ALE

Automatic-Feed Soldering Station

This Plug & Play Guide corresponds to the following references:

①   ②

Station **with** Solder Wire Perforation   Station **without** Solder Wire Perforation

Ref.		Ref.	Ref.
ALE-908VA (100 V)		**ALE-904A** (100 V)	**ALE-910A** (100 V)
ALE-108VA (120 V)		**ALE-104A** (120 V)	**ALE-110A** (120 V)
ALE-208VA (230 V)		**ALE-204A** (230 V)	**ALE-210A** (230 V)
ALE-910VA (100 V)		**ALE-905A** (100 V)	**ALE-912A** (100 V)
ALE-110VA (120 V)		**ALE-105A** (120 V)	**ALE-112A** (120 V)
ALE-210VA (230 V)		**ALE-205A** (230 V)	**ALE-212A** (230 V)
ALE-912VA (100 V)		**ALE-906A** (100 V)	**ALE-915A** (100 V)
ALE-112VA (120 V)		**ALE-106A** (120 V)	**ALE-115A** (120 V)
ALE-212VA (230 V)		**ALE-206A** (230 V)	**ALE-215A** (230 V)
ALE-915VA (100 V)		**ALE-907A** (100 V)	**ALE-916A** (100 V)
ALE-115VA (120V)		**ALE-107A** (120 V)	**ALE-116A** (120 V)
ALE-215VA (230 V)		**ALE-207A** (230 V)	**ALE-216A** (230 V)
ALE-916VA (100 V)		**ALE-908A** (100 V)	**ALE-918A** (100 V)
ALE-116VA (120 V)		**ALE-108A** (120 V)	**ALE-118A** (120 V)
ALE-216VA (230 V)		**ALE-208A** (230 V)	**ALE-218A** (230 V)

Station
More Information at the
product web page

Video Guide
Watch the
product video

① **With** Solder Wire Perforation

Packing List:

Purchased Station Ref.		Control Unit * Ref.	Suitable for Solder Wire:
ALE-908VA (100 V) ALE-108VA (120 V) ALE-208VA (230 V)		ALE-908UVA (100 V) ALE-108UVA (120 V) ALE-208UVA (230 V)	Ø 0.8 mm / Ø 0.032 in
ALE-910VA (100 V) ALE-110VA (120 V) ALE-210VA (230 V)	Content*	ALE-910UVA (100 V) ALE-110UVA (120 V) ALE-210UVA (230 V)	Ø 1.0 mm / Ø 0.040 in
ALE-912VA (100 V) ALE-112VA (120 V) ALE-212VA (230 V)		ALE-912UVA (100 V) ALE-112UVA (120 V) ALE-212UVA (230 V)	Ø 1.2 mm / Ø 0.047 in
ALE-915VA (100 V) ALE-115VA (120V) ALE-215VA (230 V)		ALE-915UVA (100 V) ALE-115UVA (120V) ALE-215UVA (230 V)	Ø 1.5 mm / Ø 0.060 in
ALE-916VA (100 V) ALE-116VA (120 V) ALE-216VA (230 V)		ALE-916UVA (100 V) ALE-116UVA (120 V) ALE-216UVA (230 V)	Ø 1.6 mm / Ø 0.063 in

One of the listed control unit references is included according to the purchased station reference.

Note:

A solder wire guide kit is included inside the control unit package and the guide wheels are already installed in the control unit.

Other solder wire guide kits for different solder wire diameters are available at www.jbctools.com/solder-wire-guide-product-2098.html

GALExxV
Solder Wire Guide Kit for ALE250
with perforation

GALExxD
Solder Wire Guide Kit for ALE250

The following items are included in **all** purchased station references (1 unit of each item):

ALE250 Automatic-Feed Soldering Iron
Ref. ALE250-A

ALES Stand for ALE250
Automatic-Feed Soldering Iron
Ref. ALE-SA

C250403 Conical Bent Cartridge Ø 1
Ref. C250403

② **Without** Solder Wire Perforation

Packing List:

