LINCOLN ELECTRIC
ELEVATE™ SLi
BATTERY POWERED WELDER
ELEVATE™ SLi
CHARGE
ON
ELEVATE™ SLi
LINCOLN ELECTRIC

Ultimate Portability.

Unrivaled Performance.

Designed, built, and tested to deliver the industry's leading battery powered welder, the ELEVATE™ SLi combines unlimited portability with the trusted, reliable arc performance you expect from Lincoln Electric. Engineered to withstand rugged jobsite conditions, this durable and lightweight system offers up a powerful cordless Stick & TIG welder that ELEVATEs your operator's versatility on the jobsite.

Cordless Rugged Design - Go Anywhere

Portability

Welcome to the world of convenience with ELEVATE™ SLi. This cordless design with internal rechargeable battery technology is designed to be lightweight and portable, allowing you to take it on a construction site or repair equipment in the field. The ELEVATE™ SLi is always there to help you get the job done.

Arc Performance

Thanks to its premium performance utilizing Lincoln Electric's proven Chopper Technology®, ELEVATE™ SLi delivers superior DC arc welding performance for both Stick and Touch Start TIG® welding. Featuring cellulosic capability with the ability to handle up to a 5/32 in. (4.0 mm) diameter electrodes, this welding machine allows both whip and drag techniques for a wider range of construction and fabrication applications.

Straightforward & Simple

ELEVATE™ SLi has an impressive all-in-one internal charging system that eliminates the need for an external charger, multiple battery packs, or custom power cords. This charging system is designed to regulate the charging process and prevent the battery from being overcharged while continuously monitoring its status.

Durability

Not all lithium-ion battery technologies are the same. ELEVATE™ SLi uses lithium iron phosphate battery technology, which offers a longer lifespan, improved discharge and charge efficiency, and increased safety. Built to withstand challenging welding environments with an IP23S rating and fan-as-needed circuitry, ensuring long-lasting performance.

Processes »
Stick, DC TIG

Applications »
Construction, Fabrication, Maintenance, Repair

Output »

Input »

Product Number »
- K4706-1 –ELEVATE™ SLi Base Unit

The Next Generation of Portable Welding

Cordless Design - Internal Rechargeable Battery

The ELEVATE™ SLi battery powered welder is perfect for remote work as it doesn't require any input power to weld. This cordless design utilizes internal rechargeable battery technology, specifically lithium iron phosphate (LFP), that ensures a longer lifespan.

Go Anywhere Sustainability

The ELEVATE™ SLi battery powered welder is incredibly convenient for remote work, as it doesn't require any input power to weld, it eliminates the need for;

- Input power
- Engine-driven welders
- Generators
- Extra cables
- Loud noise
- High fuel costs

New Ergonomic Design

Our ergonomic case design is sleek and robust, making it easy to move around the job site with multiple lift points. Despite its durability, it's also lightweight and portable, weighing only 33 pounds. With ELEVATE™ SLi, you'll have a reliable and easy-to-use welding solution that can handle any job site challenge.

- **Ergonomic Case** - Sleek and robust case design with multiple lift points for ease of mobility around the job site
- **Lightweight and Portable** - Only 33 lbs
- **Adjustable Shoulder Strap** - Clips into the ELEVATE™ SLi to get you into the most isolated places

The Performance you Expect from Lincoln Electric

Outstanding E6010, E7018 & Touch Start TIG® Performance

ELEVATE™ SLi battery powered welder offers a robust 145A output, ensuring highly efficient welding performance. It accommodates a wide variety of welding rods, including 6010 and 7018 up to 5/32 in. (4.0 mm), and also includes Touch Start TIG® functionality for added versatility.

Weld More, Worry Less

The ELEVATE™ SLi helps maximize arc time, allowing operators of all skill levels to focus more on making great welds. A full charge provides:

- 21 - 3/32 in. (2.4 mm) electrodes*
- 9 - 1/8 in. (3.2 mm) electrodes*
- 6 - 5/32 in. (4.0 mm) electrodes*

*Actual results may vary due to factors such as, but not limited to: welding conditions, machine parameters, material properties, operator technique, and/or battery lifecycle.

Advanced Features to Tackle any Challenge

Proven Chopper Technology®

Benefits of Chopper Technology® include

- Easy arc starts
- Smooth arc action
- Low spatter levels
- Optimal bead appearance

Hot Start

Adjust the amperage during arc initialization to improve electrode starting. After the arc is established, the welding current will decrease to the output current set. Increasing from 0 to 10 will increase the additional current (relative to the preset current) added at arc initiation.

