LE31MP[™] Multiprocess Welder

Processes

MIG, Flux-Cored, Stick, DC TIG, Aluminum with a Spool Gun

Product Number

K3461-1

Multiprocess Wirefeeder Welder

This Lincoln Electric LE31MP™ lightweight and portable welder connects to 120 volt power and is an excellent choice for MIG, STICK, Spool Gun, Flux-Cored, or TIG welding. The intuitive user interface, easy setup, and full list of accessories permits welding in no-time.

BENEFITS

MIG

- Wide 30-140 amp welding output for MIG, FCAW and Spool Gun allows for welding on 24 to 5/16 material.
- Durable cast aluminum gear box delivers added torgue and guiet operation, and brass-to-brass gun connection enhances conductivity.
- Smooth arc starts and a forgiving arc makes dialing in your application easy.
- TIG Torch and foot pedal sold seperately
 - The wide 10-120 amp range permits welding on thin and thick steel and stainless.
 - Weld with or without a foot pedal, the machine will automatically detect and configure when a foot pedal is connected.
 - Easy arc starts and optional patent pending TIG torch assembly eliminate the need for a manually controlled gas valve.

STICK

- Smooth arc starts prevent sticking.
- Heavy duty electrode holder and cable included.
- Great for repair.

Input Power

120/1/60

- **Input Current at Rated Output** 20 A
- Rated Output Current/Voltage/Duty Cycle 95 A / 18.75 V @ 60% MIG 115 A / 14.6 V @ 60% TIG 80 A / 23.2 V @ 60% Stick

Output Range 30 - 140 A MIG 25 - 90 A Stick 10 - 120 A TIG 40-500 WFS (1.3-12.7 m/min) Weight/Dimensions (H x W x D) 34.5 lbs. (15.6 kg) 13.6 x 8.9 x 18.1 in. (345 x 224 x 460 mm)



- Farm
- Home
- Autobody



WHAT'S INCLUDED

Gun

- Magnum[®] PRO 100L gun and 10 ft. (3.0 m) cable assembly with brass connection and 8-pin trigger connector (K530-7).
- .025 in. (0.6 mm) tapered contact tips (Qty 3) (KH831)
- .035 in. (0.9 mm) tapered contact tips ▶ (Qty. 3) (KH833)
- Gasless nozzle for Innershield® welding (KH836)
- Gas nozzle for MIG welding (KH835)
- Spindle adapter for 8 in. (203 mm) diameter spools (KH720)
- .025 .035 in. (0.6 0.9 mm) wire diameter dual track drive roll for MIG and flux-cored welding (KP2948-1)

Shielding Gas Apparatus

Harris® 3000290 Gas Regulator (S25805) and 52 in. (1.3 m) hose (S19303) for use with Ar/ CO₂ blend gases. For use with CO₂ shielding gas, order a Lincoln Electric S19298 CO2 shielding gas bottle adapter.

Welding Wire

- Sample spool of .025 in. (0.6 mm) diameter SuperArc[®] L-56[®] premium MIG wire
- Sample) spool of .035 in. (0.9 mm) diameter Innershield[®] NR[®]-211-MP flux-cored wire

Shown K3461-1









Two Year Extended Warranty Available in the U.S.A. and Canada.

Other

- Work clamp and 10 ft. (3.0 m) cable
- Instruction manual
- Quick Start guide
- Electrode holder with 10 ft. cable • for stick welding



Publication E7.47 | Issue Date 06/17 © Lincoln Global, Inc. All Rights Reserved

THE LINCOLN ELECTRIC COMPANY 22801 St. Clair Avenue • Cleveland, OH • 44117-1199 • U.S.A. PH: +1.216-481-8100 • www.lincolnelectric.com



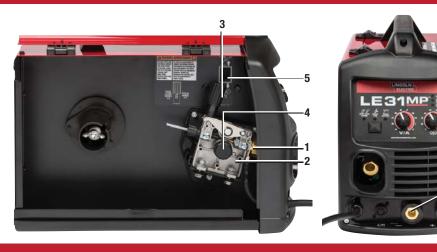
HEAVY DUTY WIRE DRIVE - ENHANCED QUALITY AND EASY TO USE

Enhanced Quality

- 1. Brass-to-brass gun connection enhances conductivity.
- Rigid drive aids wire alignment. The cast aluminum body with an enclosed multi-stage gear box delivers improved torque and quiet operation.

Easy to Use

- 3. Easy-turn drive tension adjustment with numeric tension indicators.
- 4. Fast tool-less drive roll changeovers. The dual track drive roll ensures positive flux-cored wire feeding with common wire diameters.
- Spool gun ready switch allows user to select spool gun or standard push gun drive operation.
- 6. Oversized twist connectors for durability.



