



INNOVATIVE LASER SOLUTIONS

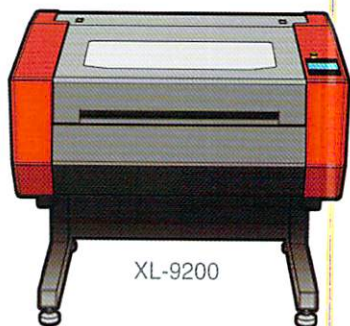




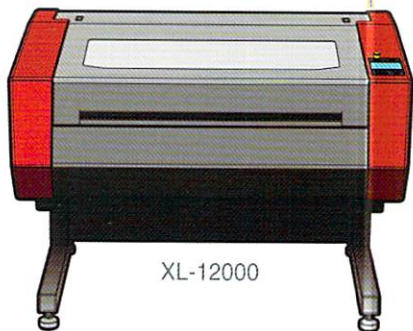
# XL SERIES

## Advanced, High Power Industrial Grade CO<sub>2</sub> Laser Systems

Universal's XL Series provides state-of-the-art industrial CO<sub>2</sub> laser processing with an unrivaled combination of high power (up to a revolutionary 400 watts of air-cooled laser power, large processing area, easy integration and advanced, stand-alone job management capabilities. Designed to provide the ultimate in productivity, flexibility and ease of use, the XL Series is ready for your most demanding applications.



XL-9200



XL-12000

### Design

- Powerful, industrial-grade laser systems designed for the most demanding manufacturing applications
- Rugged design
- Fully enclosed CDRH Class 1 safety enclosure
- Large front door and wraparound top door provide easy ergonomic access for loading and unloading
- Oversize laser processing fields – 36-inch x 24-inch and 48-inch x 24-inch – can accommodate a broad range of materials

### Special Features

- Fully automatic detection and setup of XL Series accessories
- Advanced print driver with color print preview
- New non-contact auto-focus feature – sensor in the carriage provides automatic and precision focusing for fast and accurate setup
- Beam positioning options – red laser pointer or camera option (attached to carriage) allows for quick and precise positioning of work piece
- Color LCD display with job preview on control panel

### Innovative ULS Technology

- Available with 10 to 400 watts of air-cooled laser power
- Patented Rapid Reconfiguration™ and Quick Change Laser™ technology allows for easy upgrades in minutes without the need for tools (MP models only)
- Flexibility to optimize laser power in seconds to meet any given application
- Standard red laser pointer allows for quick positioning of objects for processing
- Full Ethernet

*Large Field Size*

*High Speed*

*High Power*





## PRODUCTIVITY - ENHANCING OPTIONAL ACCESSORIES

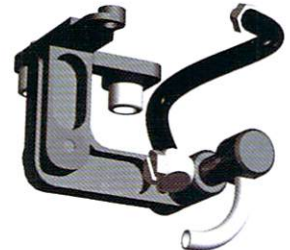
### Honeycomb Cutting Table

The cutting table provides support and light vacuum hold-down while removing smoke and debris from both sides of the material during the cutting process. A honeycomb cutting surface supports sheet stock with minimal contact to reduce the effects of laser back reflection on the undersurface of the material. Twin drawers slide out for easy debris removal.



### Air Assist

XL Series air assist can be easily upgraded in the field by the operator. Choose between cone or back sweep style air assist adaptors for maximum flexibility. Two inputs are available for mixing gas and air, allowing for custom gas mixtures. Selection of source and flow rates is controlled through the print driver.



Backsweep

### Rotary Attachment

The hot-swappable rotary attachment allows the XL to be quickly reconfigured to process cylindrical objects. Maximum part diameter is 5.4 inches and loading and unloading is quick and easy. A sensor detects the rotary attachment when installed and automatically makes all of the adjustments necessary for rotary marking and engraving.



Cone

### Patented High Power Density Focusing Optics (HPDFO)<sup>TM</sup>

HPDFO increases the power density of the laser to achieve dramatically improved resolution for applications requiring extremely fine detail. HPDFO makes it possible to produce higher resolution graphics and make deeper cuts with more precision. HPDFO also allows for marking on some uncoated metals, such as stainless steel, without the need for metal marking compounds.



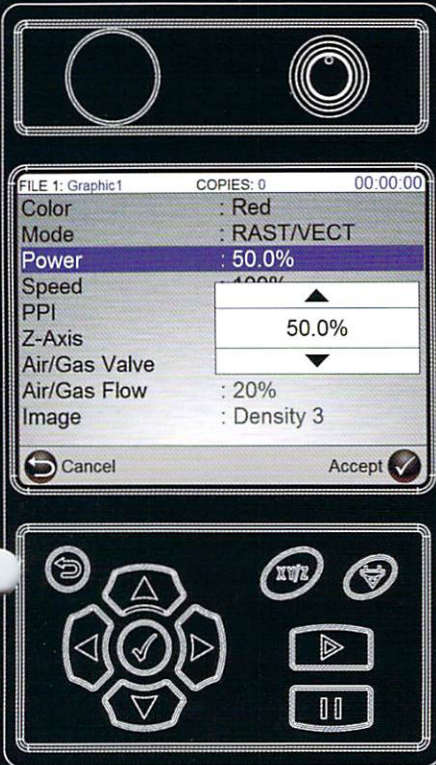
### Camera Option

The camera system allows the operator to quickly and precisely position the laser for cutting and engraving operations. The camera displays a downward-looking view of the material on the engraving table. The operator can manually move the laser to any spot with greater speed and accuracy than possible with a laser pointer.



