# Laser Engraving, Cutting and Marking Systems





## CD-ROM Demo

## Epilog Laser CD-ROM Demo

Nothing compares to watching the detail our lasers can achieve as they engrave. With our CD Demo you can see stunning close-up video of the laser in action and learn about how a laser system works. Insert the CD-ROM demo into your computer's CD drive and watch this informative demo as it explores:

- The possibilities of what the laser can add to your business
- How easy it is to use the laser
- The high quality parts that go into each Epilog laser system
- The profitability of owning a laser system
- How to pick the right laser for your business
- And what the next step is to getting your own laser!



## Commitment to Quality



### **Our Company**

You can never underestimate the importance of experience. One of the reasons that Epilog laser systems are the very best in the industry is that Epilog has been developing cutting edge laser technology longer than anyone else. From the very beginning, Epilog has been at the forefront of laser technology with a long list of "firsts" which have defined today's laser market. By embracing the latest technology, we have continued to develop faster, higher quality, longer lasting laser systems that can better meet your needs.

### Why Choose an Epilog?

When you're evaluating different laser systems, compare the attributes that are most important to your profits, such as image quality, speed, included features and build quality. From using the highest quality components in our systems to incorporating the latest motion control technologies, we are confident that we design a laser that will exceed your expectations.

At Epilog, we are proud to produce systems that can create unmatched engraving quality, but we are equally proud to produce laser systems that are affordable, exceptionally easy to use, extremely versatile, as well as being recognized as the most robust, reliable systems in the world. To truly find out how Epilog stands apart, set up a demonstration with the distributor in your area. They will match you up with an Epilog system that best meets your needs. Call today and set up an appointment. Toll Free 1.888.437.4564

#### Dedication

Along with the best laser technology, Epilog is recognized throughout the world as having the industry's most experienced and knowledgeable sales and support teams. Epilog's philosophy of developing and nurturing long-term relationships with our worldwide distribution channel ensures that our customers always have the most experienced sales and support professionals available long after the initial purchase.



You will also find that Epilog is widely recognized as the best source of aftermarket training programs in the industry. Customers are encouraged to attend our users' clinics and CorelDRAW seminars, which provide an excellent means of discovering the latest in laser technology, as well as information about new products and trends from other engraving professionals.



## **Engraving System Introduction**

## **Product Line**

Epilog produces a wide range of laser products to suit the different needs of the laser industry. Our products are differentiated by work area, laser wattage, performance and cost. Whether you're looking for an entry level machine, like the Epilog Mini 18, or the ultimate in a high performance laser system, like the Legend 36EXT, there's sure to be an Epilog laser system to meet your needs. Given that all of our systems feature Epilog's exclusive Accupoint<sup>™</sup> and HyperSpeed<sup>™</sup> Technologies, you can be sure that you're getting Epilog's renowned quality and performance in every system.



## **Epilog Mini**



## Wattage Options: Mini 18 25 watts 35 watts



### Epilog Mini 18

Epilog's entry-level laser system has set new standards for a low cost, high performance laser system. Built to fit almost any work space, the Epilog Mini 18 features an 18" x 12" (457 x 305 mm) engraving area, and it comes equipped with many of the same features as our larger laser systems. Originally designed to satisfy the needs of an entry level system, the Mini 18's big capabilities have made it popular for experienced users that need a low cost solution to expand their current business. Because the Mini 18 does not compromise on features, engraving quality or build quality, it has established itself as the system of choice when it comes to a truly affordable, small format laser system.

## Epilog Mini 24

Moving up in size, the Epilog Mini 24 is the world's most affordable high performance laser system. Incorporating a popular 24" x 12" (610 x 305 mm) table size, the Mini 24 is ideal for fitting an industry standard 24" x 12" engraving material into the system. Fully featured, the Mini 24 includes Epilog's Radiance™ High Energy Optics, Auto Focus, Red Dot Pointer and Air Assist.

## **Epilog Helix**

## **Epilog Helix 24**

For engravers looking to be able to accept larger engraving pieces without a large increase in system cost, the Epilog Helix is an ideal choice. The Helix features a 24" x 18" (610 x 457 mm) work area, and has an 11" (279 mm) Z-stroke. The Helix is the world's most affordable medium-sized, fully featured system. Powerful laser wattages up to 75 watts allow the system to cut through thicker materials, as well as produce deeper, faster engraving in materials that demand more power. The Helix includes Epilog's Radiance™ optics package, integrated Vector Grid and Vacuum Table, along with the abundant standard features you expect from an Epilog.