PERFORMANCE PLUS

Process	Wire Dia. (in.)														
		24ga.	22ga.	20ga.	18ga.	16ga.	14ga.	12ga	10ga,	3/16"	1/4"	5/16"			
Flux-Cored Welding – Steel	.030				INNE	RSHIEL	D° NR ⁻ :	211 MP			MP				
	.035				INNE	RSHIEL	D° NR°-	211 MP		SP		MP			
	.025	SUPER	RARC [®] I	L-56°											
MIG Welding – Steel	.030		SUPE	RARC	L-56°				SP	MP					
	.035				SUPE	RARC®	L-56°			SP				DRIVE ROLL	S
MIG Welding – Aluminum ⁽¹⁾	.035				SUPE	RGLAZ	E* 4043			SP			Product Number	Wire Diameter in. (mm)	Process
⁽¹⁾ Aluminum welding requires optional K4360-1 Magnum [®] PRO spool gun.										ingle Pas Iultiple P	° .	<pre><p2948-1< pre=""><pre></pre><pre><pre><pre><pre><pre><pre><pre><</pre></pre></pre></pre></pre></pre></pre></p2948-1<></pre>	.025035 (0.6-0.9) .035045 (0.9-1.1)	MIG/Flux-Corec Flux-Cored	

RECOMMENDED ACCESSORIES



GENERAL OPTIONS Welding Cart

Full-featured cart is designed to store and transport a welder, 80 cubic foot gas cylinder, welding cables and accessories. Includes an angled top shelf for easy access to welder controls, a lower tray for added storage space, a sturdy handle also used as a convenient cable wrap hanger. Order K2275-3



Ready to weld PTA-9 TIG Torch Light and easy to use, these torches give you the power of maximum versatility and maneuverability. A molded, knurled handle gives you a sure grip so you can focus on the

weld. Whether you are an occasional TIG welder, fabrication shop or production welder, Pro-TorchTM TIG torches are right for you. **Order K1782-16**

Foot Pedal

This TIG foot pedal controls the amperage when TIG welding with LE31MP. Depress pedal to increase current. Depressing pedal fully achieves maximum set current. Fully raising the pedal finishes the weld and starts the After flow cycle. This foot pedal will give the optimum amperage needed for any TIG welding project. **Order K4361-1**



WIRE FEEDER OPTIONS

Magnum® PRO 100SG Spool Gun Designed to easily feed 4 in. (102 mm) diameter 1 lb. (0.45 kg) spools of .030 in. (0.8 mm) or .035 in. (0.9 mm) diameter SuperGlaze® aluminum MIG wire. Includes gun, adapter kit, .035 in. (0.9 mm) contact tips (qty. 3), gas nozzle, and a 1 lb. (0.45 kg) spool of SuperGlaze® 4043 .035 in. (0.9 mm) MIG wire. Packaged in a convenient carrying case. **Order K4360-1**

PRODUCT SPECIFICATIONS											
Product Name	Product Number	Input Power	Rated Output Current/Voltage/Duty Cycle	Input Current @ Rated Output	Output Range	H x W x D inches (mm)	Net Weight Ibs. (kg)				
LE31MP™	K3461-1	120/1/60	95 A / 18.75 V / 60% MIG 115 A / 14.6 V / 60% TIG 80 A / 23.2 V / 60% Stick	20A	30-140 Amps DC MIG 25-90 Amps Stick 10-120 Amps TIG 40-500 ipm WFS	13.6 x 8.9 x 18.1 in. (345 x 224 x 460mm)	34.5 (15.6)				

For best welding results with Lincoln Electric equipment, always use Lincoln Electric consumables. Visit www.lincolnelectric.com for more details.

CUSTOMER ASSISTANCE POLICY

The business of The Lincoln Electric Company is manufacturing and selling high quality welding equipment, consumables, and cutting equipment. Our challenge is to meet the needs of our customers and to exceed their expectations. On occasion, purchasers may ask Lincoln Electric for information or advice about their use of our products. Our employees respond to inquiries to the best of their ability based on information provided to them by the customers and the knowledge they may have concerning the application. Our employees, however, are not in a position to verify the information provided or to evaluate the engineering requirements for the particular weldment. Accordingly, Lincoln Electric does not warrant or guarantee or assume any liability with respect to such information or advice. Moreover, the provision of such information or advice does not create, expand, or alter any warranty on our products. Any express or implied warranty that might arise from the information or advice, including any implied warranty of merchantability or any warranty of fitness for any customers' particular purpose is specifically disclaimed.



Lincoln Electric is a responsive manufacturer, but the selection and use of specific products sold by Lincoln Electric is solely within the control of, and remains the sole responsibility of the customer. Many variables beyond the control of Lincoln Electric affect the results obtained in applying these types of fabrication methods and service requirements.

Subject to Change - This information is accurate to the best of our knowledge at the time of printing. Please refer to www.lincolnelectric.com for any updated information.