Arc Force

Controls penetration profile from soft arc to crisp arc. A high arc force value creates a crisp arc, while a low arc force value creates a soft arc. Full range is from -10 (Soft) to +10 (Crisp).

The Next Generation of Simplicity & Control

All-In-One Internal Charging System

No External Charger Needed or Custom Power Cord.

- **Charges Battery** - Regulates the charging system to power the battery without overcharging the battery
- **Compatibility** - No custom charging cord needed. The system can be easily charged by a readily-available cord
- **Anti-Vibration Battery System** - The internal battery allows the case and rubber fittings to take the shock rather than your battery

Multiple Ways to Weld

You can use the ELEVATE™ SLi for a cordless experience or plug your welder into a standard 120V wall outlet for charging while welding. With these options, you can power your welder anytime, anywhere.

- **Battery Operation** - Full welding capabilities powered directly from the internal battery source
- **Charge While Welding** - Advanced battery management system (BMS) allows for seamless transition from charging to welding. When the arc starts, power pulls directly from the battery and automatically switches back to charging the battery from the wall when the arc is finished
- **Generator Usage** - Can charge or operate on a compatible generator*

*See the ELEVATE SLi manual for specifications.

Built for the Field

Lithium Iron Phosphate Battery Technology

Lithium iron phosphate battery technology (LFP) offers good electrochemical performance and low resistance, delivering one of the safer, more stable battery systems on the market.

Fan-As-Needed Circuitry

Keep your devices running longer with Fan-As-Needed™ (FAN™) Circuitry. This innovative technology reduces the amount of debris entering your machine by shutting off the fan when it's unnecessary. The fan automatically turns on before components overheat, prolonging your electronics' life expectancy. Plus, it decreases power usage during idle periods, helping to conserve battery life.

Designed for Durability

ELEVATE SLi is built to last in even the harshest welding environments. With an IP23S enclosure rating, you can be sure that your equipment will be protected. This means you can use it outdoors without worrying about damage to your machine.

- All PC boards are environmentally coated
- Harness connectors are made with locking pins and sealed with electrical grease
- Cycled tested through extremes: temperature, humidty, and dust

Benefits of Lithium Iron Phosphate include:

- Longer life span
- No maintenance
- Safer
- Low cost
- Improved discharge and charge efficiency

Trusted Expertise & Support

Welding Experts

High-quality products and excellent customer service are essential for the Lincoln Electric story. Still, our unmatched welding expertise, from the construction site to the right of way, truly sets us apart. If there's a better way for you to weld, we'll help you find it

Global Support

With a worldwide network of distributor and sales offices reaching over 160 countries, as well as 36 global technical application facilities, Lincoln Electric can provide trusted global support you can count on.

Trusted Protection

Purchase with peace-of-mind. All ELEVATE™ SLi battery powered welders come backed by our standard, industrial 3-year warranty on parts & labor.

Key Controls

Front

1. Shoulder Strap Hooks
2. Ergonomic Front Handle
3. Display
4. Mode Selector
5. On/Off Switch
6. Weld Terminals
7. Battery Charge Level
8. Charging Indicator
9. Output Knob

Back

10. Ergonomic Back Handle
11. Circuit Breaker
12. Charging Port

What's Included

Base Model/Unit »
Some base models include a set of specific standard accessories

Packages »
Assembly required

ELEVATE™ SLi Battery Powered Welder

Base Model (K4706-1)

- ELEVATE™ SLi Battery Powered Welder
- 200A Industrial Electrode Holder, Cable and Twist Mate™ Plug *(K5612-1)*
- Work Cable and Clamp with Twist Mate™ Plug *(K5482-1)*
- Fully Adjustable Shoulder Strap *(KP5656-1)*
- 120V Input Cord, 8 ft. (2.4m) *(KP5655-1)*

Base Model with Rolling Case Package (K5622-1)

- Everything listed for base model
- Rolling Carrying Case *(K5548-1)*

Base Model with TIG and Rolling Case Package (K5624-1)

- Everything listed for base model
- Rolling Carrying Case *(K5548-1)*
- Caliber® 17 Series TIG Torch - Flex/Valve 12.5 ft. *(K4841-17FV-1)*
- Small Twist Mate™ Torch Adapter *(K960-2)*
- Caliber® 17/18/26 Series TIG Torch Expendables Kit - 1/16 in. -1/8 in. *(KP4760-HD)*
- Single-Stage Flowgauge Regulator Ar5-30-580 *(3000369)*

Base Model
K4706-1

Small Canvas Cover

Protect your machine when not in use.
Made from red canvas, it is flame retardant, mildew resistant, and water repellent.

Order K2377-1

Accessory Bag

Canvas bag can be used to store your welding accessories and tools.

