

**ROLAND DIGITAL**  
**CAMM-2**



## **Desktop Engraver (PNC-2100A, PNC-2200)** **Professional Computer-Aided Engraving Machines from Roland**

Professional quality engraving demands a high level of skilled technology. By connecting the engraving machine to a computer, the Roland CAMM-2 makes it possible to create not only lettering, but also intricate graphics. The same pattern can be reproduced in production quantities, and the engraving machine can use, in addition to plastics and acrylics, a wide variety of materials including soft metals and wood. The result? Engravings done on the CAMM-2 have a quality finish capable of pleasing even the seasoned professional engraver. Actually, when you consider cost performance, there is no excuse not to put one to work for you! We recommend to all companies that have already introduced computers or are considering the introduction of computers, to introduce the CAMM-2 Series into your business. You can thereby gain the advantage of offering a professional finish created by Computerized Engraving, a versatile business line that will lead to expanding the future possibilities of your business.

### **CAMM-2 Responds with Flexibility to Meet All Your Engraving Needs**

It is now possible for anyone to turn to the Roland CAMM-2 desktop engravers and precision engravings they produce, to find an affordable and beneficial solution. Simple name plates now feature smoother curves, sharper text, clean graphics and perfectly straight lines. You can use copper, bronze, brass, acrylic, plastic or wood as your materials. The CAMM-2 is designed to meet your needs in creating an ever diversifying range of products, including logos, directional signs, machine components, promotional goods, raised lettering, PCB pattern engraving, etc. And, the logical design and precise operation makes creating complex illustrations as easy as producing simple lettering.

### **Open Architecture Design**

The CAMM-2's commands are based on HP-GL emulation. This means it can be used by PC's, Macintosh computers, and workstations running many popular commercial graphic and CAD programs such as CorelDraw, AutoCAD, and Adobe Illustrator. It's as easy as designing your illustration on the screen of your computer and then output to the CAMM-2. In addition, it is equipped with both parallel (Centronics) and serial (RS-232C) interface ports, ensuring compatibility with the variety of hardware platforms on the market. This Open Architecture Design lets you make a safe investment you can feel confident about, an investment that can be used to increasingly expand the scope of your system. We promise.

### **High-precision, High-speed and Reliability**

CAMM-2 makes short work of engravings that take a long time to produce using conventional methods. The job gets done quickly thus increasing your productivity and adding increased value to your business. In addition, the high resolution of the CAMM-2 creates smooth beautiful curves, corners, and straight lines. We have ensured the reliability and compatibility of both hardware and software found in all Roland products is realized in the CAMM-2 as well, so you can rest assured in using it in your business.

### Two Models Available

**Model PNC-2100A** features a work area of 200mm x 140mm (7-3/16" x 5-1/2"), perfect for creating name plates and small signs. **Model PNC-2200** features a larger work area that handles material up to 305mm x 205mm (12" x 8-1/16"). Both models are sized to fit perfectly in your workplace...alongside your computer on your desktop.

### High Performance Options

The CAMM-2 can be enhanced with a range of optional accessories designed to increase your overall efficiency. These include the optional 'Nose Guard' that provides the highest possible degree of precision when you are engraving on uneven surfaces. When using the 'Nose Guard', you can adjust the engraving depth of 0.05 mm (0.002") to 1.00 mm (0.04"). Model No. ZN-22.

The optional spindle unit, Model No. ZS-436, enables the use of engraving cutters with a diameter of 4.36 mm in addition to the standard support for 3.175 mm diameter tool spindles. This widens the variety of tools available to select from.

Adding further ways to increase your productivity, the PNC-2100A's 'Vacuum Table Feature' lets you use a commercial air compressor to hold your material in place using vacuum suction.