Station Ref.	Content*	Control Unit * Ref.	Suitable for Solder Wire:
ALE-904A (100 V) ALE-104A (120 V) ALE-204A (230 V)		ALE-904UA (100 V) ALE-104UA (120 V) ALE-204UA (230 V)	wire Ø 0.38 - 0.4 mm / 0.015 - 0.016 in
ALE-905A (100 V) ALE-105A (120 V) ALE-205A (230 V)		ALE-905UA (100 V) ALE-105UA (120 V) ALE-205UA (230 V)	wire Ø 0.45 - 0.56 mm / 0.018 - 0.022 in
ALE-906A (100 V) ALE-106A (120 V) ALE-206A (230 V)		ALE-906UA (100 V) ALE-106UA (120 V) ALE-206UA (230 V)	wire Ø 0.6 - 0.64 mm / 0.023 - 0.025 in
ALE-907A (100 V) ALE-107A (120V) ALE-207A (230 V)		ALE-907UA (100 V) ALE-107UA (120V) ALE-207UA (230 V)	wire Ø 0.7 - 0.78 mm / 0.028 - 0.031 in
ALE-908A (100 V) ALE-108A (120 V) ALE-208A (230 V)		ALE-908UA (100 V) ALE-108UA (120 V) ALE-208UA (230 V)	wire Ø 0.8 - 0.82 mm / 0.032 - 0.033 in
ALE-910A (100 V) ALE-110A (120 V) ALE-210A (230 V)		ALE-910UA (100 V) ALE-110UA (120 V) ALE-210UA (230 V)	wire Ø 0.9 - 1.1 mm / 0.036 - 0.044 in
ALE-912A (100 V) ALE-112A (120 V) ALE-212VA (230 V)		ALE-912UA (100 V) ALE-112UA (120 V) ALE-212UA (230 V)	wire Ø 1.14 - 1.27 mm / 0.045 - 0.051 in
ALE-915A (100 V) ALE-115A (120 V) ALE-215A (230 V)		ALE-915UA (100 V) ALE-115UA (120 V) ALE-215UA (230 V)	wire Ø 1.5 - 1.57 mm / 0.06 - 0.063 in
ALE-916A (100 V) ALE-116A (120 V) ALE-216A (230 V)		ALE-916UA (100 V) ALE-116UA (120 V) ALE-216UA (230 V)	wire Ø 1.6 - 1.63 mm / 0.063 - 0.065 in
ALE-918A (100 V) ALE-118A (120 V) ALE-218A (230 V)		ALE-918UA (100 V) ALE-118UA (120 V) ALE-218UA (230 V)	wire Ø 1.8 mm / 0.073 in

*One of the listed control unit references is included according to the purchased station reference.

The following items are included in **all** purchased station references (1 unit of each item):

P405 Pedal
Ref. P-405

SCH Catridge Holder
Ref. SCH-A

**PLR195** Cartridge Extractor Plier
Ref. PLR195

Installation

Before you can start working, the solder reel* must be attached and the tool stand, the soldering iron and the power cord connected to the control unit.

Follow the assembly steps in this P&P Guide.

Note: The solder diameter must match the ALE model purchased. Make sure the solder wire diameter is compatible with the wheels already installed in the ALE control unit.

Solder reel is not included.

Solder Reel

Wheels (inside)

Soldering Iron

Tool Stand
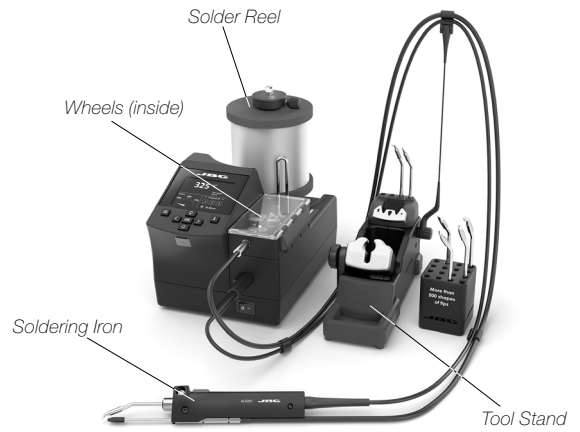
Tools Needed

The required tools are located on the control unit.

| Spanner | Allen Key Ø 1,5 | Allen Key Ø 2,5 |
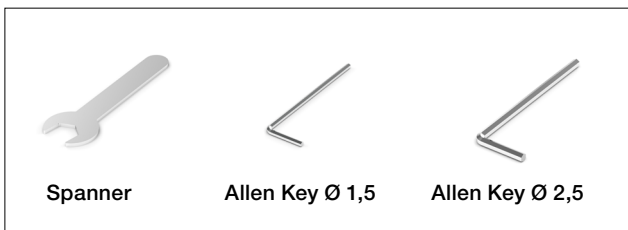
Step 1 **Solder Reel Assembly**

Loosen the reel locking screw (1) and remove the reel locking from the axis (2).

