

# Power Feed® 10M

## Processes

MIG, Pulsed, ST<sup>®</sup>, Flux Cored, Stick, TIG, Gouging

## Product Number

K2230-1 Single Bench Model  
K2234-1 Dual Bench Model  
K2314-1 Single Boom Model  
K2316-1 Dual Boom Model

See back for complete specs

**Input Power**  
40 VDC

**Rated Output Current/Duty Cycle**  
600A/60%

**Wire Size Range**  
See Back

**Wire Feed Speed**  
See Back

**Weight/Dimensions (H x W x D)**  
See Back

## Single and Dual Bench and Boom Wire Feeders

The advanced Power Feed® 10M wire feeder is designed specifically for use with Lincoln Electric Power Wave® power sources to deliver fast digital system communication and arc response.

Set your welding operations at the feeder, including Lincoln Electric advanced processes and waveforms. Select single or dual head feeders in bench or boom mount configurations.

## FEATURES

- ▶ **World-class arc performance** - On steel, stainless steel, aluminum and other materials.
- ▶ **Waveform Control Technology®** - Featuring processes like Pulse-On-Pulse®, for a TIG-like bead appearance, and Power Mode®.
- ▶ **Utilizes ArcLink®** - The leading digital communication protocol for welding systems.
- ▶ **Synergic CV MIG welding** - With ideal voltage presets for many applications.
- ▶ **Pulsed MIG process** - Great for low spatter, low heat input and out-of-position applications - makes virtually any operator a better welder!
- ▶ **Weld processes and settings at the feeder** - Add efficiency by placing controls close to the operator.
- ▶ **Easy-to-understand user interface panel** - Makes it easy to set weld parameters.
- ▶ **Push-pull capability** - For great performance on aluminum.

## APPLICATIONS

- ▶ Automotive
- ▶ Shipbuilding
- ▶ Pressure Vessels



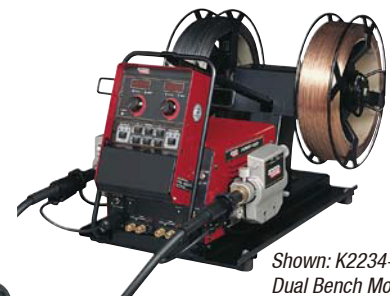
Shown: K2314-1  
Single Boom Model



Shown: K2316-1  
Dual Boom Model



Shown: K2230-1  
Single Bench Model



Shown: K2234-1  
Dual Bench Model

## WHAT'S INCLUDED

### Bench Models Include:

- ▶ Wire Reel Stand
- ▶ MSP4 Panel
- ▶ Dual Procedure/Memory Panel
- ▶ ArcLink®/Weld Power Cable Assembly, 8 ft. (2.5 m)
- ▶ High Speed Pinion Gear (2 for Dual model)
- ▶ Power Wave® Utilities CD-ROM with Weld Manager®

### Boom Models Include:

- ▶ MSP4 Panel
- ▶ Dual Procedure/Memory Panel
- ▶ ArcLink® Control Cables, 8 ft. (2.5 m) and 25 ft. (7.6 m)
- ▶ Mounting Hardware Kit
- ▶ Power Wave® Utilities CD-ROM with Weld Manager®

## INPUT OUTPUT



IP21S Rating



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



## THE LINCOLN ELECTRIC COMPANY

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

## KEY CONTROLS

**MSP4 User Interface Panel** – Provides full control of mode selection, arc control, weld sequence to dial-in the mode you desire and set procedures appropriately.

**1. Weld Mode** – Provides easy access to the multiple welding waveform programs in the Power Wave® power sources.

**Arc Control** - Also known as Inductance or Wave Control. It allows the operator to vary the arc characteristics from “soft” to “crisp” in most weld modes.

**2. Start Options** – Preflow time, run-in wire feed speed and start time.

**End Options** – Crater time, burnback time, and postflow time.

**3. Large, easy-to-read alpha numeric display.**



**The Dual Procedure/Memory Panel** – Standard equipment on ALL Power Feed® 10M Models. This panel performs three functions: weld procedure selection, feed head selection and memory saving/recall. There are two procedure memories (A and B) and six user memories (1- 6) for each feed head to store your favorite settings.



### Synergic Control CV Voltage Display

Synergic Control CV programs feature an ideal voltage best suited for most procedures. Use this voltage as a starting point for the weld procedure and adjust if needed based on personal preference. When the voltage knob is rotated, the display will show an upper or lower bar indicating that the voltage is above or below the ideal voltage.

