

INSTRUCTION MANUAL

GATEWAY PENDANT



For use with Product/Code
Numbers:
13161

Save for future reference

Date Purchased

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SAFETY INFORMATION

SAFETY DEPENDS ON YOU

Lincoln welding and cutting equipment is designed and built with safety in mind. However, your overall safety can be increased by proper installation ... and thoughtful operation on your part. **DO NOT INSTALL, OPERATE OR REPAIR THIS EQUIPMENT WITHOUT READING THIS MANUAL AND THE SAFETY PRECAUTIONS CONTAINED THROUGHOUT.** And, most importantly, think before you act and be careful.

 DANGER	
	This statement indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

 WARNING	
	This statement indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

 CAUTION	
	This statement indicates a potentially hazardous situation which, if not avoided, could result in minor or moderate injury.

Notice: This statement indicates the possibility of damage to equipment if the potential risk is not avoided.

PLEASE EXAMINE CARTON AND EQUIPMENT FOR DAMAGE IMMEDIATELY

When this equipment is shipped, title passes to the purchaser upon receipt by the carrier. Consequently, claims for material damaged in shipment must be made by the purchaser against the transportation company at the time the shipment is received.

KEEP YOUR HEAD OUT OF THE FUMES



- **DON'T** get too close to the weld. Use corrective lenses if necessary to stay a reasonable distance away from the weld.
- **USE ENOUGH VENTILATION** or exhaust at the weld, or both, to keep the fumes and gases from your breathing zone and the general area.
- **IN A LARGE ROOM OR OUTDOORS**, natural ventilation may be adequate if you keep your head out of the fumes.
- **USE NATURAL DRAFTS** or fans to keep the fumes away from your face.
- **READ** and obey the Safety Data Sheet (SDS) and the warning label that appears on all containers of welding materials.

If you develop unusual symptoms, see your supervisor. Perhaps the welding atmosphere and ventilation system should be checked.

WEAR CORRECT EYE, EAR AND BODY PROTECTION



- **PROTECT** your eyes and face with properly fitted and with proper grade of filter plate (See ANSI Z49.1).
- **PROTECT** your body from welding spatter and arc flash with protective clothing including woolen clothing, flame-proof apron and gloves, leather leggings, and high boots.
- **PROTECT** others from spatter, flash, and glare with protective screens or barriers.
- **PROTECT** your eyes and face with welding helmet
- **IN SOME AREAS**, protection from noise may be appropriate.
- **BE SURE** protective equipment is in good condition.
- **AT ALL TIMES**, wear safety glasses in work area.



- **DO NOT WELD OR CUT** containers or materials which previously had been in contact with hazardous substances unless they are properly cleaned. This is extremely dangerous.



SAFETY INFORMATION



- **DO NOT WELD OR CUT** painted or plated parts unless special precautions with ventilation have been taken. They can release highly toxic fumes or gases.
- **PROTECT** compressed gas cylinders from excessive heat, mechanical shocks, and arcs; fasten cylinders so they cannot fall.
- **BE SURE** cylinders are never grounded or part of an electrical circuit.
- **REMOVE** all potential fire hazards from welding area.



- **ALWAYS HAVE FIRE FIGHTING EQUIPMENT READY FOR IMMEDIATE USE AND KNOW HOW TO USE IT.**

CALIFORNIA PROPOSITION 65 WARNINGS

 WARNING	
	<p>Breathing diesel engine exhaust exposes you to chemicals known to the State of California to cause cancer and birth defects, or other reproductive harm.</p> <p>Always start and operate the engine in a well-ventilated area.</p> <p>If in an exposed area, vent the exhaust to the outside.</p> <p>Do not modify or tamper with the exhaust system.</p> <p>Do not idle the engine except as necessary.</p>

 WARNING	
	<p>This product, when used for welding or cutting, produces fumes or gases which contain chemicals known to the State of California to cause birth defects and, in some cases, cancer. (California Health & Safety Code § 25249.5 et seq.)</p>

For more information go to <https://www.p65warnings.ca.gov>

ARC WELDING CAN BE HAZARDOUS

PROTECT YOURSELF AND OTHERS FROM POSSIBLE SERIOUS INJURY OR DEATH. KEEP CHILDREN AWAY. PACEMAKER WEARERS SHOULD CONSULT WITH THEIR DOCTOR BEFORE OPERATING.

Read and understand the following safety highlights. For additional safety information, it is strongly recommended that you purchase a copy of "Safety in Welding & Cutting - ANSI Standard Z49.1" from the American Welding Society, P.O. Box 351040, Miami, Florida 33135 or CSA Standard W117.2. A Free copy of "Arc Welding Safety" booklet E205 is available from the Lincoln Electric Company, 22801 St. Clair Avenue, Cleveland, Ohio 44117-1199.

BE SURE THAT ALL INSTALLATION, OPERATION, MAINTENANCE AND REPAIR PROCEDURES ARE PERFORMED ONLY BY QUALIFIED INDIVIDUALS.

FOR ENGINE POWERED EQUIPMENT



- Turn the engine off before troubleshooting and maintenance work unless the maintenance work requires it to be running.



- Do not add the fuel near an open flame welding arc or when the engine is running. Stop the engine and allow it to cool before refueling to prevent spilled fuel from vaporizing on contact with hot engine parts and igniting. Do not spill fuel when filling tank. If fuel is spilled, wipe it up and do not start engine until fumes have been eliminated.



- Keep all equipment safety guards, covers and devices in position and in good repair. Keep hands, hair, clothing and tools away from V-belts, gears, fans and all other moving parts when starting, operating or repairing equipment.

- In some cases it may be necessary to remove safety guards to perform required maintenance. **REMOVE GUARDS ONLY** when necessary and replace them when the maintenance requiring their removal is complete. Always use the greatest care when working near moving parts.
- **DO NOT** put your hands near the engine fan. Do not attempt to override the governor or idler by pushing on the throttle control rods while the engine is running.
- To prevent accidentally starting gasoline engines while turning the engine or welding generator during maintenance work, disconnect the spark plug wires, distributor cap or magneto wire as appropriate.