Assemble the solder reel onto the axis (3).

Assemble the solder reel in such a way - when viewed from above - that the solder wire unwinds on the dispensing mechanism side (4).

Then pass the solder wire through the wire guidance (5).

Reel Locking Screw

Axis

Reel Locking

Solder Reel

Solder Wire Guidance

Solder Wire

Solder Wire

Solder Wire Guidance

Solder Wire Unwinding Direction
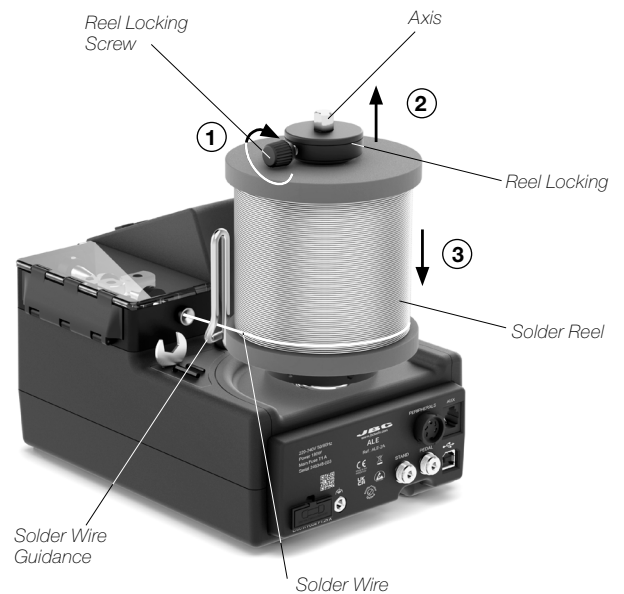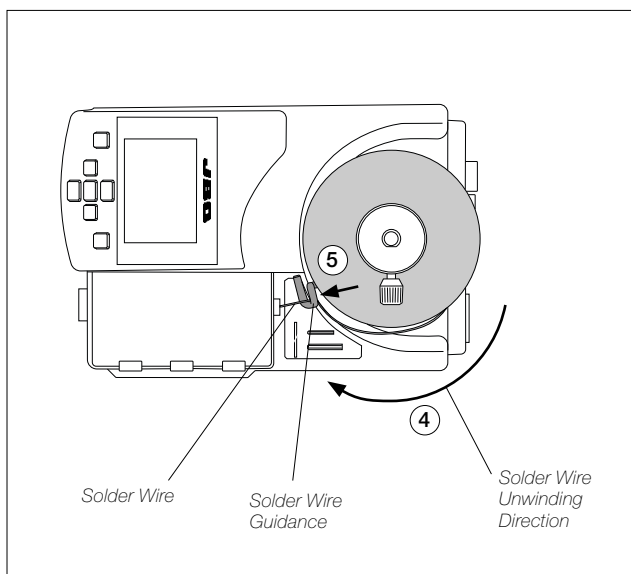
Watch the product assembly video

4

Step 2 **Reel Locking Assembly**

To assemble the reel locking, its conical side must be pointing downwards (1).