### PNC-2100A Specifications

|                                          |                                                                                                |
|------------------------------------------|------------------------------------------------------------------------------------------------|
| <b>X-Y Table Size</b>                    | 7-13/16" x 5-1/2" (200 mm x 140 mm)                                                            |
| <b>Max. Work Area</b>                    | X: 7-13/16" (200 mm), Y: 5-1/2" (140 mm), Z: 3/8" (10 mm)                                      |
| <b>Mechanical Resolution</b>             | 0.01 mm/step (0.00125 mm/step - micro-step control)                                            |
| <b>Software Resolution</b>               | 0.01 mm/step                                                                                   |
| <b>Operation Speed</b>                   | X & Y: max. 70-7/8" (1.8 meter)/minute, Z: max. 23-5/8" (0.6 meter )/minute                    |
| <b>Spindle Motor</b>                     | DC Motor                                                                                       |
| <b>Spindle Revolution</b>                | 5,000 - 12,000 rpm                                                                             |
| <b>Power Consumption</b>                 | 0.9A/117V, 0.5A/220-230V, 0.4A/240V                                                            |
| <b>Interface</b>                         | Parallel (Centronics), Serial (RS-232C)                                                        |
| <b>Buffer Size</b>                       | 2 k byte (8 k byte for replot buffer) - Expandable up to 1 M byte                              |
| <b>Instruction System</b>                | CAMM-GL II, (mode 1: compatible with commands of Roland CAMM-3, mode 2: compatible with HP-GL) |
| <b>Main Unit Dimensions (w x d x h)</b>  | 16-3/4" x 13-13/16" x 6-7/16" (424 mm x 334 mm x 162 mm)                                       |
| <b>Controller Dimensions (w x d x h)</b> | 7-1/8" x 12-3/4" x 5-1/8" (180 mm x 323 mm x 129 mm)                                           |
| <b>Main Unit Weight</b>                  | 21.4 lb. (9.7 kg)                                                                              |
| <b>Controller Weight</b>                 | 13.2 lb. (6 kg)                                                                                |
| <b>Display</b>                           | LCD: 20 characters x 2 lines                                                                   |

|                              |                                |
|------------------------------|--------------------------------|
| <b>Switch</b>                | Power, Motor                   |
| <b>Control Key</b>           | MENU, 4-way directional arrows |
| <b>Operation Temperature</b> | 5 - 40 deg. celsius            |
| <b>Operation Humidity</b>    | 20 - 70% (non-condensing)      |

### **PNC-2200 Specifications**

|                                          |                                                                                                |
|------------------------------------------|------------------------------------------------------------------------------------------------|
| <b>X-Y Table Size</b>                    | 12" x 8-1/16" (305 mm x 205 mm)                                                                |
| <b>Max. Work Area</b>                    | X: 12" (305 mm), Y: 8-1/16" (205 mm), Z: 3/8" (10 mm)                                          |
| <b>Mechanical Resolution</b>             | 0.01 mm/step (0.0003125 mm/step - micro-step control)                                          |
| <b>Software Resolution</b>               | 0.01 mm/step                                                                                   |
| <b>Operation Speed</b>                   | X & Y: max. 70-7/8" (1.8 meter)/minute, Z: max. 23-5/8" (0.6 meter)/minute                     |
| <b>Spindle Motor</b>                     | DC Motor                                                                                       |
| <b>Spindle Revolution</b>                | 8,000 - 12,000 rpm                                                                             |
| <b>Power Consumption</b>                 | 0.8A/117V, 0.5A/220-230V, 0.4A/240V                                                            |
| <b>Interface</b>                         | Parallel (Centronics), Serial (RS-232C)                                                        |
| <b>Buffer Size</b>                       | 1 k byte (8 k byte for replot buffer)                                                          |
| <b>Instruction System</b>                | CAMM-GL II, (mode 1: compatible with commands of Roland CAMM-3, mode 2: compatible with HP-GL) |
| <b>Main Unit Dimensions (w x d x h)</b>  | 20-7/8" x 15-7/8" x 6-5/16" (530 mm x 402 mm x 160 mm)                                         |
| <b>Controller Dimensions (w x d x h)</b> | 7-1/8" x 12-3/4" x 5-1/8" (180 mm x 323 mm x 129 mm)                                           |
| <b>Main Unit Weight</b>                  | 33.1 lb. (15 kg)                                                                               |
| <b>Controller Weight</b>                 | 13.2 lb. (6 kg)                                                                                |
| <b>Display</b>                           | LCD: 20 characters x 2 lines                                                                   |
| <b>Switch</b>                            | Power, Motor                                                                                   |
| <b>Control Key</b>                       | MENU, 4-way directional arrows                                                                 |
| <b>Operation Temperature</b>             | 5 - 40 deg. celsius                                                                            |
| <b>Operation Humidity</b>                | 20 - 70% (non-condensing)                                                                      |