diameter 6 mm collet: 1
	ZC-23-6.35	Diameter 6.35 mm collet: 1
Vacuum table	ZV-23A	Vacuum table: 1
Center vise	ZV-23C	Center vise: 1
Spindle unit	ZS-23	Spindle unit: 1
Spindle motor	ZM-23	Spindle motor: 1
Adhesive sheet for securing material	AS-10	210 mm x 140 mm (8-1/4 in. x 5-1/2 in.), 10 sheets

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Printed in Japan. RDG90138 '02 JUN. A-4 C-S