Reel Locking

*Reel Locking*

1

Conical Side
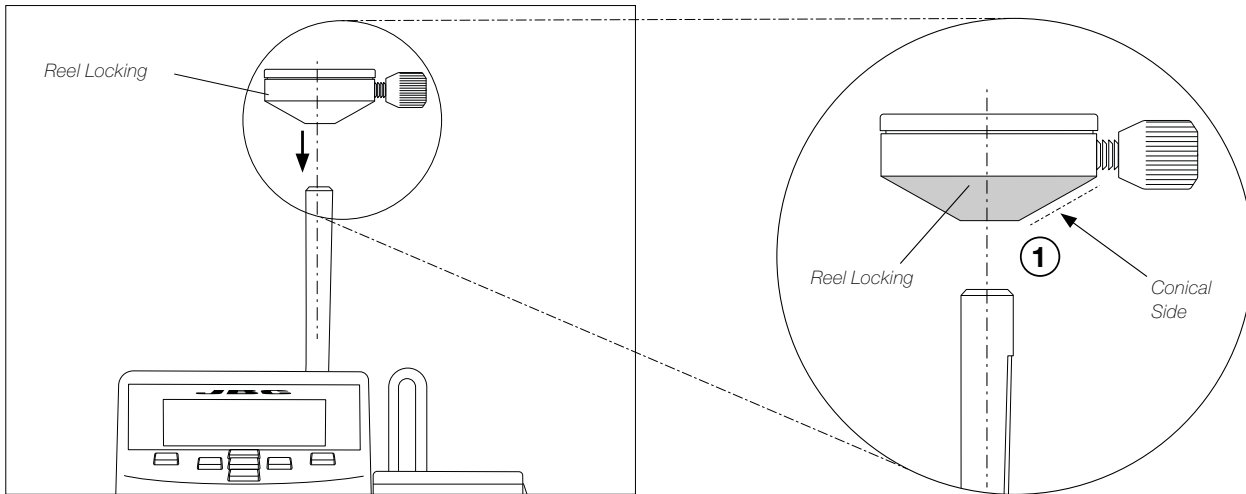
Align the flat side of the axis (2) with the inner flat side of the reel locking (3).
Make sure that the reel locking screw is slightly backed out and does not collide with the axis.
Reassemble the reel locking to the axis (4).

Note: To prevent the solder reel from spinning freely or binding, gently press the reel locking down, but only enough to allow the solder reel to rotate freely, before tightening the reel locking screw (5).

4

Flat Side of the Reel Locking

3

Reel Locking Screw

5

Flat Side of the Axis

2

Reel Locking Top View

Flat Side (Reel Locking)

3
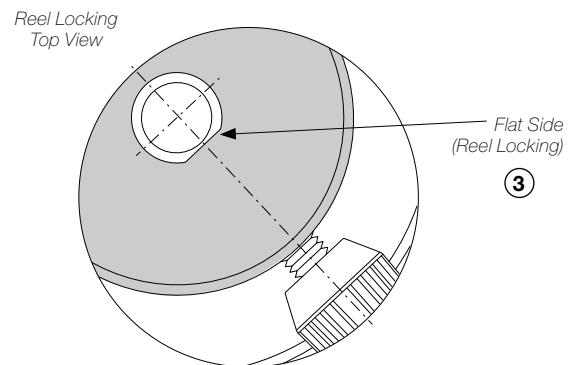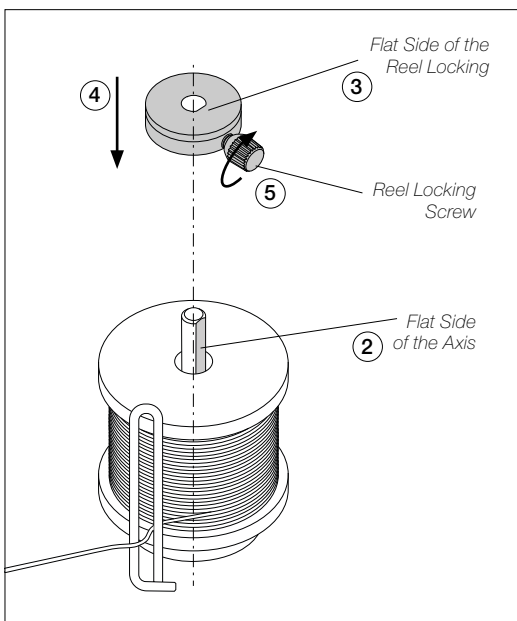
Step 3 **Cartridge Assembly**

⚠ For a safe cartridge assembly/change, make sure that the tool is unplugged and the cartridge has cooled down.

Loosen the cartridge set screw (1) and insert the cartidge up to its mark ⊩ (2). **Important:** It is essential to insert the cartridge completely for a good connection.