• Above ideal voltage (upper bar display)

• At ideal voltage (no bar displayed)

• Below ideal voltage (lower bar display)



#### Front:

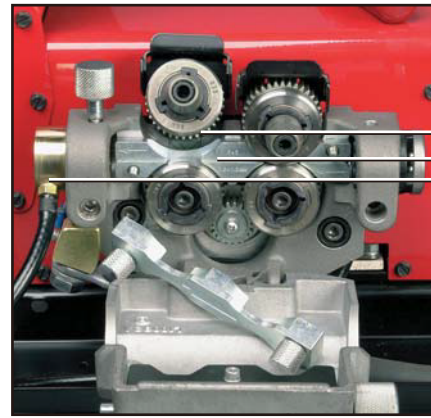
1. Digital Display – Voltage and wire feed speed
2. Dual Procedure/Memory Panel – Retain settings in memory
3. MSP4 Panel
4. 2-Step/4-Step Trigger Switch
5. ArcLink® status
6. Cold Inch/Gas Purge Switch
7. Water Cooler Kit Connection (Optional)
8. Gun Trigger Connector – (5-pin amphenol)

#### Back:

1. Shielding Gas Inlet – (5/8 - 18 CGA connection)
2. Spool Gun/ Push-Pull Gun Connector
3. Remote/Foot Amptrol Connector for TIG welding (Optional)
4. ArcLink® Control Cable Connector
5. Water Cooler Connector (Optional)
6. Access Panel - Remove to change DIP settings

**Four Drive Roll System**

- Split wire guide provides easy wire loading and maintenance.
- High speed gear for most fine wire applications. Low speed gear for higher torque with Innershield® wire.
- Wire feed speed calibrated to monitor and maintain constant speed.
- Tachometer feedback to monitor and maintain constant speed.
- Brass-to-brass connections and rugged aluminum cast housing provide reliable performance.
- Interchangeable gun bushings for use with a variety of guns.



Four Drive Roll  
Split Wire Guide  
Brass Connector

**CABLES, DRIVE ROLLS AND GUN BUSHINGS**

**ARLINK® CONTROL EXTENSION CABLES**

Description	Order Number
8 ft. (2.5 m) Without weld cable	K1543-8
25 ft. (7.6 m) Without weld cable	K1543-25
50 ft. (15.2 m) Without weld cable	K1543-50
100 ft. (30.4 m) Without weld cable	K1543-100
25 ft. (7.6 m) Heavy Duty – Without weld cable	K2683-25
50 ft. (15.2 m) Heavy Duty – Without weld cable	K2683-50
100 ft. (30.4 m) Heavy Duty – Without weld cable	K2683-100

**WELD POWER CABLES**

Description	Order Number
Lug to Lug, 3/0, 600A, 60% duty cycle, 10 ft. (3.0 m)	K1842-10
Lug to Lug, 3/0, 600A, 60% duty cycle, 35 ft. (10.6 m)	K1842-35
Lug to Lug, 3/0, 600A, 60% duty cycle, 60 ft. (18.2 m)	K1842-60
Lug to Lug, 4/0, 600A, 60% duty cycle, 110 ft. (33.5 m)	K1842-110

**COAXIAL WELD POWER CABLES<sup>(1)</sup>**

Description	Order Number
25 ft. (7.6 m) 350 amps	K1796-25
50 ft. (15.2 m) 350 amps	K1796-50
75 ft. (22.8 m) 325 amps	K1796-75
100 ft. (30.4 m) 300 amps	K1796-100






<sup>(1)</sup> Recommended for STT® and pulse welding when using long distances between feeder and power source.

**DRIVE ROLL AND WIRE GUIDE KITS**

Description	Order Number
<b>Solid Steel Wire, Smooth V Groove:</b> .023-.030 in. (0.6-0.8 mm) .035 in. (0.9 mm) solid .040-.045 in. (1.0-1.2 mm) .052 in. (1.4 mm) 1/16 in. (1.6 mm)	KP1505-030S KP1505-035S KP1505-045S KP1505-052S KP1505-1/16S
<b>Cored Steel Wire, Knurled V Groove:</b> .030-.035 in. (0.8-0.9 mm) .040-.045 in. (1.0-1.2 mm) .052 in. (1.4 mm) 1/16 in. (1.6 mm) 7/64 in. Hardfacing (Knurled V Groove with matching Smooth U Groove)	KP1505-035C KP1505-045C KP1505-052C KP1505-1/16C KP1505-7/64H
<b>Cored or Solid Steel Wire, Knurled V Groove:</b> .068-.072 in. (1.8 mm) 5/64 in. (2.0 mm) 3/32 in. (2.4 mm) 7/64 in. (2.8 mm) Cored .120 in. (3.2 mm) Cored	KP1505-068 KP1505-5/64 KP1505-3/32 KP1505-7/64 KP1505-120
<b>Aluminum Wire, Smooth U Groove:</b> .035 in. (0.9 mm) .040 in. (1.0 mm) 3/64 in. (1.2 mm) 1/16 in. (1.6 mm) 3/32 in. (2.4 mm)	KP1507-035A KP1507-040A KP1507-3/64A KP1507-1/16A KP1507-3/32A