## Wattage Options:

Helix 24 35 watts 40 watts 45 watts 60 watts 75 watts





**Epilog Legend 36EXT** 





#### Legend 36EXT

The Legend 36EXT is the culmination of laser achievement. There is no other laser system that combines the features, performance and price of the 36EXT. Designed with the most demanding users in mind, the 36EXT provides excellent engraving and cutting capabilities with an oversized 36" x 24" (914 x 610 mm) work area. By including the Radiance™ High Energy Optics, Epilog can provide the most consistent beam quality across the entire table. For applications requiring the highest laser powers, we provide 120 watts from a single-tube design.

## Wattage Options: Legend 36EXT

30 watts
35 watts
40 watts
45 watts
60 watts
75 watts
120 watts

LEGENDEXT

## **Industries**

Woodworking
Textile Cutting
Industrial Prototyping
Industrial Marking
Signmaking
Medical Part Marking
Aerospace
Architectural Modeling
Specialty Advertising
<b>Plastics Fabricating</b>
Flexo
Point of Purchase
Rubber Stamps
Picture Framing
Gift Manufacturing
Bar Coding
Engraving
Gasket Cutting
Puzzles
Cabinetry
Awards & Recognition
Personalized Pens
Door Pulls
Cut Scroll Patterns
Games & Toys
Finger Joints
Inlays & Overlays
Fraternity Paddles
Music Boxes
Light Switch Plates
Jewelry Boxes
Parts Marking
Router Templates
Desk Sets
Scrap Booking
Photo Albums
Jewelry
Crafts
Italian Charms

## **Material Capabilities**

	Engr	_
	STOV OV	Cup
Wood	•	•
Plastic	•	•
Acrylic	•	•
Glass	•	
Coated Metal	•	
Ceramic	•	
Delrin	•	•
Cloth	•	•
Leather	•	•
Marble	•	
Matte Board	•	•
Melamine	•	•
Paper	•	•
Mylar	•	•
Pressboard	•	•
Anodized Aluminum	•	
Rubber	•	•
Wood Veneer	•	•
Fiberglass	•	•
Circuit Boards	•	
Stainless Steel	•	
Painted Metals	•	
Tile	•	
Cork	•	•
Corian	•	•

These are just a few of the many materials you can use on an Epilog laser system.

Contact your distributor today to find out if your material is compatible with a laser.

Visit www.epiloglaser.com/distributors.com for your local distributor.

If you have a piece of material you would like us to test, send it to our Applications Lab at:

Epilog Laser Applications Lab 16371 Table Mountain Parkway Golden, CO 80403

Call us toll free at 888-437-4564 for more information.

Samples Page



## Image to Engraving in 5 Basic Steps

The following few steps walk you through the simple process of setting up a job to be laser engraved. We chose a photograph to show how easy it can be to engrave practically any image. Scanned photographs, corporate logos, clipart or custom artwork can all be used for "printing" to the laser. Instead of transferring ink to paper, the laser engraves your image into wood, acrylic, coated metals, plastic, glass and a wide variety of other compatible materials. Set up your artwork, print to the laser, then press the Go button. You'll be amazed at how easy it is!

Import the scanned photo into CoreIDRAW or your preferred



Configure the laser speed and power, using the suggested Δ settings in the owner's manual, then send the print job to the Epilog laser system for engraving.



Start by scanning a photo using any photo scanner.





Convert the photo to grayscale. If engraving on anodized aluminum or other black material, invert the image.



Finished Engraving Up Close

5 Complete by choosing your print job from the laser menu and pushing the go button for engraving to begin.



Your work is done! The laser will automatically set the engraving table to the correct height for the material you are using and start engraving. With these few simple steps, you have created a stunning engraving that will last a lifetime!





**Engraving Process** 



## Epilog's Easy-to-Use Control Panels

## Mini & Helix Control Panel

The Epilog Mini and Helix include a fully featured control panel that is innovative, easy to understand and simple to use. Designed for one touch control, the Mini and Helix control panel displays file names, speed and power settings, run time and more. Scroll through engraving jobs you have sent to the laser, change speed and power as the job is running and even set a custom home position at the touch of a button.



