



CAMM-1 GR Series

Product Information Guide

The cutter you've been waiting for...



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Overview

The new CAMM-1 GR series – Roland’s most advanced, feature-packed and versatile line of cutters ever – ushers in a new era of cutting device technology. Available in 42”, 54”, and 64” models, the GR series builds on a 30-year tradition of CAMM-1 cutter reliability, ease-of-use, and unmatched support.

Newly-designed from the ground up, the CAMM-1 GR series raises the performance bar to a whole new level. Every GR series cutter is built on a rigid chassis that supports a host of new, innovative hardware features. Each model also comes bundled with Roland CutStudio software, which is now even easier to use and more powerful than ever. Not only do GR series cutters work hand-in-hand with Roland VersaWorks® Dual, but can also be easily paired with any large format printer driven by the most popular industry-wide RIP software, making them perfect for nearly every print-service-provider’s print then cut workflow.

Incorporating outstanding cutting speed with enhanced tracking for long-run production, the GR series can keep up with the demands of even the busiest shop. Built to tackle tough applications like diamond-grade reflective films, sandblast mask, and cardstock. The new dual-position tool carriage is capable of 600 grams of down force, so cutting once-difficult materials is a breeze. The second tool position aligns one of the redesigned blade holders over a groove in the platen for perforated cutting. Electronically-controlled pinch rollers offer 10 user-selectable pressure settings, giving the GR the versatility to cut everything from the thinnest window tint film to thick sandblast mask.

