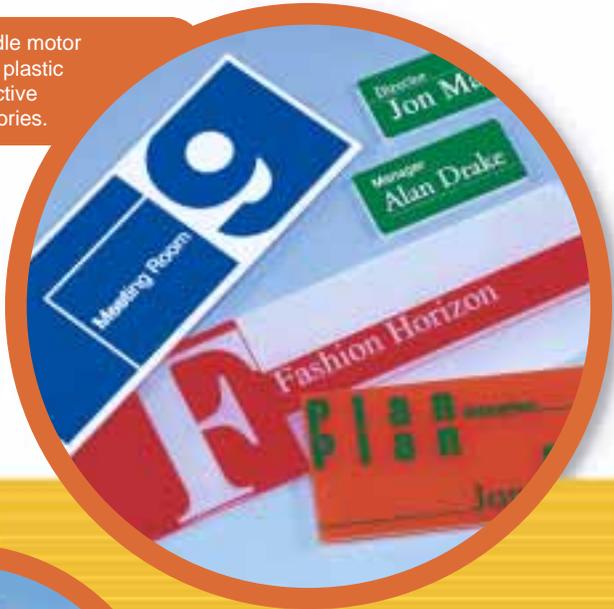**Roland**

# EGX-20

## DESKTOP ENGRAVER

## Simply Brilliant

# Designed to Inspire Confidence --
# Right Out of the Box!

Now anyone can produce beautiful, professional engraving of text and scanned graphics right from their computer. Roland designed the EGX-20 to be remarkably easy to operate, even for beginners. The EGX-20 is large and powerful enough to handle a wide variety of engraving jobs, including awards, product serial numbers, office directories, personalized items and more, yet small enough to fit comfortably on your desktop. Thanks to its intuitive joystick and dial controls, operation is uncomplicated for both novices and experienced professionals. The EGX-20 includes everything you need to get started immediately, including a complete suite of engraving software.

A powerful 15,000-rpm spindle motor makes quick work of acrylic, plastic and other materials for attractive nameplates and room directories.

Dr. Engrave software includes an automatic layout function for importing Excel and CSV database files for fast engraving of product serial numbers and nametags.

Thanks to its unique AST system, the EGX-20 can engrave on a wide variety of materials for personalizing gifts and novelty items.

With 3D Engrave, the EGX-20 easily creates reliefs from bitmap images.

**Roland**

EGX-20
**DESKTOP ENGRAVER**

## ● Roland's Active Surface Tracking System (AST)

Among the most revolutionary of the EGX-20's features is its Automatic Surface Tracking System. AST automatically tracks the height of the material to ensure engraving at a consistent depth, even on bowed or non-uniform surfaces. Unlike systems that can take extensive trial and error to learn, AST makes setting the origin point and cutting depth effortless. Now you can produce consistently beautiful results with less learning time and less wasted materials.

### How AST Works:

An automatic height sensor is attached to the lower end of the spindle unit. In addition to tracking the height of the material, AST controls the spindle and cutter height automatically. It also protects the surface from being scratched by cutting debris. A choice of three-different-diameter nose cones is included, allowing you to choose the most appropriate size, depending on the line thickness or curvature of the material.

*AST may not be able to engrave some materials, depending upon their shapes and/or design.
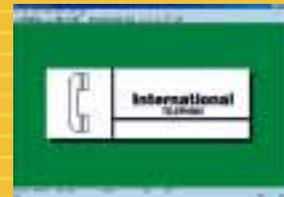
## ● Engrave a Wide Variety of Materials

With its 15,000-rpm spindle motor, the EGX-20 is powerful enough to engrave on a wide variety of popular materials, including acrylics, PVC, ABS, polycarbonate and wood. With the optional diamond scraper and burnishing attachment, you can also scribe light metals such as aluminum and brass for awards. Securing the material to the worktable is easy with the included adhesive sheet. Once you select the material to be engraved from the menu of the included software, the EGX-20 automatically determines optimum cutting speed and tool path, assuring smooth accurate results.

## ● Powerful, Easy-to-Use Engraving Software Included

Included with the EGX-20 is a complete suite of software: Dr. Engrave for nameplate engraving, 3D Engrave for producing reliefs and Virtual MODELA for simulating finished work.

### Dr.Engrave

- Converts Windows TrueType fonts into single-line fonts for scribing so you won't need to purchase new fonts.
- Imports database files (*.txt/csv) and automatically lays them out for fast engraving of nameplates in large quantities. A "V" cut function outlines borders for easy separation of individual plates.
- Accepts scanned images such as illustrations or company logos directly from your scanner and computer for engraving.
- Quickly handles enlargement and reduction.


Dr.Engrave

### 3D Engrave

- Adds thickness to bitmap images to create reliefs.
- Allows you to specify different engraving depths for various objects in a single design for added creativity.

### Virtual MODELA

- Preview finished reliefs on screen prior to actual production.
- Lighting effects, material color and bitmap overlays can be added to represent the finished product.
- Accurately estimates engraving time.


