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Introduction

We would like to thank you for your laser system purchase. Universal Laser Systems, Inc. (ULS) is the pioneer, and highest volume manufacturer, of large field, computer controlled laser engraving, marking, and cutting systems. ULS has devoted years of research and development to further the quality of our products that has resulted in a number of remarkable innovations within the laser industry. Since 1988, the staff at ULS has been dedicated to total customer satisfaction. When you buy Universal you get more than a laser - you get a team of talented, experienced, enthusiastic people who are focused on your satisfaction. Our commitment is to help you now and in the future.

To begin with, we highly recommend that this entire manual be read before attempting to use your laser system. The manual includes important information about safety, assembly, use, and basic maintenance.

How To Get Help

Before contacting our Technical Support Department, make sure that you have read this entire manual as well as any other accompanying manuals included with your laser system.

Step 1:

Try to recreate the problem and write down the circumstances in which the problem occurred. Try to recall if the problem began all of a sudden, worsened over time, or began after you performed any recent maintenance. Also be prepared to describe all pertinent information about the computer being used such as software, ULS printer driver version, computer operating system and computer type.

Step 2:

Make sure that you have the serial number of the laser system available. The serial number tags are located on the back of the machine, next to the exhaust port, and inside the front door, visible when you open it. The Technical Support Department may not be able to assist you without this number.

Step 3:

Contact your local ULS Representative. They may have more details about your particular installation and applications. If possible, call from a phone that is close to the laser system so that it can be operated while talking to our representative.

Step 4:

If your local Sales Representative cannot assist you and you would like to use our **FREE**, email based support system, log on to our website: www.ulsinc.com. Click on the "Technical Support" link, then click on the "Technical Support Request Form" and follow the instructions.

Step 5:

If you are unable to obtain Internet access, you may contact our Technical Support Department at:

Universal Laser Systems, Inc.

Technical Support Department

16008 North 81st Street

Scottsdale, AZ 85260

Phone: 480-609-0297

Fax: 480-609-1203

M-F 8am – 5pm Arizona Time

support@ulsinc.com

Specifications

System Operating Environment Requirements (user provided)

	Models			
	PLS3.60	PLS4.60	PLS6.60	PLS6.120D
Operating Environment	Well-ventilated office (recommended) or clean, light-duty manufacturing			
Operating Temperature	50°F (10°C) to 95°F (35° C) capable 73°F (22°C) to 77°F (25° C) for best performance			
Storage Temperature	50°F (10°C) to 95°F (35° C)			
Operating Humidity	Non-condensing			
Electrical Power	Single Phase 110/230V AC, 10/5 Amp, 50/60 Hz Grounded (earthed) and stable (surge and spike protected)			
Particulate/Odor Outside Ventilated Exhaust System	High-pressure vacuum blower capable of 250 CFM (cubic feet per minute) @ 6 inches static pressure (425m ³ /hr at 1.5kPa)			
Computer Requirement	Windows XP or Windows Vista (32-bit version only)			
Software Requirement	Graphics or CAD based (See manual for recommendations)			

Model System Specifications				
	PLS3.60	PLS4.60	PLS6.60	PLS6.120D
Laser Safety	CO2 Laser, Interlocked Safety Enclosure = Class I Red Diode Pointer = Class IIIa			
Work Area	24 x 12 Inch (609.6 x 304.8 mm)	24 x 18 Inch (609.6 x 457.2 mm)	32 x 18 Inch (812.8 x 457.2 mm)	
Table	29 x 17 Inch (736.6 x 431.8 mm)	29 x 23 Inch (736.6 x 584.2 mm)	37 x 23 Inch (939.8 x 584.2 mm)	
Max Part	29 x 17 x 9 Inch (736.6 x 431.8 x 228.6 mm)	29 x 23 x 9 Inch (736.6 x 584.2 x 228.6 mm)	37 x 23 x 9 Inch (939.8 x 584.2 x 228.6 mm)	
Raster Speed	75 IPS		100 IPS	
Vector Speed	25 IPS			
Resolutions	1000, 500, 333, 250, 200, 166 dpi/lpi			
Interface	Keypad/small LCD display shows current file name, laser power, engraving speed, PPI and run time			
Control	Requires a dedicated PC to operate. Requires Windows XP or Windows Vista (32-bit version only).			
Interconnection	USB 2.0 High Speed port			
Cabinet Style	Floor Standing			
Laser Options	10, 25, 30, 35, 40, 45, 50, 55 and 60 watts			10, 25, 30, 35, 40, 45, 50, 55 and 60 watts (equipped for two lasers)
Power Requirements	110V/10A 230V/5A			230V/15A
Size (inch)	36W x 38T x 30D (91.4cm W x 96.5cm T x 76.2cm D)	36W x 39T x 36.5D (91.4cm W x 99.1cm T x 92.7cm D)	44W x 39T x 37.5D (111.8cm W x 99.1cm T x 95.3cm D)	
Weight	235 lb (107 kg)	270 lb (122 kg)	325 lb (147 kg)	345 lb (156 kg)
Exhaust Hookup	One 4" (10.16 cm) port		Two 4" (10.16 cm) ports	
Laser Cartridge Weight	25/30 Watt = 20 lbs (9 kg) 35/40 Watt = 23 lbs (10 kg) 45/50/55/60 Watt = 26 lbs (12 kg)			
Available Options	Rotary Fixture, Air Assist (standard or computer controlled), Air Compressor (desiccant or refrigerated dryer options), Honeycomb Cutting Table, Dual Head, Assorted Focal Length Lens Kits			

Specifications subject to change without notice

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2007 Professional Systems

**Models PLS3.60, PLS4.60,
PLS6.60, & PLS6.120D**

Laser Engraving and Cutting System

Safety, Installation, Operation,
and Basic Maintenance Manual

System Serial Number: _____

(Located on the back of the machine and inside the front door)

Universal Laser Systems, Inc.
16008 North 81st Street
Scottsdale, AZ 85260 USA
Technical Support Department
Phone: 480-609-0297
Fax: 480-609-1203
Web Based Email Support: www.ulsinc.com

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CE

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