

# Laser Engraver **LV-290 / LV-180**

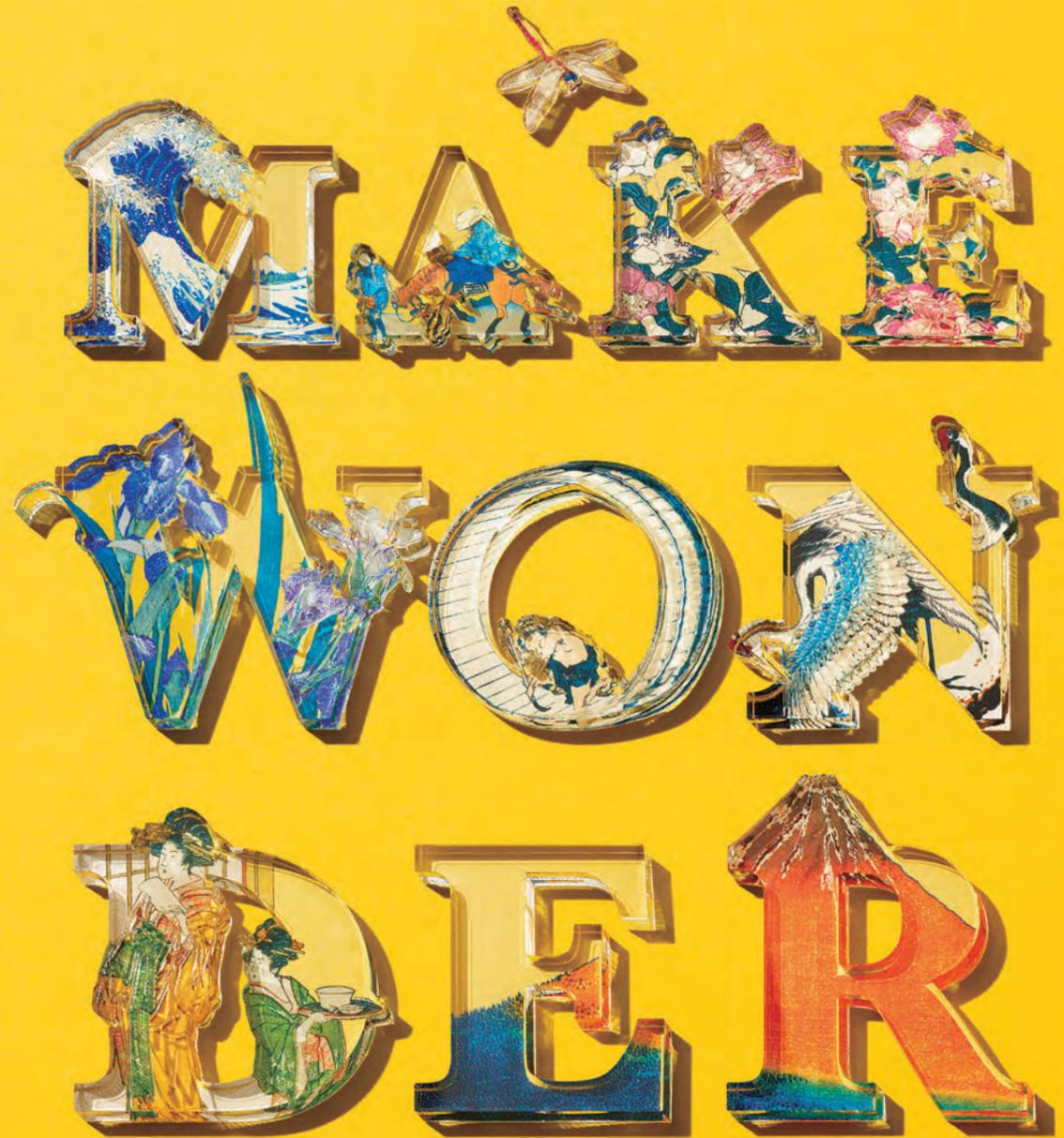


Specifications	LV-290	LV-180
Laser Source	40W CO <sub>2</sub> Laser	30W CO <sub>2</sub> Laser
Work Area	When with SmartVISION Pro CCD: 550 x 440 mm (21.6 x 17.3 in.) When without SmartVISION Pro CCD: 640 x 460 mm (25.1 x 18.1 in.), Extendable to 740 x 460 mm (29.1 x 18.1 in.)	458 x 305 mm (18.0 x 12.0 in.)
Maximum Part Size (W x L x H)	762 x 482.6 x 165 mm (30.0 x 19.0 x 6.4 in.)	505 x 309 x 170 mm (19.8 x 12.1 x 6.6 in.)
Table Size	790 x 530 mm (31.1 x 20.8 in.)	520 x 375 mm (20.4 x 14.7 in.)
Cooling	Air-cooled, Operating environment temperature 15°–30°C (60°–86°F)	
Drive	Closed-loop DC Servo control	
Maximum Motor Speed	When with SmartVISION Pro CCD: 1016 mm/s (40 in./s) When without SmartVISION Pro CCD: 1524 mm/s (60 in./s)	1016 mm/s (40 in./s)
Speed Control	Adjustable from 0.1–100% (Up to 16 color-linked speed settings per job)	
Power Control	Adjustable from 0–100% (UP to 16 color-linked power setting per job)	
Distance Accuracy	0.254 mm or 0.1% of move, whichever is greater	
Z-Axis Movement	Automatic	
Focus Lens	Standard 2.0 in., Optional 1.5 in., 2.5 in. & 4.0 in. available	Standard 2.0 in., Optional 1.5 in. available
Resolution (DPI)	Available 125, 250, 300, 380, 500, 600, 760, 1000, 1500	
Computer Interface	Full-speed USB 2.0 port, 10 Base-T Ethernet	
Memory Buffer	32MB standard	
Compatible Operating Systems	Windows® 7, 8.1, 10	
Display Panel	4-line LCD panel showing current file name, total working time, laser power, engraving speed, file(s) loaded into memory buffer, setup and diagnostic menus.	
Safety	Class I Laser Product Compliant with EN60825 Class II Laser Product Compliant with CDRH 2006/42/EC Machinery Directive Compliance	