## Legend EXT Control Panel

For maximum control from the display panel, the Legend 36EXT features an enhanced two-line display to see more details of your jobs. In addition to all of the standard display features, the Legend EXT control panel provides Job Save and Delete functions, easy access to configuration settings, as well as calibration and maintenance menus. Whether you want to auto focus the job from the control panel, change the home position or view all of the jobs that you have sent to the laser, it's all available at the powerful Legend EXT Control Panel.

## Print Driver Features and Advanced Uses

## **Print Driver Functions**

Epilog's in-house software engineers have designed a feature-filled custom print driver specifically for laser processing. Our intuitive and easy-to-use interface allows you to set the most important laser settings - Job Type, Resolution, Speed, Power, Auto Focus and more. Once you have established the perfect settings for a job, you can save those settings in the Configuration menu and retrieve them the next time you want to run that project.

## **Advanced Print Driver Functions**

For more complex projects, the Advanced tab gives you the option to engrave in 3-D mode, Stamp mode or to change the dithering pattern for photograph engraving. Vector color mapping lets you set independent speed and power settings based on line color, providing a convenient way of performing multiple cutting tasks in a singe job setup. The driver's multiple language support can be set in this tab, and you can even use the Stamp Settings feature to create custom stamps with the shoulder and character weight you desire.



## Moveable Home Position and Connectability





### **Moveable Home Positioning**

When engraving irregularly shaped objects, Epilog's moveable home position feature will quickly become one of your favorites. At the push of a button, you can disable the X and Y motors and set a new home position by moving the carriage by hand. Use the red dot pointer to determine where you want the new home position to be, press "Set Home" on the keypad and you're done. Setting a new home position has never been easier or more user friendly.



#### Permanent Job Storage

**Networking Your Epilog** 

Networking

**ENGINEERING** 

**ETHERNET** 

Epilog's Quick Connect<sup>™</sup> system gives you the most connection options of any laser system. Choose either a high-speed 10 Base T Ethernet connection, or connect the laser to your computer using a USB cable. In addition to higher transfer speeds, the

Ethernet connection provides the most reliable data transfer over

long distances. Network your laser to all of the computers in your

with the maximum efficiency for expanding your business!

building, or more than one laser to each computer, providing you

INPU

USB

With the Permanent Memory Storage on the Legend 36EXT, you can permanently store jobs at the machine. Every time you turn on your laser, you can have your most common jobs ready to run at the touch of a button.

## Legend EXT Emergency Stop Button

Our laser systems are designed for optimal safety with dual-interlock safety devices that stop the laser from firing when either top access door is opened. For an additional safety feature, our Legend 36EXT comes standard with an Emergency Stop Button. Located on the front of the system for the quickest access, the Emergency Stop Button immediately shuts off power to the machine when pressed.

## Legend EXT Inside Focus Button

Another feature that is exclusively available on the Legend 36EXT is our Inside Focus Button. With the door of the laser raised, you have easy access inside the laser to this convenient switch that allows you to move the engraving table up or down to position your object correctly. No more reaching to the control panel on the raised door to set the table height!

## Epilog's Enhanced Standard Features for Engraving and Cutting.

### **Comprehensive Standard Features**

At Epilog, we don't believe that you should have to buy a lot of extras to have a fully functional laser system. With that in mind, we have developed all of our laser lines to include the most comprehensive standard package available. Standard features on all systems include Air Assist, Auto Focus, Red Dot Pointer, Integrated Vector Grid/Vacuum Hold-Down Table, and much more. Explore the many features that make Epilog laser systems the most complete in the industry.

## Air Assist

Epilog provides Air Assist capability as a standard feature on all systems. The Air Assist Tube is incorporated into all systems with an optional Air Assist Cone also available for the Legend EXT model line.

Air Assist is most commonly used in vector cutting applications, to remove heat and combustible gases from the cutting surface. By directing a constant stream of compressed air across the cutting surface, the possibility of flaming, scorching and charring is reduced when cutting materials such as wood, acrylic and rubber. All systems can be connected to a standard compressed air supply (30 psi max) or the optional stand-alone compressor offered by Epilog.

The Air Assist Cone is available on the Legend EXT for those applications where it is desirable to force compressed air directly downward into the cutting area to reduce heat, charring and scorching when vector-cutting thick materials.