- To avoid scalding, do not remove the radiator pressure cap when the engine is hot.
- Generator exhaust contains carbon monoxide. This is a poison you cannot see or smell.
- Using a generator indoors **CAN KILL YOU IN MINUTES**.
- **NEVER** use inside a home or garage, **EVEN IF** doors and windows are open.
- **ONLY** use **OUTSIDE** and far away from windows, doors and vents.

- Avoid other generator hazards. **READ MANUAL BEFORE USE.**

ELECTRIC AND MAGNETIC FIELDS MAY BE DANGEROUS



- Electric current flowing through any conductor causes localized Electric and Magnetic Fields (EMF). Welding current creates EMF fields around welding cables and welding machines.
- EMF fields may interfere with some pacemakers, and welders having a pacemaker should consult their physician before welding.
- Exposure to EMF fields in welding may have other health effects which are now not known. All welders should use the following procedures in order to minimize exposure to EMF fields from the welding circuit:
 - Route the electrode and work cables together - Secure them with tape when possible.

- Never coil the electrode lead around your body.
- Do not place your body between the electrode and work cables. If the electrode cable is on your right side, the work cable should also be on your right side.
- Connect the work cable to the workpiece as close as possible to the area being welded.
- Do not work next to welding power source.

ELECTRIC SHOCK CAN KILL



- The electrode and work (or ground) circuits are electrically "hot" when the welder is on. Do not touch these "hot" parts with your bare skin or wet clothing. Wear dry, hole-free gloves to insulate hands.
- Insulate yourself from work and ground using dry insulation. Make certain the insulation is large enough to cover your full area of physical contact with work and ground.

In addition to the normal safety precautions, if welding must be performed under electrically hazardous conditions (in damp locations or while wearing wet clothing; on metal structures such as floors, gratings or scaffolds; when in cramped positions such as sitting, kneeling or lying, if there is a high risk of unavoidable or accidental contact with the workpiece or ground) use the following equipment:

- Semiautomatic DC Constant Voltage (Wire) Welder.
- DC Manual (Stick) Welder.
- AC Welder with Reduced Voltage Control.
- In semiautomatic or automatic wire welding, the electrode, electrode reel, welding head, nozzle or semiautomatic welding gun are also electrically "hot".
- Always be sure the work cable makes a good electrical connection with the metal being welded. The connection should be as close as possible to the area being welded.
- Ground the work or metal to be welded to a good electrical (earth) ground.
- Maintain the electrode holder, work clamp, welding cable and welding machine in good, safe operating condition. Replace damaged insulation.
- Never dip the electrode in water for cooling.

SAFETY INFORMATION

- Never simultaneously touch electrically “hot” parts of electrode holders connected to two welders because voltage between the two can be the total of the open circuit voltage of both welders.
- When working above floor level, use a safety belt to protect yourself from a fall should you get a shock.
- **Also see [WELDING AND CUTTING SPARKS CAN CAUSE FIRE OR EXPLOSION](#) and [FOR ELECTRICALLY POWERED EQUIPMENT](#)**

ARC RAYS CAN BURN



- Use a shield with the proper filter and cover plates to protect your eyes from sparks and the rays of the arc when welding or observing open arc welding. Headshield and filter lens should conform to ANSI Z87.1 standards.
- Use suitable clothing made from durable flame-resistant material to protect your skin and that of your helpers from the arc rays.
- Protect other nearby personnel with suitable, non-flammable screening and/or warn them not to watch the arc nor expose themselves to the arc rays or to hot spatter or metal.

FUMES AND GASES CAN BE DANGEROUS



- Welding may produce fumes and gases hazardous to health. Avoid breathing these fumes and gases. When welding, keep your head out of the fume. Use enough ventilation and/or exhaust at the arc to keep fumes and gases away from the breathing zone.
- **When welding hardfacing (see instructions on container or SDS) or on lead or cadmium plated steel and other metals or coatings which produce highly toxic fumes, keep exposure as low as possible and within applicable OSHA PEL and ACGIH TLV limits using local exhaust or mechanical ventilation unless exposure assessments indicate otherwise. In confined spaces or in some circumstances, outdoors, a respirator may**

also be required. Additional precautions are also required when welding on galvanized steel.

- The operation of welding fume control equipment is affected by various factors including proper use and positioning of the equipment, maintenance of the equipment and the specific welding procedure and application involved. Worker exposure level should be checked upon installation and periodically thereafter to be certain it is within applicable OSHA PEL and ACGIH TLV limits.
- Do not weld in locations near chlorinated hydrocarbon vapors coming from degreasing, cleaning or spraying operations. The heat and rays of the arc can react with solvent vapors to form phosgene, a highly toxic gas, and other irritating products.
- Shielding gases used for welding can displace air and cause injury or death. Always use enough ventilation, especially in confined areas, to insure breathing air is safe.
- Read and understand the manufacturer’s instructions for this equipment and the consumables to be used, including the Safety Data Sheet (SDS) and follow your employer’s safety practices. SDS forms are available from your welding distributor or from the manufacturer.
- Also see [FOR ENGINE POWERED EQUIPMENT](#)

WELDING AND CUTTING SPARKS CAN CAUSE FIRE OR EXPLOSION



- Remove fire hazards from the welding area. If this is not possible, cover them to prevent the welding sparks from starting a fire. Remember that welding sparks and hot materials from welding can easily go through small cracks and openings to adjacent areas. Avoid welding near hydraulic lines. Have a fire extinguisher readily available.
- Where compressed gases are to be used at the job site, special precautions should be used to prevent hazardous situations. Refer to “**Safety in Welding and Cutting**” (ANSI Standard Z49.1) and the operating information for the equipment being used.

