

Specifications		xTool F2 Ultra UV	
Processing Capacity	Laser Type	5 W 355 nm UV Laser	
	Processing Mode	Laser Engraving	Laser Cutting
	Supported Materials	**Laser Engravable:** Glass, Crystal, Acrylic, Wood, Metal, Leather, Plastic, Rubber, Silicone, Ceramic and more **Laser Cuttable:** Paper, Wood, Plastic, Glass, Fabric, Leather and more	
	Working Area	7.9" × 7.9" Surface Engraving (200 mm × 200 mm) 2.8" × 2.8" Inner Engraving (70 mm × 70 mm) 7.9" × 19.7" with conveyor (200 mm × 500 mm)	
	Max. Working Speed	590.55 ips (15,000 mm/s)	
	Max. Laser Cutting Capacity (Basswood)	0.59" (15 mm) in Multiple Passes	
	Max. Laser Cutting Capacity (Acrylic)	0.47" (12 mm) in Multiple Passes	
	Max. Processing Height	5.9" (150 mm)	
Easy Operation	Built-in Camera	48 MP Dual Cameras	
	Preview Method	Smart Camera Preview	High-Speed Light Live Preview
Accuracy & Precision	Laser Spot Size	0.01 × 0.01 mm	
	Motion Resolution	0.00005" (0.00133 mm) (Inner Engraving)	
	Vector Fitting Resolution	0.00004" (0.001 mm)	
General Information	Safety Certification	Class 4 Laser Safety	
	Machine Dimensions	11.6" × 16.9" × 20.5" (294 mm × 429 mm × 520 mm)	
	Machine Weight	49.6 lb (22.5 kg)	
Smart Software	Supported Software	xTool Studio	
	Operating System	Windows/macOS	
	Supported Files	2D: SVG, DXF, JPG, JPEG, GIF, PNG, BMP and WEBP 3D: STL, OBJ, AMF, 3MF, GLB, PLY	

xTool F2 Ultra UV

The Ultimate Laser for Ultra-Precise Engraving.



XTOOL

Mastering Glass Inside and Out

F2 Ultra UV unlocks the unique capability to precisely process glass and other transparent materials. From 3D subsurface engraving to embossing, cutting, rotary engraving, and batch engraving — each technique flawlessly transforms materials into high-quality, long-lasting masterpieces.















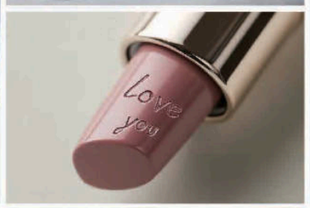
Ultimate Versatility One Machine

As the ultimate multi-material laser, F2 Ultra UV does what others can't — delivering fine detail even on crystal, ceramic, acrylic, agate, and more, offering the widest material compatibility ever.











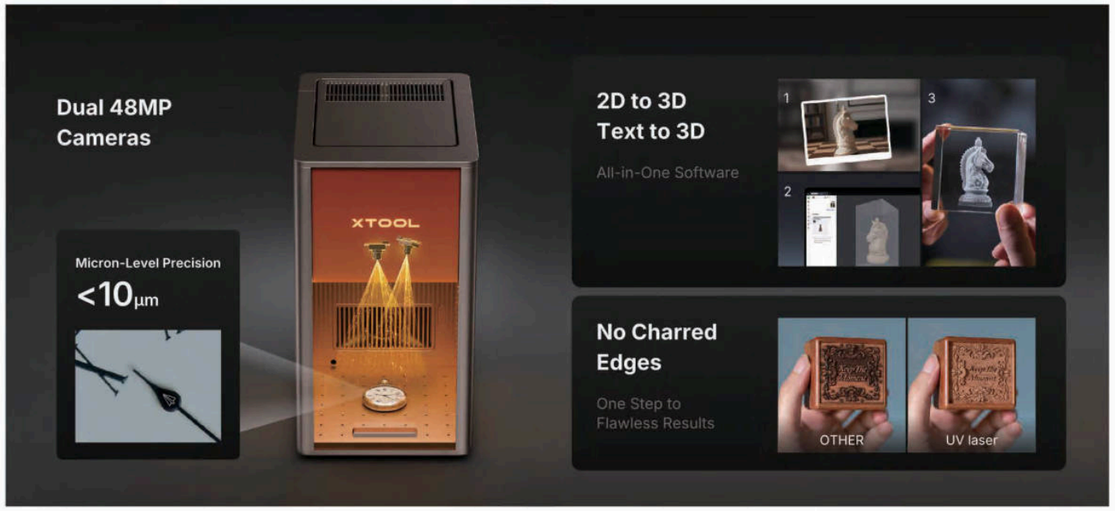






UV Power Unmatched Performance

A fully integrated smart system drives this performance. Equipped with dual 48 MP cameras and our all-in-one 2D to 3D software, it delivers true < 10 µm precision and a perfect, burn-free finish.



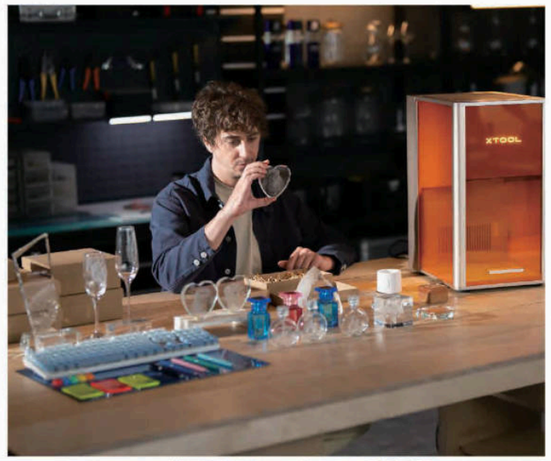
Premium Quality & Maximum ROI

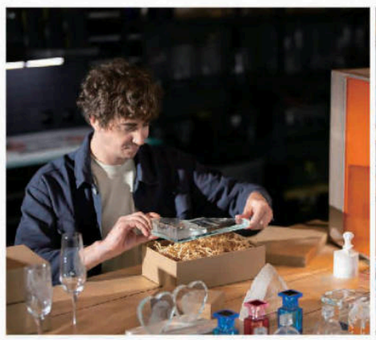
Larger:
Dual Lenses for Surface & Subsurface Engraving.

Faster:
15,000 mm/s Speed for Over 50% More Efficiency.

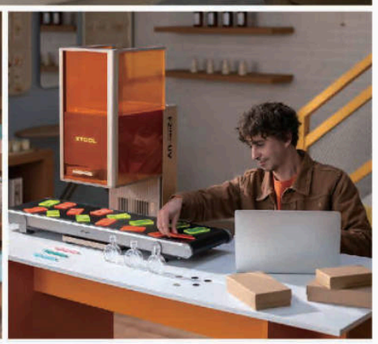
Smarter:
Conveyor-batch, rotary, and curved-surface engraving.

Safer:
Fully Enclosed, UV-Shielded Design.









Event Planner

Master 3D inner glass engraving with a flawless, burn-free finish

In-Store Brand

Enable instant personalization via dual 48 MP cameras and 15,000 mm/s speed

Niche Creator

Unlock multi-material versatility and micron-level precision to maximize your ROI