**FEED PLATE GUN RECEIVER BUSHINGS**

K1500-1 Gun Receiver Bushing	K1500-2 Gun Receiver Bushing	K1500-3 Gun Receiver Bushing	K1500-4 Gun Receiver Bushing	K489-7 Fast-Mate™ Gun Receiver Bushing
<ul style="list-style-type: none"> <li>• Magnum® PRO Curve™ 200, 300 and 400 with K466-1 connector kit.</li> <li>• Magnum® PRO 250, 350 and 450 with K466-1 connector kit.</li> <li>• Magnum® PRO 550 with K613-1 connector kit.</li> <li>• K126™ PRO Innershield®</li> </ul> 	<ul style="list-style-type: none"> <li>• Magnum® PRO 200, 300 and 400 w/K466-10 connector kit.</li> <li>• Magnum® PRO 250, 350 and 450 w/K466-10 connector kit.</li> <li>• Magnum® PRO 550 with K613-7 connector kit.</li> <li>• K126™ PRO Innershield®</li> <li>• Guns with Tweco® #2, #3, and #4 connectors.</li> </ul> 	<ul style="list-style-type: none"> <li>• Magnum® PRO 550 with K613-7 connector kit.</li> <li>• K126™ PRO Innershield®</li> <li>• Guns with Tweco® #5 connectors.</li> </ul> 	<ul style="list-style-type: none"> <li>• Magnum® PRO 200, 300 and 400 w/K466-3 connector kit.</li> <li>• Magnum® PRO 250, 350 and 450 w/K466-3 connector kit.</li> <li>• Magnum® PRO 550 with K613-3 connector kit.</li> <li>• K126™ PRO Innershield®</li> </ul> 	<ul style="list-style-type: none"> <li>• Magnum® with Fast-Mate™ connections.</li> <li>• Handles single and dual procedure guns.</li> </ul> 

<sup>(2)</sup> Tweco is a registered trademark of Thermadyne.

## RECOMMENDED ACCESSORIES

### GENERAL OPTIONS

#### Magnum® PRO Guns

Choose Magnum® PRO GMAW/FCAW Barrel or Curve™ or fume models or select a K126™ PRO FCAW model for construction environments. See publication E1209



#### Python-Plus® Air-Cooled and Python® Water-Cooled Push-Pull Guns

The Python-Plus® air-cooled push-pull guns feature a Magnum® backend that integrates power, gas and wire conduit into a single easy connection for direct plug into a POWER MIG® 350MP wire feeder welder, Power Wave® C300 or Power Feed® 10M semiautomatic wire feeder. The Python® water-cooled push-pull gun has separate wire and conduit, power and gas connections and requires a connection adapter.

**Order**  
**K3038-1** Air-Cooled, 15 ft. (4.5 m)  
**K3038-2** Air-Cooled, 25 ft. (7.6 m)  
**K3038-3** Air-Cooled, 50 ft. (15.2 m)  
**K2212-2** Water-Cooled, 25 ft. (7.6 m)



#### Cougar™ Pistol-Grip Air-Cooled Push-Pull Guns

Cougar™ push-pull guns are intended for those operators who prefer an upright pistol-grip design for aluminum welding fabrication or production. Feature Sure-Grip™ handle, integrated strain relief and multi-turn potentiometer. Rated 300A @ 60% duty cycle w/Argon.

**Order**  
**K2704-2** Air-Cooled, 25 ft. (7.6 m)  
**K2704-3** Air-Cooled, 50 ft. (15.2 m)



#### Push-Pull Gun Connection Kit

Required for aluminum welding with the Prince® XL, Python® and CobraMax™ air or water-cooled push-pull guns. Includes power block, gun bushing, gas hose adapter, torch gas bypass valve (required for Prince® XL Gun only), and wire reel brake limiter. Requires aluminum drive roll kit.