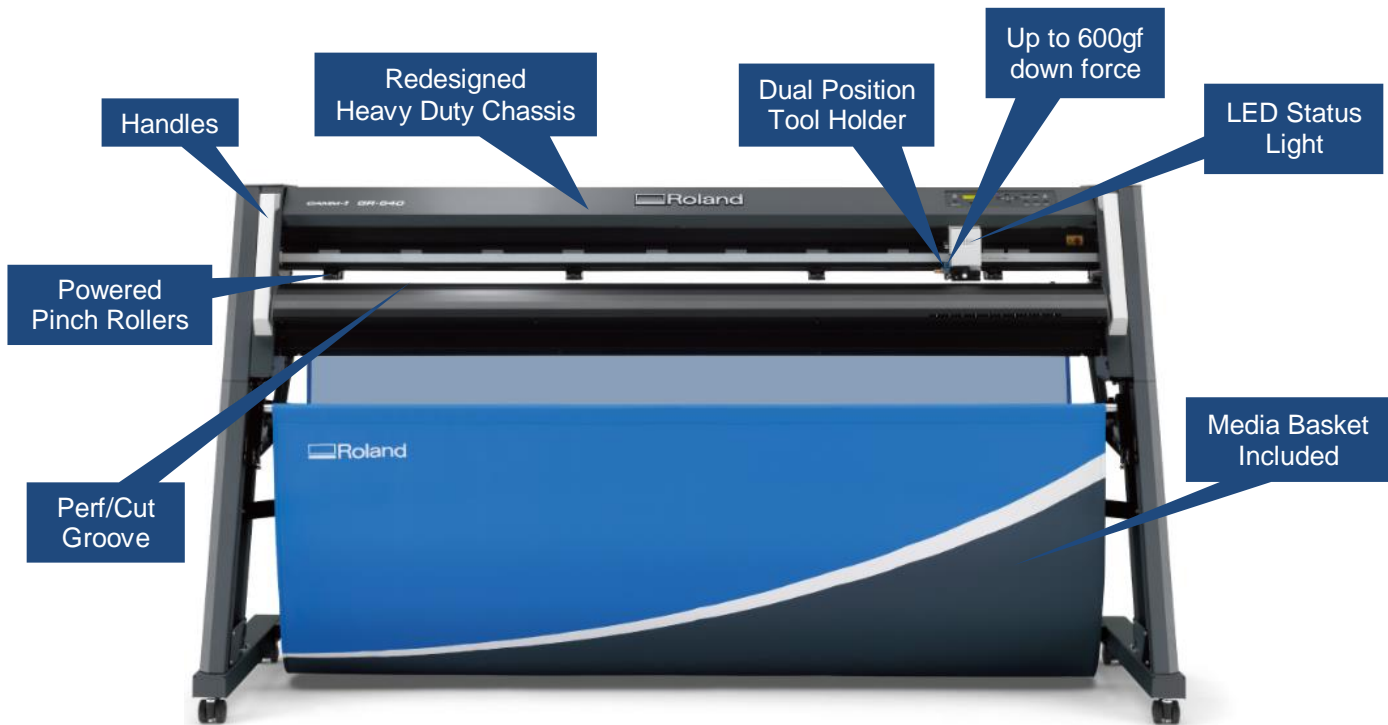
MSRP

42” CAMM-1 GR-420.....	\$5,495 USD
54” CAMM-1 GR-540.....	\$5,995 USD
64” CAMM-1 GR-640.....	\$6,995 USD

Key Features and Benefits

- Down force: 20 to 600 gf
- Maximum speed: 58.5 in/sec (1,485 mm/sec) in 45° direction
- Maximum roll weight: 88.5 lbs (40 kg)
- Maximum media thickness: .04 inches (1mm) (.08 in (2mm) with backing)
- Extended mode supports an additional .79 in (20 mm) in width
- Standard cutting + 10 times overlap
- Overcut mode (tangential emulation) of .04 inches (1 mm)
- Dual-position tool carriage
- Perforated cutting groove
- Ethernet and USB 2.0 interface
- Powered 10-step variable pressure pinch rollers
- LED status light
- Powered accessory port
- Heavy-duty, color-coded blade holders
- Integrated accessory holders
- Branded media basket (included)
- Rigid construction with integrated stand and media holder
- Quadralign optical print/cut registration
- Compatible with Roland VersaWorks® Dual and other popular RIP software
- Bundled with CutStudio software
- Three-Year Trouble-Free Warranty*

*Requires product registration. Valid in Canada, US, and Latin America regions only.



Robust New Chassis

Each GR series cutter is built on a solid foundation. The newly-engineered L-shaped profile and sturdy cross-bracing steel construction make this the most rigid CAMM-1 ever. Even the carriage rail and drive mechanics have been reinforced to ensure years of accuracy and reliability.



New Tool Carriage



Capable of 600 grams of cutting down force, the dual-position tool carriage allows for a host of demanding applications. The blade can be quickly repositioned from the front holder to the second blade holder which lies above a groove in the platen. The second blade holder's strategic positioning eliminates the need to frequently replace the protection strip when performing perforated cut lines and ultimately prolongs the life of the blade. The new tool carriage also features a built-in LED status light and powered accessory port*. The automated, encoder-controlled height adjustment adapts to varying material thickness and enables soft-landing

sequence optimization, increasing efficiency and extending blade life. Tool height setting options are: auto, high, middle & low.

**Optional accessories not yet available*

Blade Detection

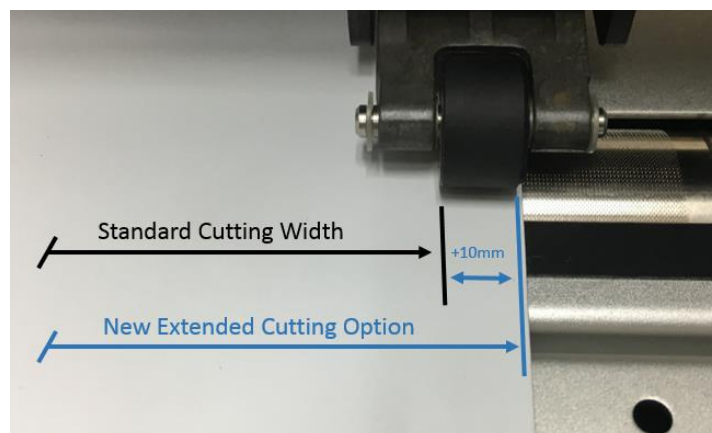
The cutter now features a blade detection option to ensure users have the correct tool position loaded when sending a cut file. When the blade detection option is enabled, the cutter will not begin to cut if the wrong tool position is loaded. When the wrong tool position is loaded, the user will be prompted on the control panel to change the tool position. The user must first load the front tool position and send a kiss-cut file and then load the second tool position before sending the perforated cut file. Blades cannot be loaded in both positions at the same time.

Powered Pinch Rollers with Variable Pressure

With a single touch of a button, the operator can now raise and lower the GR series' motor-driven pinch roller system. Choose from ten different pressure settings for the outer-most pinch rollers, and three settings for the center pinch roller, to easily adapt to the thickness of material. The settable range for the outer-most pinch rollers are 1 through 10. The options for the center pinch roller are normal, slight, and none. Each CAMM-1 GR model is equipped with three pinch rollers.