- When not welding, make certain no part of the electrode circuit is touching the work or ground. Accidental contact can cause overheating and create a fire hazard.
- Do not heat, cut or weld tanks, drums or containers until the proper steps have been taken to ensure that such procedures will not cause flammable or toxic vapors from substances inside. They can cause an explosion even though they have been “cleaned”. For information, purchase “Recommended Safe Practices for the Preparation for Welding and Cutting of Containers and Piping That Have Held Hazardous Substances”, **AWS F4.1** from the American Welding Society.
- Vent hollow castings or containers before heating, cutting or welding. They may explode.
- Sparks and spatter are thrown from the welding arc. Wear oil free protective garments such as leather gloves, heavy shirt, cuff-less trousers, high shoes and a cap over your hair. Wear ear plugs when welding out of position or in confined places. Always wear safety glasses with side shields when in a welding area.
- Connect the work cable to the work as close to the welding area as practical. Work cables connected to the building framework or other locations away from the welding area increase the possibility of the welding current passing through lifting chains, crane cables or other alternate circuits. This can create fire hazards or overheat lifting chains or cables until they fail.
- **Read and follow NFPA 51B** “Standard for Fire Prevention During Welding, Cutting and Other Hot Work”, available from NFPA, 1 Batterymarch Park, PO box 9101, Quincy, MA 02269-9101.
- **DO NOT** use a welding power source for pipe thawing.

CYLINDER MAY EXPLODE IF DAMAGED



- Use only compressed gas cylinders containing the correct shielding gas for the process used and properly operating regulators designed for the gas and pressure used. All hoses, fittings, etc. should be suitable for the application and maintained in good condition.

- Always keep cylinders in an upright position securely chained to an undercarriage or fixed support.

Cylinders should be located:

- Away from areas where they may be struck or subjected to physical damage.
- A safe distance from arc welding or cutting operations and any other source of heat, sparks, or flame.
- Never allow the electrode, electrode holder or any other electrically “hot” parts to touch a cylinder.
- Keep your head and face away from the cylinder valve outlet when opening the cylinder valve.
- Valve protection caps should always be in place and hand tight except when the cylinder is in use or connected for use.
- Read and follow the instructions on compressed gas cylinders, associated equipment, and CGA publication P-1, “Precautions for Safe Handling of Compressed Gases in Cylinders,” available from the Compressed Gas Association, 14501 George Carter Way Chantilly, VA 20151.

FOR ELECTRICALLY POWERED EQUIPMENT



- Turn off input power using the disconnect switch at the fuse box before working on the equipment.
- Install equipment in accordance with the U.S. National Electrical Code, all local codes and the manufacturer’s recommendations.
- Ground the equipment in accordance with the U.S. National Electrical Code and the manufacturer’s recommendations.

BATTERY HANDLING, STORAGE, AND DISPOSAL



Batteries can be flammable substances such as lithium or other organic solvents, which may result in overheating, rupture, or combustion. Failure to follow the battery manufactures instructions may result in fire, personal injury, and damage to property if used improperly.

SAFETY INFORMATION

- DO NOT short circuit, disassemble, deform, or heat batteries.
- DO NOT attempt to recharge batteries unless they are specifically marked as "rechargeable".
- DO NOT use or charge the battery if it appears to be leaking, deformed or damaged in any way.
- Store in a cool location. Keep batteries away from direct sunlight, high temperature, and high humidity.
- Immediately discontinue use of the battery if, while using, charging, or storing the battery, the battery emits an unusual smell, feels hot, changes color, changes shape, or appears abnormal in any other way.
- Keep batteries out of reach of children, should a child swallow a battery, consult a physician immediately.
- Recycle or dispose of batteries in accordance with local and federal laws.
- All persons inside LCA must wear proper PPE to avoid eye or skin exposure to laser radiation. The end user's LSO shall select proper PPE including, but not limited to, heat-resistant gloves, flame-resistant clothing, laser safety eye wear and laser-safe helmets that conform to ANSI Z136.1 Optical Density requirements for the wavelength and output power of the laser in use. Standard safety glasses and welding helmets DO NOT provide adequate protection from laser beam hazards. Always inspect PPE for damage or improper fit before use.
- Only qualified persons shall install, operate or service this unit per ANSI Z136.1 standards and your LSO's instruction. Read and follow all labels and manuals before installing, operating, or servicing hand held any laser welding equipment.
- Do not operate outside of a LCA, or if the laser protective housing is modified or damaged, or if safety interlocks have been bypassed or otherwise defeated. Inspect all equipment and LCA for damage or tampering prior to use.
- Reflected beams from the laser can damage eyes and skin and can pose a fire risk. Prior to use, the LCA should be assessed by the LSO to understand the surfaces where hazardous reflected beams can exist. Never position yourself or flammable material in the anticipated laser beam path and take extra precautions when working on reflective materials like aluminum and stainless steel.
- Follow all standards, individual facility or building regulations, and national, state, and local codes.

FOR LASER EMITTING EQUIPMENT



- Hazardous Class 4 (IV) laser products emit invisible, infrared laser radiation which can permanently damage the eye's retina and/or cornea, burn skin, and pose a fire risk. End users shall assign a qualified Laser Safety Officer (LSO) who has the certifications required by applicable law/standards, have a documented Laser Safety Program and have a Laser Controlled Area (LCA) that confirms to ANSI Z136.1 & Z136.9.
- Do not operate laser before end user's LSO has completed a risk assessment and all the prescribed Risk Mitigations measures have been fully implemented. Ensure the laser is operated/demonstrated safely by trained personnel and that the environment surrounding the laser welding cell or laser-controlled area is safe for people nearby when the laser is in operation.
- Never point the laser at yourself or others. Never look directly into a laser aperture, even if wearing full eye protection.

DEALER LOCATOR & PRODUCT REGISTRATION

Register your machine:



<https://www.lincolnelectric.com/register>

Authorized Service and Distributor Locator:

<https://www.lincolnelectric.com/locator>

ADDITIONAL SAFETY INFORMATION

Refer to <http://www.lincolnelectric.com/safety> for additional safety information

ELECTROMAGNETIC COMPATIBILITY (EMC)

CONFORMANCE

Products displaying the CE mark are in conformity with European Community Council Directive of 15 Dec 2004 on the approximation of the laws of the Member States relating to electromagnetic compatibility, 2014/30/EU. It was manufactured in conformity with a national standard that implements a harmonized standard: EN 60974-10 Electromagnetic Compatibility (EMC) Product Standard for Arc Welding Equipment. It is for use with other Lincoln Electric equipment. It is designed for industrial and professional use.