**Order K2339-1**



#### Dual Procedure Switch

Allows the use of two welding procedures with each Lincoln Magnum® gun connected to an LN-10, DH-10 or Power Feed® 10M Bench or Boom model. 15 ft. (7.6m). **Order K683-3**



#### ArcLink® "T" Connector Kit

For connecting multiple feeders to a single power source. **Order K2429-1**



#### Wire Straightener

For Lincoln Electric 10 series wire feeders. Straightens wire for better, smoother feeding. **Order K1733-1**



#### Spindle Adapter for 14 lb. (6 kg) Innershield® Coils

Permits 14 lb. (6 kg) Innershield® electrode coils to be mounted on 2 in. (51 mm) O.D. spindles. **Order K435**



#### Spindle Adapter for 8 in. O.D. Spools

Permits 8 in. (200 mm) O.D. spools to be mounted on 2 in. (51 mm) O.D. spindles. **Order K468**



#### 30 lb. (14 kg) Readi-Reel® Adapter

Adapts 22-30 lb. (10-14 kg) Lincoln Readi-Reels® of electrode to 2 in. (51 mm) spindle. **Order K363P**



#### Wire Reel Cover Kit

Plastic enclosure for up to 44 lb. (20 kg) wire packages. **Order K1634-1**



#### 50-60 lb. Coil Adapter

Adapts 50-60 lb. (22.6-27.2 kg) coils of Lincoln electrode to 2 in. (51 mm) spindle. **Order K1504-1**



#### Plastic Wire Cover

Plastic enclosure for up to 60 lb. (27.2 kg) wire packages. **Order K1634-2**



**Incoming Bushing for Lincoln Conduit**  
 Feed Plate Incoming Bushings connect directly to wire conduit (not included), for use in boom system, long distances, or large payoff packages. Bushings can be used with any wire conduit (K515 or K565).

**Order K1546-1** for .025 in.-1/16 in. wire  
**Order K1546-2** for 1/16 in.-1/8 in. wire



#### Water Connection Kit

Includes fittings for use with water-cooled guns and Magnum® Coolers. Kit provides for one gun. **Order K590-6**



#### Magnum® Flow Sensor

Rotary Flow Sensor with Leads monitors water cooling flow and shuts off power to gun if water stops. **Order K1536-1**

### ADDITIONAL OPTIONS FOR SINGLE AND DUAL BENCH MODELS

#### Foot Amptrol™ Connector Kit

Provides 25 ft. (7.6 m) of remote output control for TIG welding. (6-pin plug connection). **Order K2320-1**



#### Caster Kit – Light Duty

Mounts to the Heavy Duty Wire Reel Stand. Allows for easy movement of wire feeder. **Order K1556-1**



### ADDITIONAL OPTIONS FOR SINGLE BENCH MODEL

#### Swivel Platform

Mounts to the lift bail on the power source and bottom of the Heavy Duty Wire Reel Stand. Wire feeder may be lifted off if needed. Compatible with Light Duty Caster Kit. Includes "lazy susan" parts tray. **Order K1557-1**



#### Insulated Lift Bail

Allows the entire wire feeder to be hung from a crane or hook. Use with Universal Wire Reel Stand. **Order K1555-1**



## PRODUCT SPECIFICATIONS

Product Name	Product Number	Input Power	Rated Output Current/Duty Cycle	Wire Feed Speed Range in/min (m/min)	Wire Size Range in (mm)	H x W x D inches (mm)	Net Weight lbs. (kg)
Power Feed® 10M Single Bench Model	K2230-1	40 VDC	600A/60%	High Speed: 75-1200 (2.0-30.5)	High Speed: Solid: .025-1/16 (0.6-1.6) Cored: .035-5/64 (0.9-2.0)	18.5 x 13.5 x 30.5 (470 x 343 x 775)	62 (28.1)
Power Feed® 10M Dual Bench Model	K2234-1			Low Speed: 50-800 (1.27-20.3)	Low Speed: Solid: .025-3/32 (0.6-2.4) Cored: .035-.120 (0.9-3.0)	20.0 x 20.0 x 30.7 (508 x 508 x 781)	90 (40.8)
Power Feed® 10M Single Boom Model	K2314-1			Control: 13.0 x 8.5 x 4.0 (330 x 215 x 105)	Wire Drive: 7.6 x 12.9 x 13.7 (195 x 325 x 345)	8.5 (3.8)	30 (13.6)
Power Feed® 10M Dual Boom Model	K2316-1			Control: 13.0 x 8.5 x 4.0 (330 x 215 x 105)	Wire Drive: 9.0 x 19.0 x 15.5 (228 x 483 x 394)	8.5 (3.8)	50 (22.7)

For best welding results with Lincoln Electric equipment, always use Lincoln Electric consumables. Visit [www.lincolnelectric.com](http://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.

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The product performance data of this brochure and related attachments are from LINCOLN ELECTRIC application engineering laboratory. Except for special instructions, experiments on welding machines are conducted in accordance with the general standard of IEC60974-1; experiments on welding consumables are conducted in accordance with the general standard of AWS; for specific applicable standards on welding consumables please refer to the product page. The product performance data of this website and related attachments are from LINCOLN ELECTRIC American application engineering laboratory.

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**ELECTRIC**  
 THE WELDING EXPERTS®