Extended Cutting Width

The GR series' maximum cutting width can be extended from 0.1 to 10mm on each side of the media, allowing for true edge to edge cutting. Cutting width is no longer limited to only the area between the outside pinch rollers, maximizing the cutting area by as much as 20 mm.



New Accessories

New XD-CH4 Blade Holders

The new XD-CH4 blade holders have been optimized from one internal ball-bearing to two, creating improved rotational stability of the blade and increased accuracy. Additionally, the adjustable cap now has a curved surface to reduce interference with the surface of the media. These blade holders are also available in three colors, making it easy for busy operators to identify different blades. Every GR series cutter comes bundled with a blue blade holder (XD-CH4-BL) and one 45-degree blade (ZEC-U5032). The new XD-CH4 series blade holders replace the previous XD-CH3 models, and are fully compatible with all Roland cutters and printer/cutters.



New ZEC-U5010 Window Tint Blade

The optional ZEC-U5010 blade has been specially designed for window tint applications. Featuring a uniquely-angled cutting surface offset from the center of rotation, the ZEC-U5010 blade is specifically designed for cutting thin vehicle and architectural window tint film. This blade is available in packs of two and is fully compatible with all Roland blade holders. For optimum performance and blade life, XD-CH-4 blade holders are recommended.



Material	Blade	Cutting Force	Cutting Speed	Offset	Pinch Force
Common Adhesive Vinyl	ZEC-U5032	30 - 100 gf	≤ 30 cm/s	0.25 mm	2 - 6
Fluorescent	ZEC-U5025	120 - 200 gf	≤ 10 cm/s	0.25 mm	4 - 8
Window Tint	ZEC-U5010	80 - 120 gf	≤ 30 cm/s	0.50 mm	1 - 6
Sandblast Mask	ZEC-U1715	100 - 500gf	≤ 5 cm/s	0.25 mm	7-10
Reflective	ZEC-U3075	350 - 450 gf	≤ 5 cm/s	0.75 mm	7-10
Magnetic Sheet*	ZEC-U3075	450 - 600 gf	1cm/s	0.75 mm	7-10

*Cutting magnetic materials exclusively may cause premature failure due to stress on the grit rollers.

Interface

USB 2.0 and Ethernet Connectivity

Every GR series model has been upgraded to support Ethernet connectivity allowing you to add the GR series cutters to a network. Additionally, a new high-speed USB 2.0 interface allows for simple plug-and-play installation. Either of these choices takes only a few minutes to set up. The high-speed USB 2.0 or Ethernet interface also enables multiple CAMM-1 devices to be driven from the same workstation – just another example of Roland's commitment to developing technologies that increase ease of use and overall productivity.

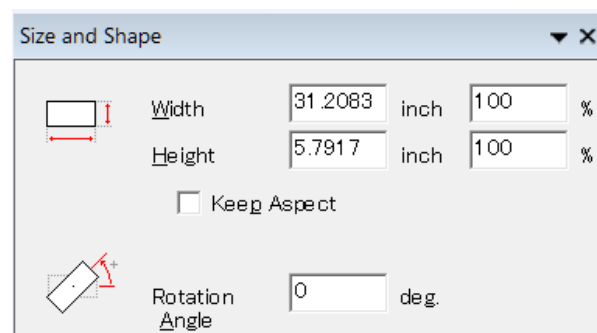
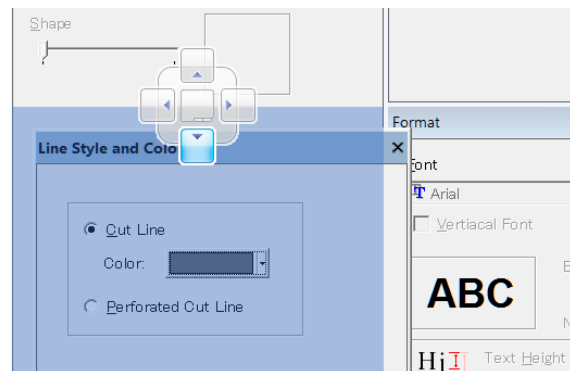
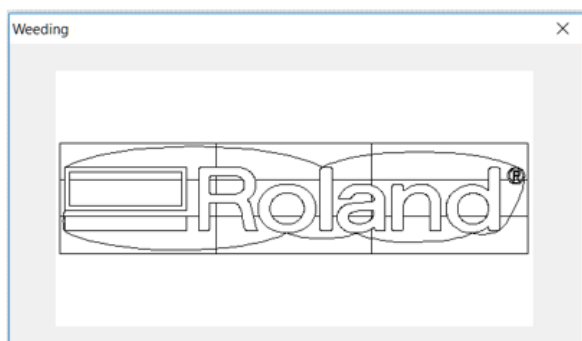
Software