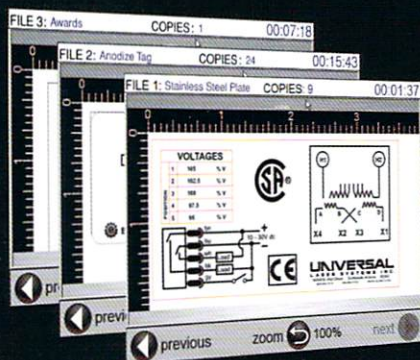
### SuperSpeed<sup>TM</sup>

SuperSpeed is available on models with two 25- through 60-watt lasers (lasers must be of equal power). SuperSpeed allows users to automatically split the beams from two lasers to engrave two raster lines simultaneously for improved throughput and then combine the beams for vector cutting with maximum power.



### Advanced Stand-Alone Job Management Capabilities

The XL Series offers true stand-alone production capability. Users can store and run thousands of jobs on XL's 40-gigabyte hard drive without connection to a host PC, and change, store or restore any job parameter on the fly. Users can preview job files on the XL's color LCD screen as well as display the status of each job as it is running. The control panel also provides an interface for system settings and diagnostics.



### Air Compressor

The air compressor supplies dry, oil-free compressed air to protect the XL optics and enable air assisted cutting and engraving. The compressed air unit is activated only when jobs are in process. The compressor pump is noise-insulated to meet OSHA regulations.



# True Stand-Alone Production Capability in a Large Format, High Power CO<sub>2</sub> Laser Processing System

<b>XL-9200 &amp; XL-12000 Specifications*</b>			
Platform Configuration	MP120	MP120 SuperSpeed™	HP400
Laser Power	10 to 120 watts	50 to 120 watts	200 or 400 watts
Field Size	XL-9200 36" x 24" (41.5" x 29.5" max part)		XL-12000 48" x 24" (53.5" x 29.5" max part)
Z Axis	8.5" motorized		
Z-Axis Load	60 lbs max dynamic load		
Computer Interface	Ethernet		
File Storage	40 Gb hard drive built in		
User Interface	Active Matrix color display provides complete job/process management and navigation keypad		
Cooling	Air-cooled, ambient operating range of 50°-95° F (10°-35° C)		
Software Compatibility	Windows® XP		
Power Consumption	15 amps @ 220V	15 amps @ 220V	30 amps @ 220V
Overall Dimensions	56"W x 48"D x 48"H (XL-9200)		68"W x 48"D x 48"H (XL-12000)
Weight	550 lbs max (XL-9200)	550 lbs max (XL-9200)	675 or 775 lbs max (XL-9200)
	650 lbs max (XL-12000)	650 lbs max (XL-12000)	775 or 875 lbs max (XL-12000)
Exhaust Requirements	Two 4-inch connections on the back of the machine requiring a blower capable of 1000 CFM(XL-9200) or 1500 CFM(XL-12000) air flow at a static pressure of 5 inches of water.		
Safety	Meets CDRH and EN60825-1 requirements for Class 1 laser safety enclosure for CO <sub>2</sub> laser and Class 3R for red laser pointer.		

\*Specifications subject to change without notice

## About Universal Laser Systems, Inc.

Universal Laser Systems, Inc. (ULS) is the pioneer and highest volume manufacturer of unique computer peripherals used for laser engraving, marking and cutting. Since 1988, ULS has designed, developed, manufactured and shipped thousands of laser systems worldwide. Today ULS has operating offices in the USA, Europe and Asia and services thousands of customers in hundreds of different industries.

ULS is also one of the world's largest suppliers of OEM CO<sub>2</sub> lasers. In 1998 ULS introduced the first complete line of air-cooled, RF-excited CO<sub>2</sub> lasers. These lasers have been installed around the world on flatbed, roll-feed, multi-axis, robotic-arm and other custom systems for numerous applications including engraving, cutting, "on-the-fly" marking and 3-D prototyping. ULS systems are available with processing areas ranging from 16"x12" to 48"x24" and lasers ranging from 10-400 watts.

## Universal Laser Systems Patents

Universal's ongoing commitment to technological innovation has resulted in U.S. patents including 5,051,558; 5,661,746; 5,754,575; 5,867,517; 5,881,087; 5,894,493; 5,901,167; 5,982,803; 6,181,719; 6,313,433; 6,342,687; 6,423,925; 6,424,670; 6,983,001. Other U.S. and international patents pending.



LASER RADIATION - AVOID  
DIRECT EYE EXPOSURE  
LASER DIODE  
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CLASS IIIa LASER PRODUCT

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