#### **Auto Focus**

To achieve optimum image and edge quality, the laser beam is focused to its smallest possible spot size at the point where it contacts the material. Focusing the laser beam is simply a matter of moving the table up and down to ensure the work piece is the correct distance from the carriage assembly. Standard on all Epilog systems, Auto Focus uses magnetic plunger technology to precisely position the table automatically with every job. It's the simplest, most convenient method available of ensuring proper focus. And, unlike other focusing technologies, Epilog's Auto Focus works on any solid surface, including glass and acrylic. As an added, bonus our Auto Focus technology is fully compatible with Epilog's optional Rotary Attachment!

#### **Red Dot Pointer**

The red dot pointer provides a visible red laser beam that is a helpful tool for providing a visible means of determining the engraving or cutting location within the engraving table on oddshaped items. Users often use the red dot to preview a job or to determine the engraving or cutting location on odd-shaped items.



**Optics Standard Features** 



## Linear Encoder

## The Precision of the Accupoint Motion Control System

Firing the laser in the right place at the right time is the concept behind Epilog's Accupoint Motion Control Technology. While it's easy to see the extraordinary detail in our engraving at any resolution, the engineering behind our equipment is what makes this accuracy possible. At 1200 DPI, the entire motion control system is moving in increments as small as .0008 inches (.02 mm), which is the result of a special blend of high-quality components available only in an Epilog laser system.

In moving the laser beam from point to point, a motion control system utilizes three basic components:

- 1) Motors to move the system in both the X and Y axes.
- 2) A bearing system to move the head consistently across the axes.



**Servo Motors** 

Epilog is the only laser system manufacturer to incorporate linear encoders in each and every model we manufacture. Long used in industrial manufacturing as one of the most precise methods of determining position, linear encoders also provide critical timing information that synchronizes the motion control system to the firing of the laser. Mounted directly to the moving carriage, Epilog's linear encoders provide crisp, clean images, even at the highest speeds!

EPILOG EPILOG mini EGENDEXT EPILOG Brushless DC Servo DC Servo Motor Motor

### Servo Motors

Another industry standard for high-performance industrial systems are closed-loop DC servo and Brushless DC servo motors. Incorporated into the X and Y axes of every system we manufacture, these motors are known for their incredibly fast acceleration and deceleration times as well as their ability to operate without the cogging, seen in other, less accurate motors. The ability of a motor to move smoothly at high speeds is a key component in producing the stunning images that can be created with an Epilog laser.

## Epilog's Enhanced Standard Features for Engraving and Cutting



## Epilog Linear Guide System Components

that are self lubricating.

EPILOG

The Legend EXT includes two slide units

# 

## NeverWear<sup>™</sup> Stainless Steel Linear Bearings

Epilog first used stainless steel linear bearings over 15 years ago, and many of those first laser systems are still running – hence, the NeverWear name! There is no other bearing system that is as fast, smooth and reliable as our linear bearing system. Built with at least 64 stainless steel bearings in each slider unit, our NeverWear bearings can operate at the highest speeds, day in and day out, without you ever having to worry about failure, replacement or the inevitable wobble that less robust bearing systems experience. Epilog's NeverWear bearings provide the accuracy, repeatability and precision that demanding laser applications require.

#### **Kevlar Belts**

Our precision drive belts are made from advanced B-style Kevlar to provide the highest levels of position accuracy and carriage speed without wearing down over time. Kevlar's superior performance characteristics reduce belt stretching and distortion while providing long belt life.

## Waveguide Laser Technology

# Laser Tube Technology

#### Waveguide Laser Tubes

 $CO_2$  lasers operate when  $CO_2$  gas in a sealed tube is excited by RF energy. The laser emits optical energy in the form of an invisible infrared beam that may be used for engraving, marking or cutting on a variety of materials.

There is a large difference in the beam created by different laser tubes. Oval-shaped beams, inconsistent power stability, and slow switching rates all contribute to images that are not as crisp and clean as images produced by an Epilog system with Waveguide laser technology. The Waveguide laser tubes used in Epilog's laser systems produce the best beam quality in the industry. With higher CO<sub>2</sub> gas pressure, less stringent mirror alignment requirements, faster switching rates and smaller bore, Epilog's Waveguide lasers provide the highest quality engraving and cutting available.