CutStudio v3.0

Bundled with each GR series cutter, Roland CutStudio software allows designers to quickly and easily enlarge, reduce, re-position, rotate and mirror images. BMP, JPG, STX, AI, and EPS file formats are all supported. The software includes a Windows driver. Windows plug-ins for Adobe® Illustrator® and CorelDRAW®, and Mac Plug-in for Adobe® Illustrator® are also available. The result is a seamless, user-friendly operating environment.

New CutStudio Features

- Additional auxiliary weed lines
- Docked panel for object properties
- Perforated cutting support
- Contour cut sorting
- Improved object transformation



Competitive Comparison

Models	MSRP (USD)	Max. Cutting Width	Max. Cutting Force	Max. Cutting Speed	Interface	Warranty (USA)
NEW! Roland CAMM-1 GR-420	\$5,495	42.3 in 1,075 mm	600 gf	58.5 in/s 1,485 mm/s	USB 2.0 Ethernet	3 years**
Mimaki CG-100SRIII	\$2,699	42.1 in 1,070 mm	500 gf	27.6 in/s 700 mm/s	USB 2.0/ RS-232C Ethernet	2 years
Graphtec CE-6000-120	\$3,395	47.8 in 1,213 mm	300 gf	40 in/s 1,000 mm/s	USB 2.0 RS-232C	2 years**
Graphtec FC8600-100	\$5,195	42 in 1,067 mm	600 gf	58.5 in/s 1,485 mm/s	USB 2.0/ RS-232C Ethernet	3 years**
SummaCut Series D120	\$3,995	47.2 in 1,200 mm	400 gf	44 in 1,120 mm	USB	2 years
Summa S Class 2 Series S2 D120	\$6,999	47.2 in 120 cm	400 gf	56 in 1,414 mm	USB Ethernet	3 years
Summa S Class 2 Series S2 T120	\$8,499	47.2 in 1,200	600 gf	56 in 1,414 mm	USB Ethernet	3 years
GCC RX II-101S	\$4,495	40 in 1,016 mm	600 gf	60.2 in/s 1,530 mm	USB 2.0/ RS-232C Ethernet	1 year
GCC Jaguar J5-132LX	\$3,750	40 in 1,016 mm	600 gf	60.2 in/s 1,530 mm/s	USB 2.0/ RS-232C Ethernet	1 year
Vinyl Express Q42 UVP	\$2,995	42 in 1,066 mm	400 gf	50 ips	USB	2 years

Models	MSRP (USD)	Max. Cutting Width	Max Cutting Force	Max Cutting Speed	Interface	Warranty (USA)
NEW! Roland CAMM-1 GR-540	\$5,995	55 in 1,397 mm	600 gf	58.5 in/s 1,485 mm/s	USB 2.0 Ethernet	3 years**
Graphtec CE6000-120	\$3,395	47.8 in 1,213 mm	450 gf	39.4 in/s 1,000 mm/s	USB 2.0 RS-232C	2 years**
SummaCut Series D140	\$4,995	53.1 in 1,350 mm	400 gf	44 in/s 1,120 mm/s	USB	2 years
Summa S Class 2 Series S2 D140	\$7,999	53.1 in 1,350 mm	400 gf	55.7 in/s 1,414 mm/s	USB Ethernet	3 years
Summa S Class 2 Series S2 T140	\$9,499	53.1 in 1,350 mm	600 gf	55.7 in/s 1,414 mm/s	USB Ethernet	3 years
Mimaki CG-130FXII	\$6,995	51.2 in 1,300 mm	400 gf	39 in/s 991 mm/s	USB RS-232C	2 years
GCC RX II-132S	\$5,995	52 in 1,320 mm	600 gf	60.2 in/s 1,530 mm	USB 2.0/ RS-232C Ethernet	1 year
GCC Jaguar J5-132LX	\$4,850	52 in 1,320 mm	600 gf	60.2 in/s 1,530 mm	USB 2.0/ RS-232C Ethernet	1 year

