Laser Decorator
LD-300

DGSHAPE METAZAStudio™

Roland DG Creative Center · Roland DG Academy · Roland DG Care

DGSHAPE
A Roland Company

Laser Decorator
LD-300

Specifications

Imprintable material	Acrylic, Polycarbonate, Polypropylene, Polystyrene, ABS, Polyurethane, PVC, Leather, Paper (Woodfree paper, Art paper, Coated paper)
Loadable material width and thickness	(Width) With base table: 323 mm (12.72 in.), without base table: 274 mm (10.79 in.) (Thickness) 216 mm (8.50 in.)
Imprint Area	[Recommended imprint area] 275 mm (width) × 196 mm (depth) (10.83 in. × 7.72 in.)
Resolution	318 dpi (text), 1270 dpi (vector)
Imprint direction	Unidirectional imprinting or bidirectional imprinting (Selectable with Windows driver)
Printing speed (default)	24 mm/s (0.95 in./s; default), 48 mm/s (1.89 in./s; maximum)
Interface	USB
Power requirements	[Dedicated AC adapter] AC 100 to 240 V ± 10%, 50/60 Hz [Machine] 19 VDC, 1.2 A
Power consumption	Approx. 23 W
Operating noise	70 dB (A) or less
Operating temperature	10 to 30°C (50 to 86°F)
Operating humidity	35 to 80% (no condensation)
External dimensions	616 mm (W) × 591 mm (D) × 496 mm (H) (24.25 in. (W) × 23.27 in. (D) × 19.53 in. (H))
Weight	46 kg (101.4 lb.)
Light source	[For imprinting (foil transfer)] Class 4 laser; wavelength: 450 nm; dispersion: 23 degrees; pulse width and repeatability: 167.5 μ s, 4 kHz; max. output: 1.6 W [For positioning] Class 1 laser, wavelength; 655 nm
Safety devices	[Interlock] When the cover opens, the laser power supply turns off. [Cover] Light-blocking cover
Included items	AC adapter, power cord, USB cable, Software Package CD, setup guide, material retainer, film frame, etc.

System requirements for USB connection

Operating system	Windows® 7 or better (32-bit or 64-bit)
USB cable	Use the included USB cable

Options

Item		Model	Description
Replacement lens unit		HL-300	1 interchangeable lens
Thermal transfer film		AL-300	A4 size, 10 sheets
Foil for laminates	Gold	DF-8079LG	80mm × 120M 1 roll
	Silver	DF-8047LS	80mm × 120M 1 roll
Foil for plastics	Gold	DF-8079PG	80mm × 120M 1 roll
	Silver	DF-8047PS	80mm × 120M 1 roll

* Laser lens and thermal transfer film are consumables and have a finite lifespan

The DGSHAPE Promise

DGSHAPE is the brand name of the 3D business unit spun off from Roland DG with the core mission: "make innovation, make life better." DGSHAPE delivers digital technologies that bring ideas to life, revolutionize business processes, and shape a better future. Our goal is to fuse human creativity with digital workflows to provide exceptional value across multiple endeavors, from individual craftsmanship to manufacturing, healthcare, and beyond.

DGSHAPE

AUTHORIZED DEALER:

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www.rolanddg.com

Foil Transfer on Soft Plastics with Precise Results

LD-300 uses semi-conductor laser transfer technology to apply heat activated adhesive foil to a variety of heat-resistant and soft plastics including: acrylic, polycarbonate, polypropylene, polystyrene, and ABS*. The pinpoint accuracy of the semi-conductor laser paired with a high-quality transfer foil can create designs as small as a fraction of a millimeter!

* When evaluating new materials, test on a disposable piece to make sure the results are satisfactory

Laser Unit

Pressure

Light Absorption Film

Foil

Object

Safety First!