## Radiance<sup>™</sup> Optics Technology

While Epilog's Accupoint<sup>™</sup> motion control system addresses the mechanical aspect of our systems, our Waveguide Laser Technology and Radiance<sup>™</sup> High Energy Optics work together to produce the sharpest laser beam in the industry for the most detailed engraving and cutting available.

## Guided Path of Laser Beam





Start

After the beam leaves the tube it passes through a set of two optical components that straighten and expand the beam. This set of optics dramatically reduces beam divergence and produces a beam that maintains its size and straightness for much longer distances, which in turn produces a much more uniform beam over the

entire work area.



The beam combiner merges the laser beam from the tube with the Red Dot Pointer (mounted above). 3. Beam Focusing Optics



The last step in Epilog's enhanced Radiance approach is the focusing of the laser beam to a tiny circular point.



At this point the enhanced laser beam will travel to the focus lens where it is focused to the ideal spot size.

While the laser tube is the source of the laser beam, it's not the only technology that is involved in producing a crisp, sharp laser beam. After the laser beam leaves the tube, we use additional optical components to shape and refine the laser beam before it is delivered to the work surface. We refer to these optics as our Radiance<sup>TM</sup> High Energy Optics package and they have revolutionized the detail that can now be achieved with a  $CO_2$  laser system.

There are four significant advantages that our Radiance technology provides over ordinary beam delivery optical systems:

- 1. A rounder spot: A spot that is as close to circular as possible produces laser characteristics that are the same in both the X and Y directions, providing crisper, more consistent engraving and cutting profiles.
- More uniform spot over the entire work area: Because all CO<sub>2</sub> laser beams diverge after they leave the laser tube, the beam can actually change shape from one end of the work table to the other. Epilog's Radiance technology produces the most uniform spot in the industry and is incorporated as standard equipment on the Mini 24, Helix and Legend 36EXT.
- 3. Smaller spot size: A smaller spot means you can produce finer detail in engraving and cutting applications. Just look at the detail in some of our samples. It is truly amazing!
- 4. Higher power density: When a laser beam is focused to a smaller spot, its power density goes up because you have the same amount of power in a smaller area. This helps produce a deeper, darker mark and is beneficial in virtually every engraving and cutting application.

## **Epilog's Integrated Vector Grid and Vacuum Table**

## Engraving Table Airflow Design

Epilog's patent-pending work table is a lot more than a flat surface to support your engraving material. It's a three part table that's full of unique features designed specifically for the engraving market.

## Vacuum Hold-down Table

The vacuum hold-down table uses the air from your exhaust fan to hold thin sheet stock flat. This built-in method of securely holding thin sheet stock in place is a large benefit to engravers, eliminating the need for double-sided sticky tape. This revolutionary feature is a huge time-saver when engraving and cutting plastic, aluminum sheet stock, thin wood and any other material that won't lie flat on its own!

#### **Vector Grid**

Remove the task plate, and Epilog's integrated vector grid is now available for vector cutting applications. The vector grid is used to lift the material being cut. This dramatically reduces underside reflections from burning the back side of the material being cut. The air space below the vector grid is connected to the exhaust, so smoke is removed not only from the top side of the material, but also from the underside.

## **Engraving Tray**

Remove the vector grid, and the engraving tray allows for almost two more inches of Z-stroke, as well as providing the support for Epilog's optional Rotary Attachment.



Integrated Vector Cutting Grid

### **Primary Component Diagram**

## Air Compressor, Mini Stand, and Rotary Attachment

#### **Epilog Air Compressor**

Epilog's optional Air Compressor is available to work with the included Air Assist feature of the laser systems. Direct a constant stream of air to your cutting surface to remove heat and combustible gases from the work area. This high quality air compressor unit feeds 30 psi of air through the Air Assist structure, giving you the best cutting available. The rubber vibration-dampening feet reduce the noise level of the compressor. Connecting the air assist compressor is easy with our quick-connect inlet and outlet ports on the compressor and the laser system.



#### **Mini Stand**

Although the Epilog Mini 18 and Mini 24 are designed to sit on a standard tabletop or desk, if you prefer to have a free-standing system, you can add the optional Mini Floor Stand to your machine. This high quality wheeled cart has been specially designed for the Mini laser line, allowing you to easily move the laser throughout your office or home. With just a few easy steps, the stand can be set up and securely attached to the laser.