Adjust the tip direction (3) and tighten the cartridge set screw (1).

1

Mark

2

3

Cartridge Set Screw
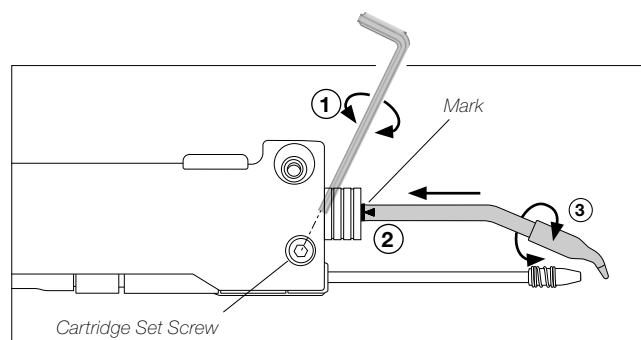
Step 4 **Guide Tube Set Assembly**

Open the guide tube set screw (1) and insert the guide tube set.

Adjust the guide tube length (2). Leave a gap of 5 to 7 mm (0.197 to 0.276 in) between the tip and the outlet nozzle (3).

If necessary adjust the cartridge tip direction (4) to match the point where the wire will come out. To do this, open the cartridge set screw and tighten it when it is done (5).

Once the guide tube set position is adjusted tighten the guide tube set screw (1).

For a better handling use the clips (6) to band the guide tube and the tool cable together.
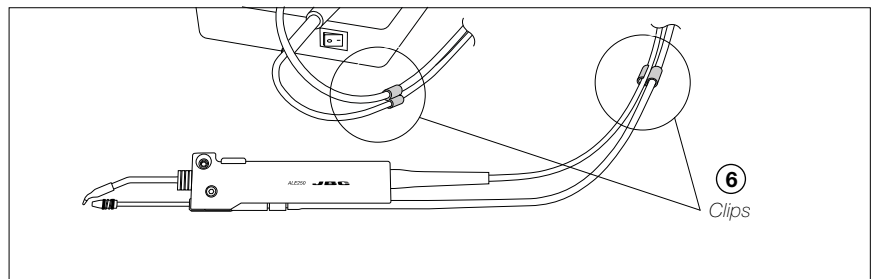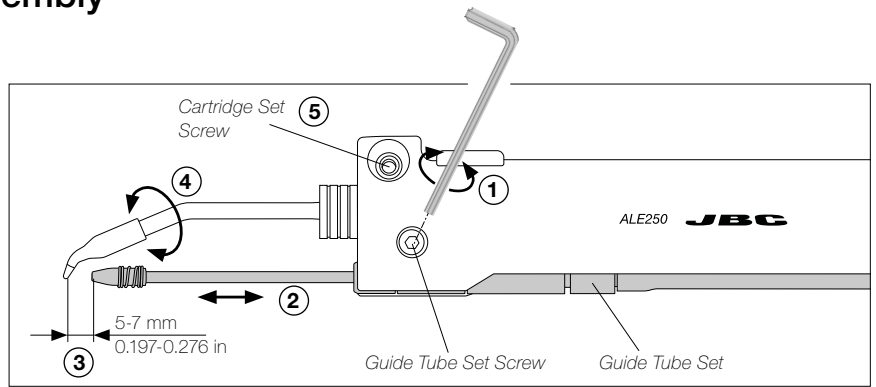
Step 5 **Tool Assembly**

Connect the tool to the control unit following these steps:

Loosen the set screw (1), insert and push the guide nozzle until it stops (2) and tighten the set screw (1).

Then plug in the tool connector (3).

ALE250
Automatic-Feed Soldering Iron

6
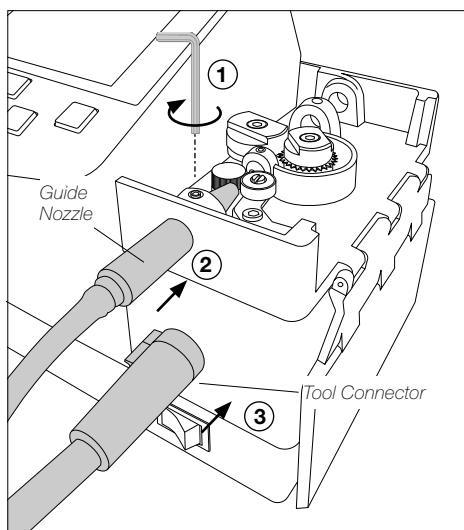
Step 6 **Stand, Pedal and Power Cord Installation**

At the rear side of the control unit plug in the stand cable, the pedal cable and power cord.

