Orion Welders

Laser and Pulse Arc/Resistance Welding Systems

Orion 200i² Patent D740,338



The Orion 200i² will simplify the welding needs of any metalsmith. Innovative new features include — the Pico weld mode for intricate welds using energy as low as 0.01 Joules of energy, to achieve truly microscopic weld joints; the ability to select up to 200 joules of energy for large work–pieces (like silver or platinum); a large 10" touch screen interface with one–touch access to all welding parameters; the ultimate space saving design; 3 unique pulse shape wave form options to choose from: Classic Orion (for Orion users that have come to love welds produced by the Orion 150i), Triangle (great for weld smoothing), and Square (for laser like welding); Seam mode— allows users to mimic laser welding with weld speeds up to 30 welds/sec. The patented Orion 200i² gives you the precision and speed of a laser with the versatility, power, and ease of a pulse arc welder.

Orion 150s



The Orion 150s is more basic than the Orion Pulse 150i but is still very easy to use and includes a wide range of power (from 1-150 joules of energy), giving users the ability to weld smaller applications in the lower energy settings and larger applications in the higher energy settings. Users will enjoy a touch screen interface that streamlines and simplifies the welding process, high-frequency agitation for added penetration and weld strength, tack mode for either temporary placement or permanent fusion welding, and an easy to adjust microscope with a clear magnified view of the work-piece.

Orion 100c



The Orion 100c is very basic yet still has more power and features than any other, non Orion, pulse arc technology in the market. Users get a wide range of power (from 3 – 100 joules of energy), an easy to use touch screen interface for quick access and adjustments to welding parameters, high-frequency agitation for additional penetration, weld length options, an easy to adjust microscope with a clear magnified view of the work-piece, and great weld quality.

Orion mPulse



The mPulse is the simple, compact, and affordable welding system in an easy-to-use package. The mPulse power settings range from 5.0ws to 30ws, in 2.5ws increments—that's 11 different power settings to choose from. The weld spot size on the smallest setting is nearly 1mm, depending upon your material. The largest setting of 30ws will yield a weld spot approximately 1.5mm in diameter, again, depending upon the material you're welding.

Orion LZR



The LZR60 and LZR100 laser welders are small tabletop welders, ideal for use in a variety of industries and applications. Despite being very compact machines, the Orion LZR lasers are equipped with a very powerful integrated cooling systems. Access to the welding is easy thanks to the wide opening in the front. There is a large touch–screen color display and video camera that is supplied as a standard option. This allows a view of the object being welded inside the welding chamber.

on[™] welders

Your partner in micro welding! Contact us for free sample weld evaluations. We will find the solution for any application.









Industries

- · Jewelry
- Medical
- · Industrial
- Dental

Applications

- Filling Porosity
- · Seam Welding
- · Wire Beading
- · Posts
- Small Wire or Chain
- · Eyeglass Repair
- · Holloware
- Jump Rings
- Watches
- Mold and Die Repair
- Tack Pieces Together
- · Rings
- · Prongs
- · Thermocouples
- · And So Much More!



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Laser and Pulse Arc/Resistance Welding Systems

Orion 200i² – Pulse Arc and Resistance Welder		
Weld Modes	5	
Pre-Programmed Metal Settings	15	
Customized Save Settings	Unlimited	
Languages	20 + (Ask rep if we have your language)	
Display	10" Touch Screen	
Energy (Ws)	0.01-200 Ws	
Switching Power Supply	110/240VAC (Auto Detected)	
Weld Spot Diameter	≈ 0.1 – 4.5mm	
Footprint / Weight	4" x 5" (10 x 12.5cm) / 28 lbs (13 kg)	
Microscope Specs	5x	
Microscope Eye Protection – Darkening Lens	IR 15 / UV 15	

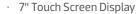
Orion 150s – Pulse Arc and Resistance Welder			
Weld Modes	3		
Pre-Programmed Metal Settings	10		
Customized Save Settings	20		
Languages	20 + (Ask rep if we have your language)		
Display	7" Touch Screen		
Energy (ws)	2-150 ws		
Switching Power Supply	110/240VAC (Auto Detected)		
Weld Spot Diameter	≈ 0.5 – 3.5mm		
Footprint	11.75" x 8" x 8" (29.8 x 20.3 x 20.3cm)		
Weight	15 lbs (6.8 kg)		
Microscope Specs	5x with Shutter System		

Orion 100c - Pulse Arc Welder			
Weld Modes	3		
Pre-Programmed Metal Settings	5		
Customized Save Settings	5		
Languages	20 + (Ask rep if we have your language)		
Display	4.4" Touch Screen		
Energy (ws)	3-100 ws		
Switching Power Supply	110/240VAC (Auto Detected)		
Weld Spot Diameter	≈ 0.75 – 2.5mm		
Footprint	9.25" x 5.75" x 6.5" (23.5 x 14.6 x 16.5cm)		
Weight	7.5 lbs (3.4 kg)		
Microscope Specs	5x with Shutter System		

Orion mPulse - Pulse Arc Welder		
Weld Modes	1	
Pre-Programmed Metal Settings	0	
Customized Save Settings	0	
Languages	N/A	
Display	4.3" Touch Screen	
Energy (ws)	5–30 ws	
Switching Power Supply	110/230VAC (Auto Detected)	
Weld Spot Diameter	≈ 1 – 1.5mm	
Footprint	5.5" x 5.25" x 3.625" (13.79 x 13.34 x 9.21cm)	
Weight	4lbs. (1.81 kg)	
Microscope Specs	Auto Darkening - Shade 3 to Shade 11	

	LZR 60	LZR 100
Laser Source and Wavelength	Nd: YAG 1064nm	Nd: YAG 1064nm
Peak Power (kW)	3 kW	5 kW
Average Power	50 W	75 W
Energy (joule)	0.1 – 60J	0.1 – 100J
Impulse Time	0.1 – 20 ms	
Pulse Frequency	0.5 – 30 Hz	
Spot Diameter	0.2 – 2.0 mm	
Servo Driven Height Adjustment	30 positions	
External Control	7" Color Touch Screen	
Input Power	230 VAC, 50/60 Hz, Single Phase	
Amps	10A	
Microscope Type	Leica Binoculars 10x	

- · 10" touch screen display
- · Pico mode
- · 3 Pulse Waveforms
- · Seam mode 30 welds/second
- · High frequency agitation
- · Internal weld monitoring
- Adaptive Weld Ignition™
- · Updateable software
- · Pulse arc and resistance welding
- · Everything from 150i



- · Weld Length Options
- · High Frequency Agitation
- · Upgradable Microscope Arm
- Updateable Software
- · 3 Weld Modes
 - Micro
 - · Ultra
 - · Tack



- · Weld Length Options
- High Frequency Agitation
- · Updateable Software
- · Upgradable Microscope Arm
- · 3 Weld Modes
 - · Micro
 - · Ultra
 - · Tack
- · 4.4" Touch Screen Display
- · 1Weld Mode



- · 7" Touch Screen Display
- · Weld Length Options
- High Frequency Agitation Arm







CE TESTED AND CERTIFIED

Welder tested for electrostatic discharge immunity up to 2kV for CE compliance



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