INTRODUCTION

All electrical equipment generates small amounts of electromagnetic emission. Electrical emission may be transmitted through power lines or radiated through space, similar to a radio transmitter. When emissions are received by other equipment, electrical interference may result. Electrical emissions may affect many kinds of electrical equipment; other nearby welding equipment, radio and TV reception, numerical controlled machines, telephone systems, computers, etc.

Warning: This Class A equipment is not intended for use in residential locations where the electrical power is provided by the public low-voltage supply system. There may be potential difficulties in ensuring electromagnetic compatibility in those locations, due to conducted as well as radiated disturbances.

INSTALLATION AND USE

The user is responsible for installing and using the welding equipment according to the manufacturer's instructions.

If electromagnetic disturbances are detected then it shall be the responsibility of the user of the welding equipment to resolve the situation with the technical assistance of the manufacturer. In some cases this remedial action may be as simple as earthing (grounding) the welding circuit, see Note. In other cases it could involve constructing an electromagnetic screen enclosing the power source and the work complete with associated input filters. In all cases electromagnetic disturbances must be reduced to the point where they are no longer troublesome.

Note: The welding circuit may or may not be earthed for safety reasons. Follow your local and national standards for installation and use. Changing the earthing arrangements should only be authorized by a person who is competent to assess whether the changes will increase the risk of injury, e.g., by allowing parallel welding current return paths which may damage the earth circuits of other equipment.

ASSESSMENT OF AREA

Before installing welding equipment the user shall make an assessment of potential electromagnetic problems in the surrounding area. The following shall be taken into account:

- a) other supply cables, control cables, signaling and telephone cables; above, below and adjacent to the welding equipment;
- b) radio and television transmitters and receivers;
- c) computer and other control equipment;
- d) safety critical equipment, e.g., guarding of industrial equipment;
- e) the health of the people around, e.g., the use of pacemakers and hearing aids;
- f) equipment used for calibration or measurement;
- g) the immunity of other equipment in the environment. The user shall ensure that other equipment being used in the environment is compatible. This may require additional protection measures;
- h) the time of day that welding or other activities are to be carried out.

The size of the surrounding area to be considered will depend on the structure of the building and other activities that are taking place. The surrounding area may extend beyond the boundaries of the premises.

METHODS OF REDUCING EMISSIONS

Public Supply System

ELECTROMAGNETIC COMPATIBILITY (EMC)

Welding equipment should be connected to the public supply system according to the manufacturer's recommendations. If interference occurs, it may be necessary to take additional precautions such as filtering of the system. Consideration should be given to shielding the supply cable of permanently installed welding equipment, in metallic conduit or equivalent. Shielding should be electrically continuous throughout its length. The shielding should be connected to the welding power source so that good electrical contact is maintained between the conduit and the welding power source enclosure.

Maintenance of the Welding Equipment

The welding equipment should be routinely maintained according to the manufacturer's recommendations. All access and service doors and covers should be closed and properly fastened when the welding equipment is in operation. The welding equipment should not be modified in any way except for those changes and adjustments covered in the manufacturer's instructions. In particular, the spark gaps of arc striking and stabilizing devices should be adjusted and maintained according to the manufacturer's recommendations.

Welding Cables

The welding cables should be kept as short as possible and should be positioned close together, running at or close to the floor level.

Equipotential Bonding

Bonding of all metallic components in the welding installation and adjacent to it should be considered. However, metallic components bonded to the work piece will increase the risk that the operator could receive a shock by touching these metallic components and the electrode at the same time. The operator should be insulated from all such bonded metallic components.

Earthing of the Workpiece

Where the workpiece is not bonded to earth for electrical safety, nor connected to earth because of its size and position, e.g., ship's hull or building steelwork, a connection bonding the workpiece to earth may reduce emissions in some, but not all instances. Care should be taken to prevent the earthing of the workpiece increasing the risk of injury to users, or damage to other electrical equipment. Where necessary, the connection of the workpiece to earth should be made by a direct connection to the workpiece, but in some countries where direct connection is not permitted, the bonding should be achieved by suitable capacitance, selected according to national regulations.

Screening and Shielding

Selective screening and shielding of other cables and equipment in the surrounding area may alleviate problems of interference. Screening of the entire welding installation may be considered for special applications.

PRODUCT DESCRIPTION

GENERAL DESCRIPTION

The Gateway Pendant is part of the Reveal® Gateway system to regulate usage of proprietary Lincoln welding processes. In conjunction with Reveal® Access cards, this system serves to provide licensed Lincoln processes to the customer.

The Gateway Pendant is an Arclink® connected accessory designed to be used with Lincoln Electric Power Wave® and Pipefab™ welding systems. It is a small enclosure that contains a 5 inch touchscreen user interface, a RFID card reader device, connections for Arclink® communications, and a USB port. It is designed to be positioned vertically via an integrated hanging loop or on a steel surface by magnets located on the rear panel.

GLOSSARY

- **Licensed Process:** A welding process that is exclusive to Lincoln welders and protected by patents and / or copyrights.
 - **Hyperfill®:** One of the licensed processes available to users of Lincoln Electric Power Wave® welders.
 - **Reveal® Access Card :** A RFID enable credit card that provides credit for usage of a Licensed Process on Lincoln welders. Credits are provided in wire weight (pounds or kilograms), or time(days or arc hours). Users of Lincoln welding wire will be provided with Reveal® Access Cards free of charge. Users of other brands of welding wire must pay for the cards.
 - **Gateway Pendant:** The hardware interface to read Reveal® Access Cards and allow access to a Licensed Process. The pendant communicates with the welder via an Arclink® connection. A pendant must be connected to the welder in order to utilize a Licensed Process.
-

RECOMMENDED PROCESSES AND EQUIPMENT

The Gateway Pendant may be used for all supported welding processes found on the Power Wave® family of welders and on Pipefab™ welders.

