FX500XL Multiprocess Welder

Processes

• Stick, Flux-Cored, MIG, Pulsed MIG, TIG, Arc Gouging

Output

- CC/CV DC output 5-500A
- 500A/40V/60%
- 450A/38V/100%

Reliable

- Designed for outdoor environments, such as construction sites and shipyards
- IP23 and Desert Duty[®] rated for operation in the harshest environments (up to 55°C)

Features

- ArcLink[®] enables synergic pulse modes⁽¹⁾
- Optimized stick welding for both cellulosic and low hydrogen electrodes
- Touch-Start TIG for easy, contamination-free starts without high frequency
- Selectable VRD[™] (Voltage Reduction Device) provides additional safety in the CC-Stick mode. The VRD reduces the OCV (Open Circuit Voltage) at the welding output terminals while not welding to less than 35 VDC peak.



[1] Requires Power Feed® wire feeder





Compatibility

Compatible with all 42VAC wire feeders for MIG and Flux-Cored welding

CrossLinc[®] Technology (LN25X, Activ8X[™], CrossLincRemote)

CrossLinc technology communicates through a standard weld cable to enable voltage or current control at the arc without a control cable.

5-pin Control Cable Connection (Lincoln Power Feed® wire feeders)

5-pin high-speed digital communication enables advanced process capability and additional operator controls. Allows compatibility with future wire feeder models.

14-pin (Lincoln LF, LN and Flex Feed[®] wire feeders)

14-pin analog communication enables compatibility with most existing Lincoln wire feeders.

Across-the-arc Connection

Across-the-arc feeders connect to the power source using the weld cables. This basic configuration does not use a control cable or CrossLinc Technology, so voltage control is only accessed at the welding power source.





FLEXIBILITY

FX500XL power sources support multiple weld processes: MIG, TIG, Stick, Gouging and FCAW. FX500XL welders can be used with nearly all Red-D-Arc/Lincoln Electric wire feeders due to available feeder communication connections.







5-pin Control Cable Connection (Lincoln Power Feed wire feeders)

5-pin high-speed digital communication enables advanced process capability and additional operator controls. Allows compatibility with future wire feeder models.



14-pin (Lincoln Electric LF, LN and Flex Feed® models)

14-pin analog communication enables compatibility with most existing Lincoln wire feeders.



Across-the-arc Connection

Across-the-arc feeders connect to the power source using the weld cables. This basic configuration does not use a control cable or CrossLinc Technology, so voltage control is only accessed at the welding power source.



CrossLinc with True Voltage Technology (TVT) – Improve all aspects of your operation with CrossLinc and TVT.



- Reduce jobsite clutter by removing cumbersome control cables.
- Eliminate unnecessary movement of personnel across the jobsite.
- No need to drag heavy control cables around the jobsite.



- Full output control at the arc results in the correct settings for every weld.
- True Voltage Technology (TVT) accurately compensates for voltage drop across long cable runs.
- Eliminate unintentional machine adjustments by helpers or other operators.



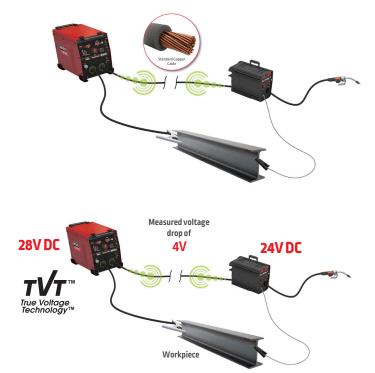
- Setup faster with fewer cable connections.
- Eliminate helpers or trips to the power source to make procedure adjustments.
- Minimize rework with easy settings adjustments.

CrossLinc allows for amperage and voltage control at the welding arc to improve control of your operation.

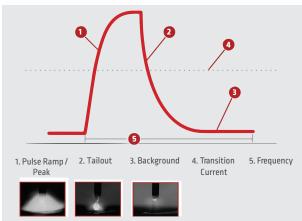
- No need for an additional control cable communication occurs directly over the weld cables:
 - 1. Set the desired voltage on the CrossLinc wire feeder
 - 2. The feeder sends a signal to the CrossLinc power source.
 - 3. The power source will change to the desired voltage

CrossLinc also features True Voltage Technology to compensate for voltage drop across the welding circuit.

- TVT will measure the voltage drop and adjust the power source to compensate for the difference between the desired voltage and actual voltage at the weld.
 - 1. Preset the wire feeder to the desired voltage.
 - 2. Make a test weld.
 - 3. The system will measure voltage drop and automatically adjust the power source to compensate.



PULSE



Pulsed spray is a non-contact transfer method between the electrode and the weld puddle. This means that at no time does the electrode ever touch the puddle. This is accomplished through high-speed manipulation of the electrical output of the welding machine. It is designed to be a spatterless process that will run at a lower heat input than spray or globular transfer methods.