P405
Pedal

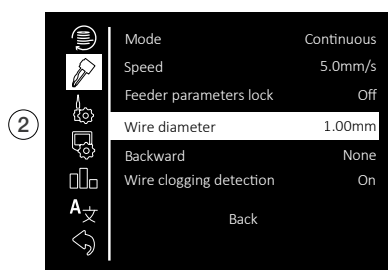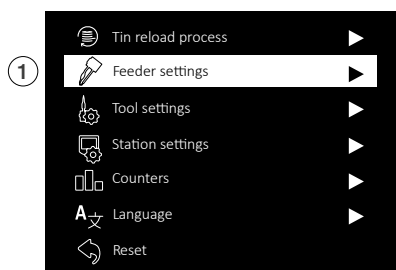**ALE**
Automatic-Feed Control Unit

Power Cord
included in
ALE Control Unit

ALES
Stand for ALE250 Automatic-Feed
Soldering Iron

Step 7 **Station Set Up**

Hold up the tool or leave it in the tool holder and switch the station on. ⚠ Be carefull, cartrige tip will get very hot.

Important:
For correct operation, the diameter of the choosen solder wire must match that of the guide kit and its components
(wheels, clamps and nozzles) assembled to the ALE. Guide kits for different wire diameters are available at www.
jbctools.com/solder-wire-guide-kit-product-2098.html

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Change the wire diameter by accessing to main menu pressing ▤ , select "*Feeder Settings*" (1) and then "*Wire Diameter*" (2) to adjust the
value to the current solder wire diameter.

🖹	Tin reload process	▶
✒	Feeder settings	▶
🛠	Tool settings	▶
🖳	Station settings	▶
🎚	Counters	▶
A✎	Language	▶
↺	Reset	

(1) → Feeder settings

|		
🖹	Mode	Continuous
✒	Speed	5.0mm/s
🛠	Feeder parameters lock	Off
🖳	Wire diameter	1.00mm
🎚	Backward	None
A✎	Wire clogging detection	On
↺	Back	

(2) → Wire diameter

Step 8 **Solder Wire Loading**

Make sure that the solder wire passes through the solder wire guidance (1). Introduce the solder wire into the inlet nozzle (2) until it reaches the wheels (3).
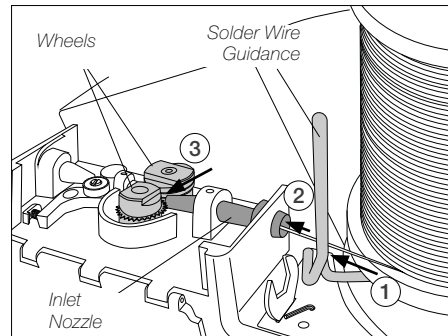

Select "*Tin Reloaded Process*" (1) and then press and hold ⬆ to feed the solder wire and advance until it comes out through the outlet nozzle.
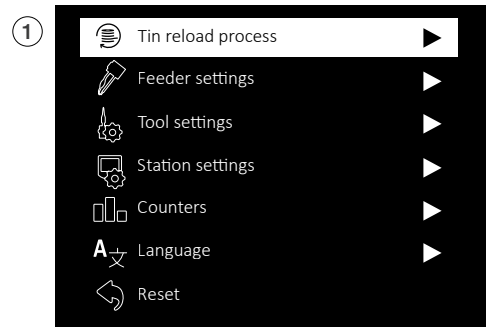
If needed, carefully push the wire until it gets locked in between the rotating wheels for the wire to start moving forward.
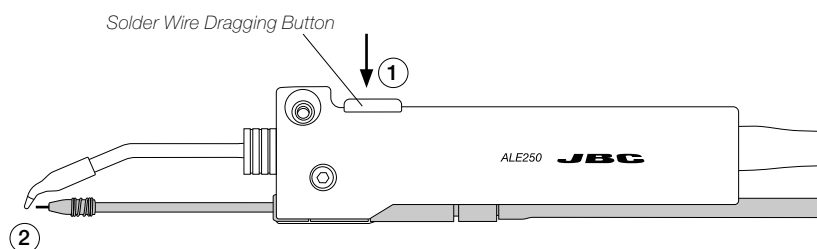Keep ⬆ pressed and after a while the wire will advance faster.