PROCESS LIMITATIONS

There are no process limitations when using the Gateway Pendant.

EQUIPMENT LIMITATIONS

The Gateway Pendant is designed for use with Lincoln Electric Power Wave® and Pipefab™ welders that are equipped with Arclink® communication capability. It is intended for indoor use, or locations protected from outdoor elements.

Position the Gateway Pendant on an accessible vertical surface that is out of the way of welding spatter and grinding sparks. The pendant should be at a comfortable height for touchscreen interaction. It should be in a dry location with free circulation of clean air.

PRODUCT DESCRIPTION

INSTALLATION

TECHNICAL SPECIFICATIONS

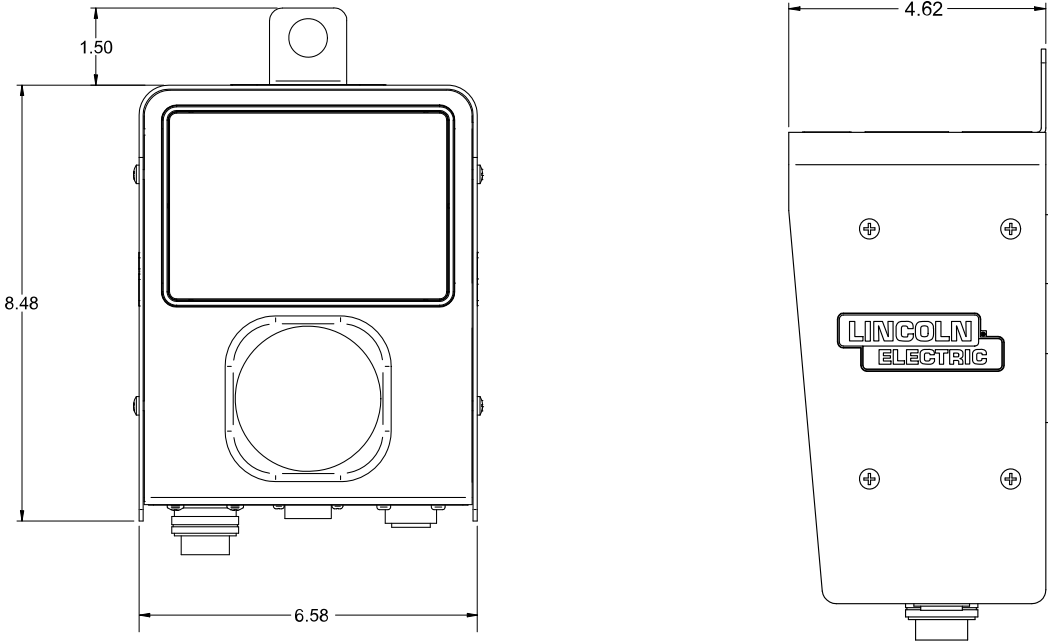
INPUT VOLTAGE & CURRENT		
Input Voltage	Input Amperes Max	Idle Amps
40 VDC	10	0.2

PHYSICAL DIMENSIONS			
Height	Width	Depth	Weight
10 in. 254 mm	6.6 in. 168 mm	4.6 in. 117 mm	4.4 lbs. 2 kg.

RADIO FREQUENCY & POWER	
Radio Frequency	Max RF Power Transmitted*
125kHz	≤ - 14.21 dBμA/m
13.56MHz	≤ - 8.05 dBμA/m

Note: * Field strength at 10 meters, standard max value

PENDANT DIMENSIONS



REGULATORY REQUIREMENTS

Regulatory requirements are presented separately.

DESIGN FEATURES

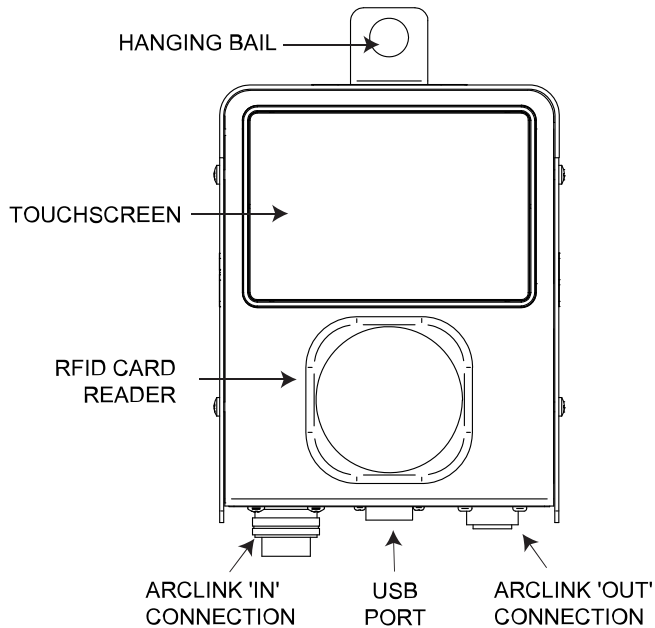
The Gateway Pendant will function with any SR series Power Wave® welder that has Arclink® connectivity and with Pipefab™. The welder must be capable of running the desired licensed process. The Pendant offers customers the following features:

- **RFID Card Reader:** Reads Reveal® access cards to provide credit for proprietary Lincoln weld processes.
- **5 inch Touchscreen Display:** Provides a simple user interface with the card reader.
- **Productivity Data:** Provides a high-level view of welding data such as Deposition, Arc Time, and Weld Count.
- **Metal Enclosure:** Completely enclosed rugged metal enclosure with hanging bail and rear magnets. The pendant may be hung from the top or magnetically attached to a vertical steel surface. It is designed to withstand industrial welding environments.
- **Simplicity:** Easy to setup and operate.
- **Portability:** The unit may be easily moved and placed in the most convenient location for interfacing.