The laser used in the LD-300 conforms to the safest "Class 1" standard*, and adopts a full-cover structure, so laser light can be used in a retail setting without any danger of exposure. Built-in safety features cancel operation if the cover is opened for any reason. In addition, our unique method of laser decoration creates no dust or gas, and no regular maintenance is required to operate the machine at peak performance.

* IEC 60825-1

Now You Can Decorate Leather

Our patent pending technology, first pioneered with the LD-80, uses foil transfer for decoration on synthetic leather. With the LD-300, the same technology can also imprint directly onto the surface of genuine* leather. Produce multiple items at once or create unique masterpieces one at a time. Unlike CO_2 lasers, DGSHAPE's semi-conductor laser decoration technology emits no gas or odors commonly associated with laser engraving applications and needs no fume extraction equipment. All while delivering crisp text, fine lines, and highly detailed artwork.
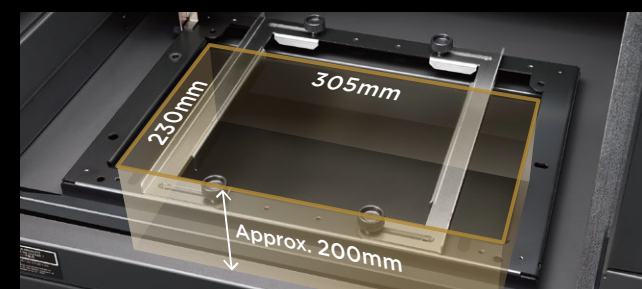
* Please use genuine leather processed with plant-based tanning when transferring and stamping. Other types of treated leather will produce inconsistent results. In addition, please note that synthetic leather cannot be printed directly.

GET PERSONAL

Take Your Brand to the **Next Level**

Your brand's products are already exclusive. Make them one-of-a-kind for your customers with DGSHAPE laser decoration technology. Building on the platform of the revolutionary LD-80 Laser Decorator, the LD-300 Laser Decorator goes beyond foil decoration on soft plastics to include larger and more robust items like gift packaging and direct imprinting on leather. The unique design of LD-300 accepts small to medium size branded products for unique personalization on a variety of materials. In addition to smaller applications compatible with LD-80, LD-300 also decorates large objects with ease.

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Decorate Large Items Up to 20cm Thick

The LD-300 Laser Decorator was completely re-designed to accommodate large items such as handbags and gift boxes* with increased speed. Flat, A4 sized items (305mm × 230mm) can be decorated with ease; and if you remove the print table, the available decorating area expands to 200mm thick!

* Depending on the height of the box, a spacer may be required for adjustment. You may also need to support the inside of the box to prevent the surface of the box from sinking or creasing.
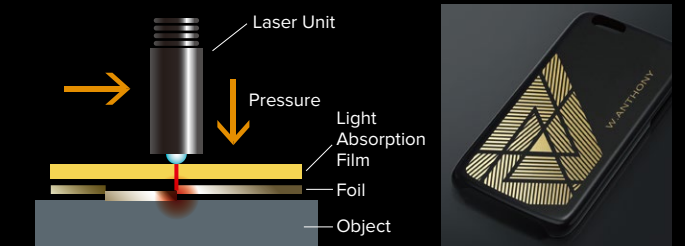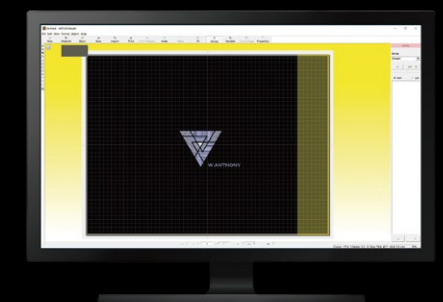
230mm

305mm

Approx. 200mm

* Photo shown with base table removed

Bundled Software for Text and Logos

LD-300 comes bundled with intuitive design software for your Windows PC. Use any system fonts or vector designs you want, or import existing designs from popular design software packages in AI or EPS formats. Create custom fill patterns for your text and logos, or set up your file for multiple colors using different foils.

* Screen images simulated. Actual results may vary.