Order K3071-1

Replacement 200 Amp Industrial Electrode Holder with 12.5 ft. (3.8 m) Cable and Twist Mate™ (Dinse 10-25) Connector

Order K5612-1

Replacement Ground Clamp with 12.5 ft. (3.8 m) Work Lead and Twist Mate™ (Dinse 10-25) Connector

Order K5482-1

Replacement 120V Input Cord 7.5 ft (2 m) for ELEVATE™ SLi Battery-Powered Welder

Order KP5655-1

Replacement Adjustable Shoulder Strap for ELEVATE ™ & Sprinter™ Welders

Order KP5656-1

Caliber® 17 Series TIG Torch - Flex/Valve
Premium Caliber® TIG Torch with a Flexible/Valve Torch Head and a 150A 60% Duty Cycle.

Order K4841-17FV-1

Caliber® 17/18/26 Series TIG Torch Expendables Kit - 1/16 in. -1/8 in.
Includes all of the front end parts needed to run a Gas Lens setup on 17/18/26 Series TIG Torches.

Order KP4760-HD

Small Twist Mate™ Torch Adapter (with separate gas)
TIG Torch Adapter

Order K960-2

Deluxe Adjustable Gas Regulator and Hose Kit

Order K586-1

Recommended Accessories

Heavy Duty Rolling Carrying Case

Ultimate Protection, Effortless Mobility

The heavy-duty rolling carry case is designed for the ELEVATE™ SLi battery-powered welder and most of its accessories. It provides the ultimate protection for your welding equipment, ensuring that it always stays safe and secure. With a telescoping handle, you can easily transport your equipment from one location to another without worrying about carrying it around.

Dimensions: 20.5H x 25W x 17.5D

- 42 in. Telescoping Handle
- Interior Accessory Tray
- Lockable Case
- Water-Resistant Silicone Gasket
- Durable Rotomolded Construction
- Heavy Duty Locking Latches
- 6 in. All Terrain Wheels

Order K5548-1

SPECIFICATIONS

Product Name	Product Number	Charging Input Power Voltage/Phase/Hertz	Output Range	Rated Output @ 104°F (40°C)	Electrode Diameters in (mm)	Open Circuit Voltage (OCV)	Dimensions - H x W x D in (mm)	Net Weight lb (kg)
ELEVATE™ SLi Base Model	K4706-1	120/1/60 Max 6A	Stick: 20-145A TIG: 4-145A	Stick: 145A / 25.8V TIG: 145A / 15.8V	3/32 (2.4) 1/8 (3.2) 5/32 (4.0)	Average: 55V Peak: 72V	14 x 11 x 20 (356 x 292 x 508)	33 (15)
Rolling Case Package	K5622-1							
TIG & Rolling Case Package	K5624-1							

ELECTRODE CONSUMPTION - STICK WELDING* (SMAW)

	E6010		E6013		E7018	
	Electrodes Consumed	Amps	Electrodes Consumed	Amps	Electrodes Consumed	Amps
3/32 x 12 in	21.7	60	16.8	75	12.3*	90
1/8 x 14 in	9.2	90	9.4	110	8.1	120
5/32 x 14 in	6.3	120	5.8	140	5.3	140

*3/32 x 14 in.

LIFT START TIG WELDING* (GTAW)

	Total Arc Time to Battery Depletion (min)	Amps
1/16 in	21.1	100

*Actual results may vary due to factors such as, but not limited to: welding conditions, machine parameters, material properties, operator technique, and/or battery lifecycle.

For best welding results with Lincoln Electric equipment, always use Lincoln Electric consumables. Visit www.lincolnelectric.com for more details. Manufactured at a facility with certified ISO Quality and Environmental Management Systems.

CUSTOMER ASSISTANCE POLICY

The business of Lincoln Electric is manufacturing and selling high quality welding equipment, automated welding systems, consumables, cutting equipment and EV charging systems. Our challenge is to meet the needs of our customers, who are experts in their fields, and to exceed their expectations. On occasion, purchasers may ask Lincoln Electric for information or technical information about their use of our products. Our employees respond to inquiries to the best of their ability based on information and specifications 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, or to provide engineering advice in relation to a specific situation or application. Accordingly, Lincoln Electric does not warrant or guarantee or assume any liability with respect to such information or communications. Moreover, the provision of such information or technical information does not create, expand, or alter any warranty on our products. Any express or implied warranty that might arise from the information or technical information, including any implied warranty of merchantability or any warranty of fitness for any customers' particular purpose or any other equivalent or similar warranty is specifically disclaimed.

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Publication E21.10 | Issue Date 01/2025

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