Operation Voltage	100–240 VAC, 50–60 Hz Auto Switching, Max. 15 A	100–240 VAC, 50–60 Hz Auto Switching, Max. 12 A
Dimensions (W x L x H)	1125 x 720 x 1005 mm (44.2 x 28.3 x 39.5 in.)	740 x 780 x 410 mm (29.1 x 30.7 x 16.1 in.)
Weight	167 kg (369 lb.)	75 kg (166 lb.)
Fume Extraction System	External exhaust system is required, one 4 in. connection on the back of the machine	
Included Items	Power cord, Ethernet cable, USB cable, user's guide, cleaning tissue, mirror cleaner, etc.	

Options		
	Model	Description
Focus Lens	FL15	1.5 in. for LV-290/180
	FL20	2.0 in. for LV-290/180
	FL25	2.5 in. for LV-290
	FL40	4.0 in. for LV-290
Replacement Table	HT-180	Honeycomb table for LV-180
	GT-290	Grid cutting table for LV-290

### Expand Your Print Business With Our Benchtop UV Flatbed Printer

VersaUV LEF/LEF2 series print amazing graphics and lifelike textures, including premium finishes such as simulated embossing, onto a vast array of materials up to 100 mm (3.94 in.) thick. The breadth of applications you can produce can be greatly expanded to realize a highly profitable printing business.



LV Series Laser Engravers + VersaUV Benchtop Flatbed Printer  
The Perfect Combination of Precision and Creativity

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**!** Depending on the material being processed, harmful gases may be generated that could cause symptoms such as sore throat, headache, dizziness, etc. Roland DG strongly recommends that you install a deodorizing or local exhaust ventilation system in a well-ventilated room. For more information, please contact your local distributor or dealer.

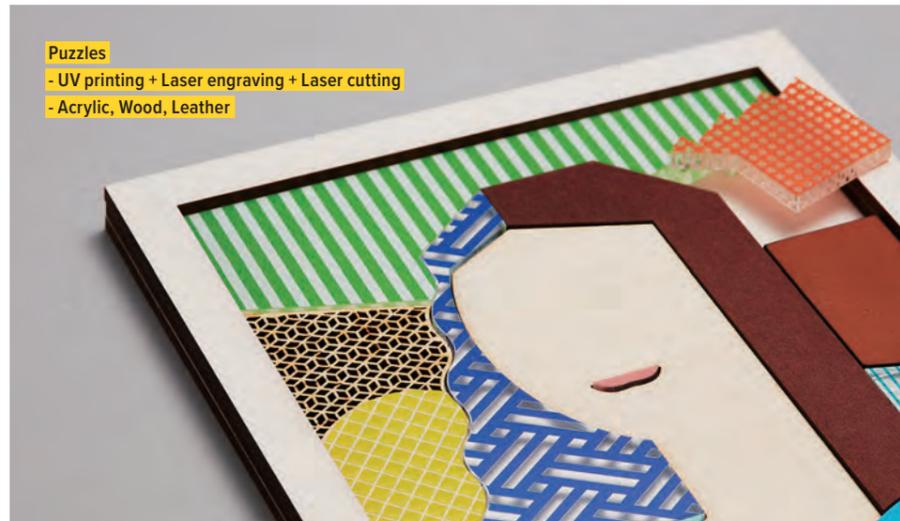
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Imagine. **Roland**