Model	MSRP (USD)	Max. Cutting Width	Max. Cutting Force	Max. Cutting Speed	Interface	Warranty (USA)
NEW! Roland CAMM-1 GR-640	\$6,995	65 in 1,651 mm	600 gf	58.5 in/s 1,485 mm/s	USB 2.0 Ethernet	3 years**
Graphtec FC8600-130	\$5,995	54 in 1,372 mm	600 gf	58.5 in/s 1,120 mm/s	USB 2.0/RS-232C Ethernet	3 years**
SummaCut Series D160	\$6,495	62.2 in 1,580 mm	400 gf	44 in/s 1,131 mm/s	USB	2 years
Summa S Class 2 Series S2 D160	\$8,999	62.2 in 1,580 mm	400 gf	55.7 in/s 1,414 mm/s	USB Ethernet	2 years
Summa S Class 2 Series S2 T160	\$10,499	62.2 in 1,580 mm	600 gf	55.7 in/s 1,414 mm/s	USB Ethernet	3 years
Mimaki CG-160FXII	\$8,595	62.9 in 1,597 mm/s	400 gf	39 in/s 991 mm/s	USB 2.0 RS-232C	2 years
GCC RX II-183S	\$6,995	72 in 1,830 mm	600 gf	60.2 in/s 1530 mm	USB 2.0 RS-232C	1 year
GCC Jaguar J5-183LX	\$5,520	72 in 1,830 mm	600 gf	60.2 in/s 1530 mm	USB 2.0 RS-232C	1 year

** Extended warranty and/or service contract available with product registration. Additional fees and conditions may apply.

New & Previous Generation Comparison

	NEW! GR-640	GX-640
MSRP (USD)	\$6,995 USD	\$6,995 USD
Maximum Cutting Width	65.8 in (1,671 mm) including extend mode	64.0 in (1,626 mm) including extend mode
Maximum Cutting Length	984.3 in (25 m)	984.3 in (25 m)
Maximum Cutting Force	600 gf	350 gf
Maximum Cutting Speed	58.5 in/sec (1,485 mm/sec)	47.3 in/sec (1,202 mm/sec)
Maximum Loadable media weight	88.18 lbs (40 kg)	Not available
Maximum Media Roll Width	70 in (1,778 mm)	72.5 in (1,842 mm)
Variable Pressure Pinch Rollers	10 Steps	No
Powered Pinch Rollers	Yes	No
Interface	USB 2.0/ Ethernet	USB 1.1/Serial
Media Basket	Included	Not Included
Overlap Cutting	Standard cut plus up to 10+	Standard cut plus up to 10+
Overcut Mode	Yes - 1mm	Yes - 1mm
Perforated Cut Groove	Yes	No
Warranty	3 years	3 years
Integrated Handles	Yes	No
Dual Tool Carriage	Yes	No

Drivers

The new GR series will be supported by industry-standard RIPs including:

- Ergosoft - basic implementation available
- Cadlink – driver available for download
- Caldera – driver written and awaiting approval
- Colorgate – availability unknown
- Onyx – scheduled for March
- Flexi – availability unknown

Service and Support

Three-Year Trouble-Free Warranty*



The original CAMM-1 series cutters have become widely known for their outstanding performance and rugged reliability. To prove just how reliable the new CAMM-1 GR series will be day in and day out, Roland is offering a Three-Year Trouble-Free Warranty*. Owners may extend this peace-of-mind for up to five years with an optional service contract.

** Requires product registration, only valid in US, Canada and Latin America regions.*

GR Series Roland Care Premium Service Contract

Customers joining our GR Series Roland Care Premium Service Contract will receive five full years of the industry's best service and support, plus additional cost savings and benefits, including:



- Two years extended warranty
- Factory authorized service and repair
- Free technical phone and e-mail support during contract period