3D Engrave

**Desktop Engraver**
## EGX-20

The EGX-20 combines power and ease of use with a compact desktop format: 515.2mm(W) x 368.3mm(D) x 270.6mm(H). Work area is 203.2mm(x) x 152.4mm(Y) x 31.8mm(Z).

| | |
|---|---|
| Table size | 220 (W) x 170 (D) mm (8-5/8 (W) x 6-11/16 (D) in.) |
| Table load weight | Maximum 1 kg (2.2 1b.) |
| Carriage cutting range | 203.2 (X) x 152.4 (Y) x 31.8 (Z) mm (8 (X) x 6 (Y) x 1-1/4 (Z) in.) |
| Carriage operating speed | X and Y axes: 0.1 to 1 mm/s, 1 to 15 mm/s (0.0039 to 0.59 in./s) |
| | Z axis: 0.1 to 1 mm/s, 1 to 6 mm/s (0.0039 to 0.23 in./s) |
| Cutting-depth control | AST (Active Surface Tracking) system |
| Maximum cutting depth | 3D Cutting mode: 0.05 to 7 mm (0.002 to 0.27 in.) |
| | Engraving mode: 0.05 to 1 mm (0.002 to 0.039 in.) |
| Cuttable materials | Composition: Resin (acrylic, modeling wax, ABS, polyacetal, polycarbonate, styrenefoam, etc.), wood, and plaster |
| | Maximum thickness: 30 mm (1-1/8 in.) |
| Resolution | 0.01 mm/step (0.00039 in./step) |
| Spindle motor | 12 W (DC motor) |
| Spindle rotating speed | 4,000 to 15,000 rpm |
| Cutter diameter | 3.175 mm (1/8 in.) |
| Interface* | Parallel (compliant with IEEE 1284) |
| Power supply | AC adapter |
| | Input: AC 100 to 240 V ±10%, 50/60 Hz   Output: DC 19 V, 2.1 A |
| Power consumption | Maximum during operation: 0.6 A at 100 V, 0.27 A at 240 V |
| Operating noise level | Standby: Less than 45 dB (A) |
| | No-load operation: Less than 70 dB (A) (according to ISO 7779) |
| External dimensions | 515.2 (W) x 368.3 (D) x 270.6 (H) mm (20-5/16 (W) x 14-1/2 (D) x 10-5/8 (H) in.) |
| Machine weight | 10.9 kg (24 1b.) |
| Operating environment | Temperature: 5 to 40 $^{\circ}$C (41 to 104 $^{\circ}$F) |
| | Relative humidity: 35 to 80% (no condensation) |
| Included items and accessories | AC adapter, power cord, cutter, cutter holder, depth regulator noses (large and small), |
| | adhesive sheet for mounting material, test-use plate material, Roland Software Package CD-ROM, User's Manual |

*USB Connectivity:  You can connect the EGX-20 to your computer's USB port with the optional parallel to USB conversion cable (SX-UP2).

## ■ Available Options

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

| Model No. | Description | |
|---|---|---|
| **3.175 (1/8) cutters for general engraving on acrylic and resin material** | | |
| ZEC-A2013 | Cemented carbide   dia = 3.175, 114(L) x 0.127(W) | |
| ZEC-A2025 | Cemented carbide   dia = 3.175, 114(L) x 0.254(W) | |
| ZEC-A2051 | Cemented carbide   dia = 3.175, 114(L) x 0.508(W) | |
| ZEC-A2076 | Cemented carbide   dia = 3.175, 114(L) x 0.762(W) | |
| | | |
| **Parallel cutters for engraving large characters (not intended for deep engraving) on acrylic and resin material** | | |
| ZEC-A2150 | Cemented carbide   dia = 3.175, 114(L) x 1.52(W) | |
| ZEC-A2190 | Cemented carbide   dia = 3.175, 114(L) x 1.91(W) | |
| ZEC-A2230 | Cemented carbide   dia = 3.175, 114(L) x 2.29(W) | |
| ZEC-A2320 | Cemented carbide   dia = 3.175, 114(L) x 3.175(W) | |
| | | |
| **Quarter round cutters for engraving  acrylic and resin material with high speed** | | |
| ZEC-A2013-QR | Cemented carbide dia = 3.175, 114(L) x 0.13(W) | |
| ZEC-A2025-QR | Cemented carbide dia = 3.175, 114(L) x 0.25(W) | |
| | | |
| **Diamond scraper for scribing names and numbers on aluminum or brass** | | |
| ZDC-A2000 | dia = 3.175, 127(L).  Burnishing attachment (ZB-20) is required. | |

| Model No. | Description |
|---|---|
| **Burnishing attachment** | |
| ZB-20 | Diamond scraper (ZDC-A2000) is required. |
| | |
| **Adhesive sheet for securing engraving material** | |
| AS-10 | 210 mm x 140 mm (8-1/4 in. x 5-1/2 in.), 10 sheets |
| | |
| **Replacement spindle motor** | |
| ZM-12 | Tests conducted by Roland DG Corporation resulted in motor life of approximately 1000 hours. |
| | |
| **Replacement spindle** | |
| ZS-20 | |
| | |
| **Interface cable** | |
| SX-UP2 | 1.8m parallel to USB conversion cable |