Make sure the wire passes through the intermediate nozzle (4) and enters the guide tube (5).
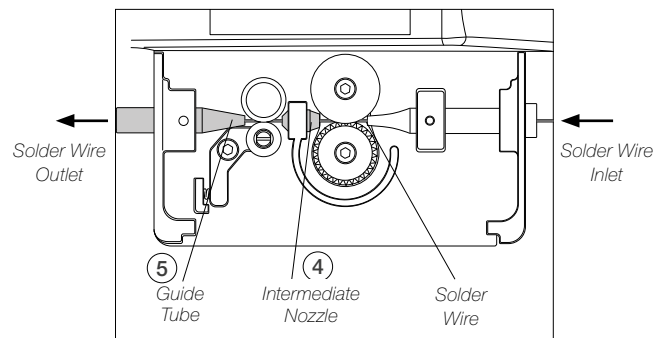
Solder Wire Feeding

Forward the solder wire by pushing the dragging button (1) until the wire comes out of the tip (2).

Alternatively solder wire can also be fed using the pedal P405. The pedal should be plugged in at the rear of the feeder control unit into the pedal connector.

Step 9 **Solder Wire Unloading**

With Solder Wire Perforation

To unload perforated solder wire that has already passed through the guide tube, cut the wire between the wire guidance and the inlet nozzle (1).

To extract the wire out of the tool and the guide tube, hold the tool on your hand and press ⬆ until the wire stops moving forward.

Grasp the wire coming out of the outlet nozzle with a pliers and pull from it until it is completely out.

Wire Guidance

Inlet Nozzle
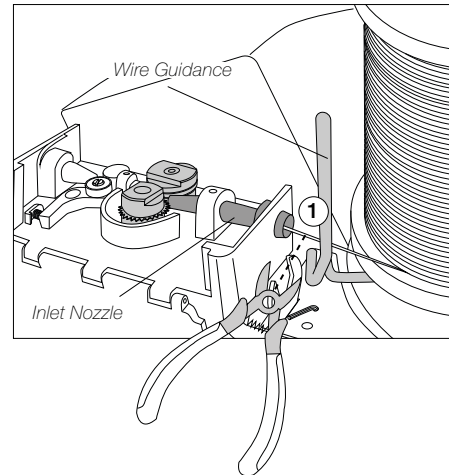
Without Solder Wire Perforation

When using a kit without solder wire perforation, press ⬇ until the wire is completely wound to unload the solder wire. It is best to rotate the reel by hand as the wire is being pulled back in order to keep it neatly arranged on the reel.

Or, if prefered, proceed as described above for perforated solder wire unloading.

Wire Winding Direction

Solder Reel

Solder Wire
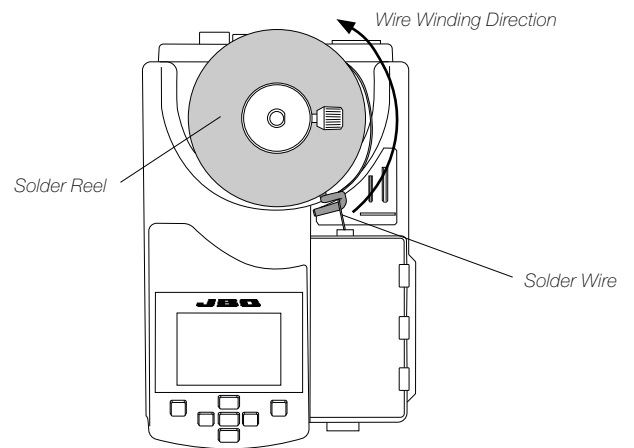
Step 9 **Control Process**

Feeder Setting Modes

Depending on the selected mode, different parameters are available for "Feeder Settings".