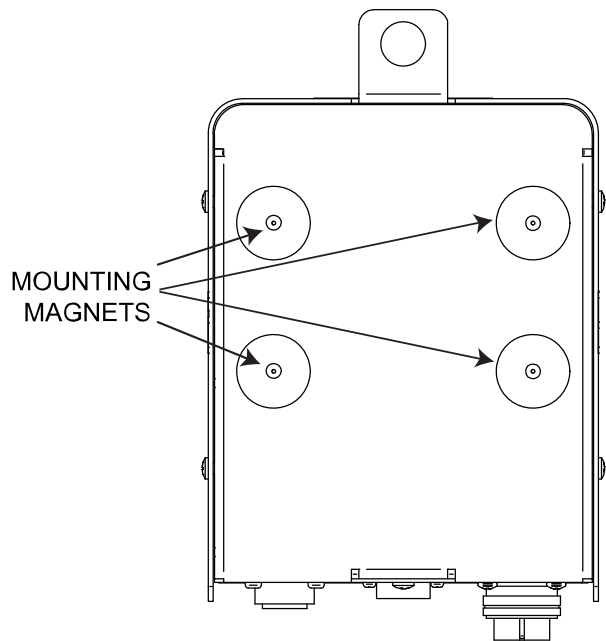
OPERATION

MAJOR COMPONENT LOCATION

CASE FRONT



CASE BACK



- **Hanging Bail:** This is for hanging the Pendant from an overhead or wall-mounted hook.
- **Touchscreen Display:** Touch activated user interface screen. All Pendant functions are controlled through the screen. There are no other controls on the pendant.
- **RFID Reader:** The circular face of this unit is the target for reading Reveal® access cards. Data on the card will be read when placed in front of the circular face of the reader.
- **Arlink® "OUT" Connection:** This is the 5-pin Arlink® "OUT" connection for making downstream connections to the wire feeder when connecting in series.
- **USB Port:** This is a USB "A" port for interfacing with USB devices and updating software.
- **Arlink® "IN" Connection:** This is the 5-pin Arlink® "IN" connection for connection to the weld power supply.

POWER-UP SEQUENCE

1. Check that the proper Arclink® connection are made and secure.
2. Ensure that Pendant is accessible and is securely fixed in a vertical position via the hanging bail or the magnets.

 WARNING	
	<p>FALLING EQUIPMENT can cause injury.</p> <p>The Gateway Pendant must be mounted vertically and suspended by the hanging ball from a secure point, or magnetically attached to a suitable vertical surface.</p>

3. Turn on the welding power supply.
4. After the full power up sequence is complete, the display on the touchscreen will show the "Home" screen.

HOME SCREEN

Users may choose between a Standard Home Screen and an Alternate Home Screen via the Display settings.

The Standard Home Screen (default) has Menu Tabs on the left side of the screen, Weld Details section in the center and a Credits section along the bottom of the screen.

The Alternate Home Screen has all of the above along with a Today's Summary section to the right of the Last Weld Detail section.

The three menu tabs at the left side of the Home Screen are always visible on Level 1 screens:

- Home (top)
- Weld Summary (center)
- Settings (bottom)
- Users may touch a menu tab to go to that menu item screen.
- The currently selected tab will be indicated by a lighter gray background.
- The Credits section is displayed along the bottom of the Home Screen when a licensed weld mode is selected.
- The Credits section shows remaining credits for the selected mode after a weld is completed.
- Credits may display in weight, days, or arc hours.
- After the low credits threshold is met, the Credits section will turn bright red to alert that credits are low.
- User can touch the credits area to view the License Credits screen and to Add Credits.

LAST WELD DETAILS

Last Weld details displays:

- Last weld avg amperage
- Last weld avg voltage
- Last weld true energy
- Last weld arc time in seconds
- Last weld deposition rate
- Last weld details section is not interactive

SETTINGS SCREEN

- Each sub-heading is interactive
- Language selects display language. Default is English
- Display Units selects system units. Default is Imperial
- Display Options selects settings for the display
- Advanced Settings is for more detailed setup options
- Touch the "Home" tab upper left corner to return to the Home screen

ADVANCED SETTINGS SCREEN

- This is a scrollable screen; touch and slide up or down to see all selections
- USB Media selection is only active when a device is detected in the USB port
- License Credits will appear once process credits are recorded. A process credit heading with sub menus will appear for each specific process
- Manage Restrictions is for assignment of individuals to Supervisor and User roles. Supervisor PINs, User PINs and User restrictions may be assigned in this section.
- Credit History displays credit transactions performed on the pendant.
- Touch the return arrow in the upper left corner to return to the System Options screen.

INITIAL SETUP UPON INSTALLATION

Upon initial power application, the standard Home Screen is displayed. Touch the 'Settings' tab (lower left wrench icon) to perform initial Pendant setup. The display will show the 'System Options' screen.

Note: Pendant setup is optional; the Pendant is ready to accept credits once it is powered up.

ADDING CREDITS

If there are no credits on the Pendant, touch the Settings tab in the lower left corner of the Home Screen, then select Advanced Settings > Wire Credits > +Add Credits.

If credits are already present on the Pendant, touch the Credits section from the Home Screen then '+Add Credits' on the following screen. A "Tap a Card" prompt screen will display. Present a valid card against the circular face of the RFID card reader on the Pendant. The reader will detect the card and the display will show the Card Value Screen.

- To continue, touch the blue 'ADD (VALUE)' section at the bottom of the screen
- To cancel and return to the Home Screen, touch the 'X' in the upper left corner

OPERATION

ADD (VALUE) SELECTED

The ADD (VALUE) screen displays the value to be added, and a warning that adding the value cannot be undone.

- To continue, touch the blue 'CONFIRM & ADD (VALUE)' section at the bottom of the screen. Confirming will remove the credits from the card and add the credits to the Pendant. This action cannot be undone.
- To cancel and return to the Home Screen, touch the 'X' in the upper left corner.