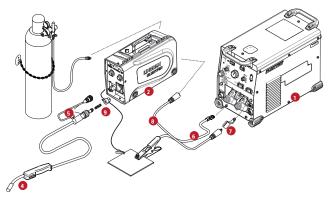
Advantages provided by pulsing machines include:

- · Spatter and fume reduction
- Heat reduction
- Improved productivity
- Better control

KEY SYSTEM CONFIGURATIONS

Field Setup

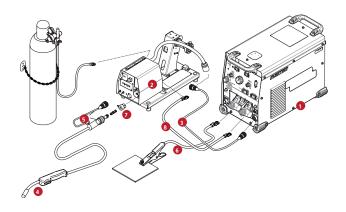
On the construction site or in the shipyard, the **FX500XL** welder has you covered. When paired with a CrossLinc technology enabled feeder, you can control the voltage right at the arc, without the need for extra cables.



| | ITEM | DESC. | К# |
|---|----------------------|------------------------------|-----------------------------|
| 1 | Machine | FX500XL | K3607-5 |
| 2 | Feeder | LN25X PRO Extreme, or LN-25X | K4326-1, K4326-2 or K4267-1 |
| 3 | Control Cable | None | |
| 4 | Gun | Required | |
| 6 | Gun Connector Kit | Required | |
| 6 | Work Cable | Required | |
| 7 | Adapter | Required | |
| 8 | Weld power Cable | Required | |
| 9 | Feeder Bushing | Required | |

Factory Setup

The multi-process **FX500XL** welder will satisfy all your fabrication needs.



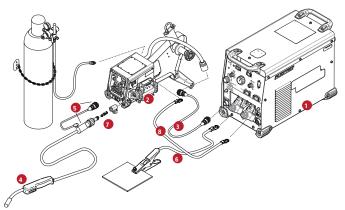
| | ITEM | DESC. | K# |
|---|----------------------|---|---------|
| 1 | Machine | FX500XL | K3607-5 |
| 2 | Feeder | LF-74 | K2426-5 |
| 3 | Control Cable | 14-pin Male to 14-pin Female Extension | |
| 4 | Gun | Required | |
| 6 | Gun Connector Kit | Required | |
| 6 | Work Cable | Required | |
| 7 | Feeder Bushing | Required | |
| 8 | Weld Power Cable | Required | |

Pulse Setup

To unlock the full potential of the **FX500XL** welder, Connect an Arclink technology capable feeder. This will give you access to multiple synergic pulse modes. Synergic pulse modes give you all the benefits of pulsed MIG welding without any of the hassle. Just pick your mode and wire speed and the machine will do the rest.

Synergic Pulse Modes

| | | Wire Size | | | | |
|---|--------------|-----------|-----------|-----------|----------|--|
| | Wire Size | Steel | Stainless | Metalcore | Aluminum | |
| | 0.035 | • | • | | • | |
| | 0.040 | • | | | | |
| | 0.045 | • | • | • | | |
| | 3/64 | | | | • | |
| | 0.052 | • | | • | | |
| - | 1/16 | • | • | • | • | |



| | ITEM | DESC. | К# |
|---|----------------------|---|----------|
| 1 | Machine | FX500XL | K3607-5 |
| 2 | Feeder | PF-84 Single Bench HD | K3328-13 |
| 8 | Control Cable | 5-pin ArcLink technology Male to 5-pin ArcLink technology Female. Standard Duty | |
| 4 | Gun | Required | |
| 5 | Gun Connector Kit | Required | |
| 6 | Work Cable | Required | |
| 7 | Feeder Bushing | Required | |
| 8 | Weld Power Cable | Required | |

FX500XL Multiprocess Welder

CrossLinc® w/True Voltage Technology™ (TVT™) – Improve all aspects of your operation with CrossLinc technology and the TVT[™] feature.

Safety

Quality

- Reduce jobsite clutter by removing cumbersome control cables
- Eliminate unnecessary movement of personnel across the jobsite
- No need to drag heavy control cables around the site
- Full output control at the arc results in the correct settings for every weld
- True Voltage Technology (TVT) feature accurately compensates for voltage drop across long cable runs

Productivity

- Setup faster with fewer cable connections
- Eliminate trips to the power source to make procedure adjustments
- Minimize rework with easy settings adjustments

FX500XL Specifications

| Product Number | Input Power | Rated Output Current/Voltage/Duty Cycle | Input Current @ Rated Output | Output Range | HxWxD in (mm) | Net Weight Ib (kg) |
|-------------------|---------------------|--|---------------------------------|--------------|---------------------------------------|-----------------------|
| K3607-5 | 380/460/575/3/50/60 | 500A/40V/60% 450A/38V/100% | 39/31/31 33/27/27 | | 18.8 x 14 x 26.5 [477 x 356 x 673] | 120 (54) |

FX500XL Controls

- 1. Amperage Display Meter
- 2. Thermal LED
- 3. Output Control Dial
- 4. Hot Start Control Dial
- 5. Weld Process Selector Switch
- 6. Local/Remote Output Selector Toggle Switch
- 7. Circuit Breaker Reset Button for the 5-pin Wire Feeder Connector
- 8. 5-pin ArcLink[®] Wire Feeder Connector
- 9. Positive and Negative 1/2 in (12.7 mm) Welding Output Studs
- 10. VRD[®] (Voltage Reduction Device) indicator Lights
- 11. CrossLinc[®] Indicator Light
- 12. Voltage Display Meter
- 13. Power Switch
- 14. Arc Force Control Dial
- 15. Weld Terminals On/Remote Selector Switch
- 16. Circuit Breaker Reset Button for the 14-pin Wire Feeder Connector
- 17. Remote Output Control (12-pin Universal Connector)
- 18. 14-Pin Wire Feeder Connector
- 19. Wire Feeder Voltmeter Polarity Selection Switch
- 20. Input Power Cord Strain Relief
- 21. Input Power Terminal Block
- 22. Input Fuse
- 23. Input Power Reconnect
- 24. Cooling Fan