**AUTHORIZED DEALER:**

December, 2019

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 - UV printing + Laser engraving + Laser cutting  
 - Acrylic, Wood, Leather



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 - UV printing + Laser cutting  
 - Acrylic



**Shop signs**  
 - UV printing + Laser engraving + Laser cutting  
 - Wood



**Water bottle cover**  
 - Laser engraving  
 - Leather



**Wood pierced earrings**  
 - Laser engraving + Laser cutting  
 - Wood



**Acrylic flower POP**  
 - UV printing + Laser cutting  
 - Acrylic, Wood

# MAKE WONDER

LV Series Laser Engravers + VersaUV Benchtop Flatbed Printer  
 The Perfect Combination of Precision and Creativity

## Laser Engraver LV-290 / LV-180

To boost your creativity and build your business, Roland DG is proud to offer a unique, new combination of precision cutting and engraving with brilliant, lifelike printing. The fusion of different capabilities empowers you to create unique and attractive items.



### Our Laser Engraver and UV Flatbed Printer Combo Opens Up Profitable New Business Possibilities

LV series laser engravers are ideal for engraving or cutting shapes out of acrylic and other resins. With the VersaUV LEF/LEF2 series UV flatbed printers, you can print amazingly photo-realistic color, textures and simulated 3D embossing as well as gloss and matte finishes. Combining the LV series' capabilities with that of the LEF/LEF2 series printers enables the creation of premium value items, such as custom giftware, personalized awards, or acrylic displays with attractive graphics. Jigs that support setting up items to be UV-printed efficiently can also be easily created by cutting out resin shapes for the number of items to be printed.

### Precision Cutting and Engraving

The LV series uses a non-contact CO<sub>2</sub> laser to engrave complex shapes and text with crisp edges at high speed. Unlike conventional computerized engravers, cut surfaces have a smooth, clean finish without burrs, thus eliminating the need for any final touch-up work. With no engraving cutters to break or wear out, the laser always maintains a beautiful finish with no degradation in quality. The LV-290 is equipped with a CCD camera that supports positioning the material to accurately contour cut UV-printed graphics.

### Supports a Broad Range of Materials

The LV series is capable of working with an extensive range of materials, from plastics to wood, leather, paper, cork and much more. With two models available featuring different laser power and work areas, users can select the model that best suits the thickness and size of the materials you wish to work with.

### Simple Even for Beginners

#### 1. Easy and Accurate Setup

The LV series is equipped with functions that help users set the zero point for materials of different sizes and thicknesses. The XY zero point can be set accurately using the red laser pointer. The height can be set automatically with a single button using the contact-type auto-focus pin. The red laser pointer can be moved manually to any desired position to make setting the zero point even faster.

#### 2. Windows Driver for Assisting Engraving Operations

The LV series comes standard with a Windows driver that can output directly from graphics software such as Adobe® Illustrator® and CorelDRAW®. You can set and save the optimal output parameters according to the materials and type of data. You can also preview the laser processing path and check the approximate work time before starting.

#### 3. Simple and Intuitive Control Panel

The operation panel provides a simple configuration consisting of four function keys for navigating smoothly and quickly to the function you want to use. Output data can be saved to the LV series so you can output the same processing data multiple times without returning to the Windows driver. An LED light indicates machine status such as the open / close for the body cover and on / off for laser irradiation.

### Designed with Safety First

The LV series is Class 1-compliant under the "IEC60825-1" international standard for laser devices. The structural design ensures a sealed housing that prevents laser light from bleeding outside. If the cover is opened during processing, the safety interlock mechanism automatically halts laser irradiation.