CONFIRM & ADD (VALUE) SELECTED

- If the card is not present at the reader, the 'Tap a Card' prompt screen will appear again. Present the card to the reader to continue.
- An animated scroll bar is displayed as the credits load. Once loaded, the Success Screen will display for 3 seconds, and then return to the Home Screen.

Note: When credits are added at initial install, or credits are added after running out of credits, the system will perform a soft reset. The new credits will be present on the Home Screen when the boot sequence is completed. If PINs are set, then a User or Supervisor will be prompted to log in to continue.

The system is now ready for welding and for use of the loaded process credits.

MAINTENANCE

MAINTENANCE

Keep the Pendant away from direct exposure to liquids, weld spatter, and grinding sparks and dust. Use the included Screen Protector to prevent damage to display screen. Replace the screen protector when necessary. Reorder KP4735-2. There are no user repairable units enclosed within the Pendant.

Note: A ' Factory Reset' via the Advanced Settings will result in the loss of all credits on the Pendant.

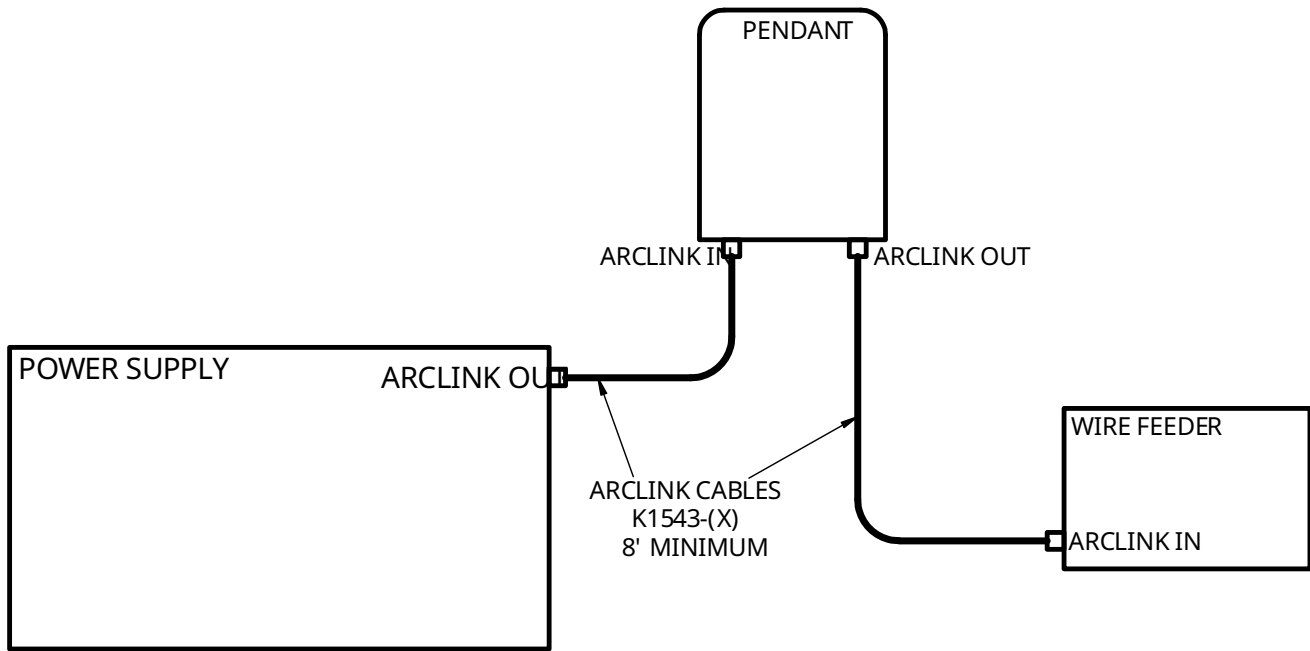
TROUBLESHOOTING

Refer to the online Gateway Pendant documentation for the latest user information and troubleshooting guidance. (<https://www.lincolnelectric.com/en-us/support/Pages/operator-manuals.aspx>)

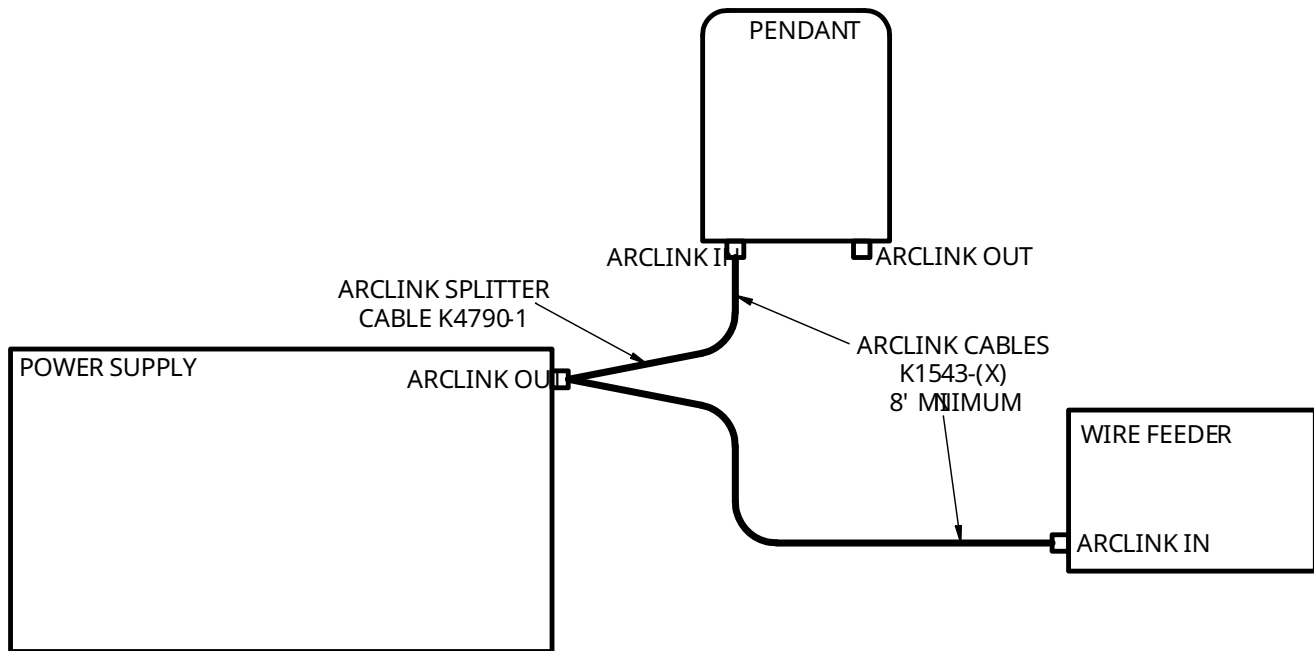
Note: Service and repair should only be performed by Lincoln Electric Factory Trained Personnel. Unauthorized repairs performed on this equipment may result in danger to the technician and machine operator and will invalidate your factory warranty. For your safety and to avoid Electric Shock, please observe all safety notes and precautions detailed throughout this manual.