#### **Epilog's Rotary Attachment**

Available for all Epilog laser systems, the Rotary Attachment adds the ability to engrave bottles, glasses, flashlights, and other cylindrical items. Specially designed for our entire line of engravers, it has been built to accommodate a large variety of shapes and sizes. The attachment easily adjusts for different lengths and will even rotate cylinders that have different diameters on each end. So intuitive and easy to use, you can change from one glass to the next in seconds without removing the attachment from the engraver. In addition, our proprietary design provides for accurate image scaling without the need to input diameter or circumference information.

### **Epilog's Vector Cutting Pin Table**

The optional Vector Cutting Pin Table is a more advanced, more flexible cutting tool developed for the most demanding vector cutting applications. The Pin Table incorporates movable pins that can be placed anywhere along the table's grid of one inch (254 mm) spaced holes. The moveable pins allow the user to raise and support the cutting material in locations where the laser will not be cutting, providing a means of completely eliminating back reflection. The moveable pins can also be used to support parts that would normally fall out of the cutting pattern. A handy removable surface plate makes the task of cleaning up small parts easy without removing the Pin Table.





12" x 12" (305 x 305 mm) mm Vector Cutting Pin Table



## Which Epilog System Is Right For Your Needs?

## Important Questions to Ask Yourself

### Hands-On Demonstration

We've gone through a few of the reasons that Epilog Laser stands out in the industry for the best built, highest performing and longest lasting lasers in the industry. The next step? Call your local distributor to set up a hands-on demonstration of the laser in action. See for yourself how an Epilog Laser can meet your needs by calling your local distributor today to set up your own demonstration.

## **Applications Lab**

Do you have a special application that you want to know if it works with the laser? Our Applications Lab is the perfect solution for testing these types of materials on any wattage of laser system. Call us toll free at 888-437-4564 to find out more information on our Applications Lab.

## Which Laser is Right for You?

How can you know which laser is right for you? The first thing to do is to go through the following step-by-step procedure to see what size and wattage of laser is going to best meet your needs. There are four important questions that can be very helpful in determining which Epilog model best suits your needs:

# 1. What is the maximum size of a piece you will be working with?

Determine the maximum piece size that makes up the majority of your work and match that to the model that most closely fits your needs. A larger work area allows more pieces to run in a single job.

### 2. What materials will you be using?

Selecting the correct wattage depends on the material you will be using. While even our low wattage (25 watt) lasers will engrave and cut most materials you will use, laser wattage and speed go handin-hand. Materials such as acrylic, coated metals, and laserable plastic can be engraved with relatively little power at high speeds. Other materials, like wood or rubber, will work with lower wattage, but require higher power to run at high speeds.

### 3. How large is your projected workload?

Faster engraving speeds and a larger table size produce more work in less time, which helps to generate higher profits. If your projected workload is small, maximum engraving speed may be less important than size or wattage. If your production needs are high, every second counts!

### 4. What is your budget?

Epilog's product lines are designed to provide maximum value for your dollar spent. Epilog offers a flexible line of lasers that allow the user to match size, wattage and speed in an affordable system that is ideally suited to your individual needs.