Applications

Sign Making

- Sign Vinyl
- Sandblast Stencils



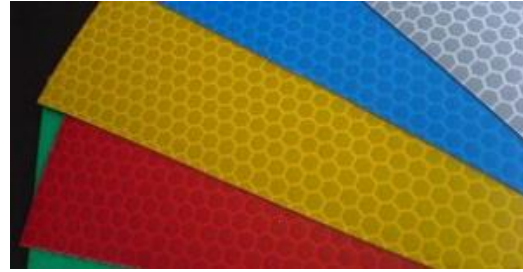
Inkjet Print/Cut and Perf/Cut

- Vinyl Decals
- Floor Graphics
- Fleet Advertising



Automotive Restyling

- Fleet Graphics
- Window Tint & Paint Protection
- Custom Restyling



Reflective Film

- Refractive
- High-Intensity
- Diamond Grade

Specifications

	GR-640	GR-540	GR-420
Mechanism / Driving method	Media-movement method / Digital control servo motor		
Acceptable media widths	Max. 70 in. (1,802 mm)	Max. 60 in (1,548 mm)	Max. 48 in (1,224 mm)
Maximum cutting area	Width: 65 in. (1,651 mm) Length: 984 in. (25 m)	Width: 55 in. (1,397 mm) Length: 984 in. (25 m)	Width: 42 in. (1,075 mm) Length: 984 in. (25 m)
Maximum cutting speed	1,485 mm/s (High speed mode - 45° direction)		
Cutting speed / Cutting force	10 - 1,050 mm/s (in increments of 10 mm/s) / 20 - 600 gf (in increments of 10 gf)		
Mechanical resolution	0.005 mm/step		
Software resolution	0.025 mm/step		
Distance accuracy	Error of no more than +/-0.2% of distance traveled, or 0.1 mm (0.00394 In.), whichever is greater		
Repetition accuracy *1 *2	0.1 mm or less		
Interface	Ethernet 10BASE-T / 100BASE-TX (auto-negotiation), USB 2.0 (full speed)		
Buffer size	8MB (2MB for re-plot buffer)		
Power supply / Consumption	AC 100 - 240 V 50/60 Hz 0.7 A / Approx. 70 W		
During operation	67 dB (A) or less (according to 1507779)		
During standby	43 dB (A) or less (according to 1507779)		
Dimensions with stand	85.2 in. (W) x 29.1 in. (D) x 46.8 in. (H) 2,165 mm (W) x 740 mm (D) x 1,190 mm (H)	75.2 in. (W) x 29.1 in. (D) x 46.8 in. (H) 1,910 mm (W) x 740 mm (D) x 1,190 mm (H)	65.0 in. (W) x 29.1 in. (D) x 46.8 in. (H) 1,650 mm (W) x 740 mm (D) x 1,190 mm (H)
Weight with stand	206.1 lb. (93.5 kg)	191.8 lbs. (87 kg)	172.0 lbs. (78 kg)
Packaging dimensions	90.5 in. (W) x 22.2 in. (D) x 30.3 in. (H) 2,300 mm (W) x 565 mm (D) x 770 mm (H)	80.7 in. (W) x 22.2 in. (D) x 30.3 in. (H) 2,050 mm (W) x 565 mm (D) x 770 mm (H)	68.5 in. (W) x 22.2 in. (D) x 30.3 in. (H) 1,740 mm (W) x 565 mm (D) x 770 mm (H)
Packaging weight	282 lbs. (128 kg)	260 lbs. (118 kg)	238 lbs. (108 kg)
Operating environment	Temperature: 5 to 40 °C (41 to 104 °F), Humidity: 35 to 80 % (no condensation)		
Included items	Power cord, electrical plug adapter, blade (ZEC-U5032, 1pc), blade holder (XD-CH4-BL), cable clamp, replacement blades for separating knife, installation guide, USB cable (2 m), alignment tool, Roland DG software (to download), user's manual (to download)		

*1: Only applicable under certain internal test conditions with the usage of specific vinyl sheet and cut settings.

*2: Excluding stretching/contraction of the material.

SOFTWARE	OPERATING SYSTEM	APPLICATION
ROLAND ON SUPPORT	Windows®*7/8/8.1/10 (32/64-bit)	-
ROLAND CUTSTUDIO	Windows®*7/8/8.1/10 (32/64-bit)	-
ROLAND CUTSTUDIO PLUG-IN FOR ADOBE ILLUSTRATOR®	Windows®, MAC OS	Adobe® Illustrator, CC (2014), CC (2015), CC (2017)
ROLAND CUTSTUDIO PLUG-IN FOR CORELDRAW®	Windows®*	CorelDRAW® X6/X7/X8