APPENDIX

SYSTEM CONNECTION DIAGRAM

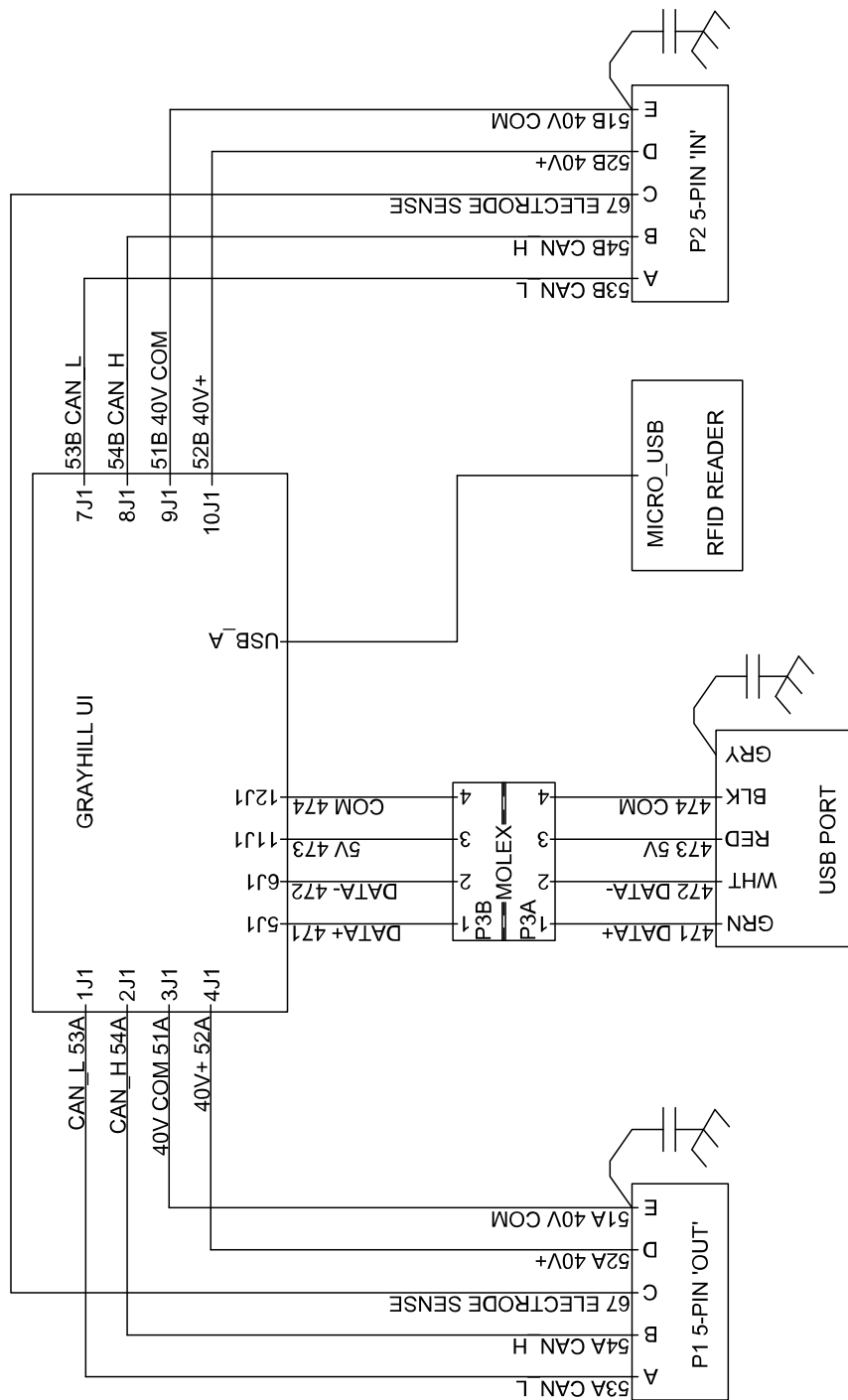


SERIAL CONNECTION



PARALLEL CONNECTION

WIRING DIAGRAM



CUSTOMER ASSISTANCE POLICY

CUSTOMER ASSISTANCE POLICY

The business of Lincoln Electric is manufacturing and selling high quality welding equipment, automated welding systems, consumables, and cutting equipment. 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.

Lincoln Electric is a responsive manufacturer, but the definition of specifications, and 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.

WELD FUME CONTROL EQUIPMENT

The operation of welding fume control equipment is affected by various factors including proper use and positioning of the equipment, maintenance of the equipment and the specific welding procedure and application involved. Worker exposure level should be checked upon installation and periodically thereafter to be certain it is within applicable OSHA PEL and ACGIH TLV limits.

PARTS LIST

Content/Details may be changed or updated without notice. For most current Instruction Manuals, go to PARTS.LINCOLNELECTRIC.COM.