## **Production Capacity Table**



Epilog CO<sub>2</sub> Laser Engraving System Technical Specifications

## Mini 18x12 and Mini 24x12 Technical Specifications

Max Engraving Area	18" x 12" (457 x 305 mm)	24" x 12" (610 x 305 mm)	
Max Material Thickness	4" (101 mm). Remove Table for 6" (152 mm) depth and 17.5" x 10" (444 x 254 mm) engraving area.	6" (152 mm). Remove Table for 8" (203 mm) depth and 23.5" x 11.75" (597 x 298 mm) engraving area.	
Laser Tube Wattages	25, 35, and 45 watts	35, 40, and 45 watts	
Standard Features	Air Assist, Auto Focus, Red Dot Pointer, Integrated Vector Grid & Vacuum Table, 2" (51 mm) Focus Lens, Relocatable Home Position.	Radiance <sup>™</sup> High Energy Optics, Air Assist, Auto Focus, Red Dot Pointer, Integrated Vector Grid & Vacuum Table, 2"t (51 mm) Focus Lens, Relocatable Home Position.	
Intelligent Memory Buffer	Store unlimited files up to 64 MB. Rolling buffer allows files of any size to be engraved.		
Operating Modes	Optimized raster engraving, vector cutting or combined raster/vector mode.		
Motion Control System	High-speed, continuous-loop, DC servomotors using linear and rotary encoding technology for precise positioning.		
Laser Source	State-of-the-art, digitally controlled, air-cooled CO <sub>2</sub> laser tubes are fully modular, permanently aligned, and field replaceable.		
X-Axis Bearings	Ground and polished stainless steel NeverWear™ Bearing system.		
Belts	Advanced B-style doublewide Kevlar precision drive belts.		
Resolution	User controlled from 75 to 1200 dpi.		
Speed and Power Control for Raster/Vector	Computer or manually controlled speed and power in 1% increments to 100%. Vector color mapping links speed and power settings to any RGB color.		
Print Interface	10 Base T Ethernet or USB connection. Comp	patible with Windows 2000/XP.	
Size	27.5" W x 12.5" H x 23" D (699 x 584 x 318 mm)	34.5" W x 16" H x 22.5" D (876 x 572 x 406 mm)	
Weight	70 lbs. (32 kg) – 100 lbs. (45.5 kg) with stand.	90 lbs. (41 kg) – 120 lbs. (55 kg) with stand.	
Electrical Requirements	Auto-switching power supply accommodates 110 to 240 volts, 50 or 60 Hz, single phase, 15 amp AC.		
Ventilation System	External exhaust to the outside required. There is 1 output port, 4" in diameter.		

## Helix and Legend EXT Technical Specifications





24" x 18" (610 x 457 mm)	36" x 24" (914 x 609 mm)			
9" (229 mm). Remove table for 11" (279 mm) depth and 23.5" x 17" (597 x 432 mm) engraving area.	12" (304 mm). Remove table for 14" (355 mm) depth and 36" x 24" (914 x 609 mm) engraving area.			
35, 40, 45, 60, and 75 watts	30, 35, 40, 45, 60, 75, and 120 watts			
Radiance <sup>™</sup> High Energy Optics, Air Assist, Auto Focus, Red Dot Pointer, Integrated Vector Grid & Vacuum Table, 2" (51 mm) Focus Lens, Relocatable Home Position.	Radiance <sup>™</sup> High Energy Optics, Air Assist, Auto Focus, Red Dot Pointer, Integrated Vector Grid & Vacuum Table, 2" (51 mm) Focus Lens, Relocatable Home Position, Permanent Job Storage with 10 job maximum, each less than 2 MB.			
Store unlimited files up to 64 MB. Rolling buffer allows files of any size to be engraved.				
Optimized raster engraving, vector cutting, or combined raster/vector mode.				
High-speed, continuous-loop, DC servomotors using linear and rotary encoding technology for precise positioning.	High-speed, continuous-loop, brushless DC servomotors using linear and rotary encoding technology for precise positioning.			
State-of-the-art, digitally controlled, air-cooled CO <sub>2</sub> laser tubes are fully modular, permanently aligned, and field replaceable.				
Ground and polished stainless steel NeverWear™ Bearing system.				
Advanced B-style doublewide Kevlar precision drive belts.				
User controlled from 75 to 1200 dpi.				
Computer or manually controlled speed and power in 1% increments to 100%. Vector color mapping links speed and power settings to any RGB color.				
10 Base T Ethernet or USB connection. Compatible with Windows 2000/XP.				
36.5" W x 39" H x 29" D (927 x 991 x 737 mm)	50.5" W x 43.25" H x 33.5" D (1282 x 1098 x 851 mm)			
180 lbs. max (82 kg)	440 lbs. max (199 kg)			
Auto-switching power supply accommodates 110 to 240 volts, 50 or 60 Hz, single phase, 15 amp AC.				
External exhaust to the outside required. There is 1 output port, 4" in diameter.	External exhaust to the outside required. There are 2 output ports, each 4" in diameter.			

Technical specifications and product configurations subject to change without notice.

For system pricing information and to set up your personal demonstration, call your local distributor.

www.epiloglaser.com/distributors.htm

# Revolutionary Technology. Legendary Performance.





16371 Table Mountain Parkway Golden, CO 80403 Toll Free 888.437.4564 303.277.1188 sales@epiloglaser.com www.epiloglaser.com



LASER RADIATION AVDID DIRECT EVE EXPOSURE CLASS OR LASER PRODUCT