Choose between "continuous", "discontinuous" and "program" mode. Access to Main Menu by pressing ☰ , select "*Feeder Settings*" (1) and then "*Mode*" (2). For mor details see ALE control Unit Manual or JBC Web www.jbctools.com/auto-feed-stations.html
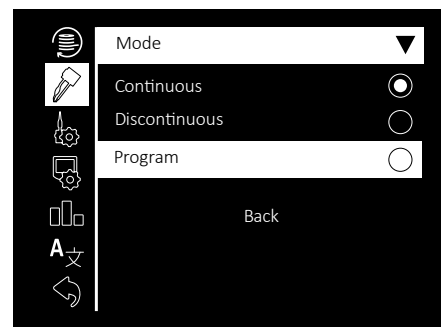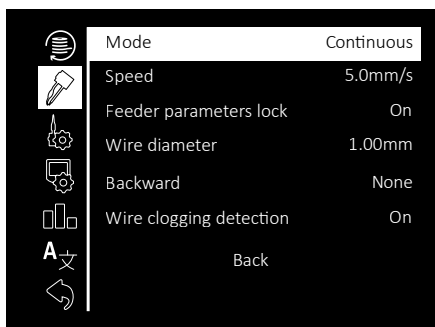
For more details see ALE control unit instruction manual, download at www.jbctools.com/ale-product-2037.html

Access to ALE control unit product page

Notes

Notes

Specifications

ALE
Automatic-Feed Soldering Station

With *Solder Wire Perforation*

for wire Ø 0.8 mm /
Ø 0.032 in
ALE-908VA (100 V)
ALE-108VA (120 V)
ALE-208VA (230 V)

for wire Ø 1.0 mm /
Ø 0.040 in
ALE-910VA (100 V)
ALE-110VA (120 V)
ALE-210VA (230 V)

for wire Ø 1.2 mm /
Ø 0.047 in
ALE-912VA (100 V)
ALE-112VA (120 V)
ALE-212VA (230 V)

for wire Ø 1.5 mm /
Ø 0.060 in
ALE-915VA (100 V)
ALE-115VA (120V)
ALE-215VA (230 V)

for wire Ø 1.6 mm /
Ø 0.063 in
ALE-916VA (100 V)
ALE-116VA (120 V)
ALE-216VA (230 V)

Without *Solder Wire Perforation*

for wire Ø 0.38 - 0.4 mm /
Ø 0.015 - 0.016 in
ALE-904A (100 V)
ALE-104A (120 V)
ALE-204A (230 V)

for wire Ø 0.46- 0.56 mm /
Ø 0.018 - 0.022 in
ALE-905A (100 V)
ALE-105A (120 V)
ALE-205A (230 V)

for wire Ø 0.6 - 0.64 mm /
Ø 0.023 - 0.025 in
ALE-906A (100 V)
ALE-106A (120 V)
ALE-206A (230 V)

for wire Ø 0.7 - 0.78 mm /
Ø 0.028 - 0.031 in
ALE-907A (100 V)
ALE-107A (120 V)
ALE-207A (230 V)

for wire Ø 0.80 - 0.82 mm /
Ø 0.032 - 0.033 in
ALE-908A (100 V)
ALE-108A (120 V)
ALE-208A (230 V)

for wire Ø 0.90 - 1.10 mm /
Ø 0.036 - 0.044 in
ALE-910A (100 V)
ALE-110A (120 V)
ALE-210A (230 V)

for wire Ø 1.14 - 1.27 mm /
Ø 0.045 - 0.051 in
ALE-912A (100 V)
ALE-112A (120 V)
ALE-212A (230 V)

for wire Ø 1.5 - 1.57 mm /
Ø 0.06 - 0.062 in
ALE-915A (100 V)
ALE-115A (120 V)
ALE-215A (230 V)

for wire Ø 1.6 - 1.63 mm /
Ø 0.063 - 0.065 in
ALE-916A (100 V)
ALE-116A (120 V)
ALE-216A (230 V)

for wire Ø 1.8 mm /
Ø 0.073 in
ALE-918A (100 V)
ALE-118A (120 V)
ALE-218A (230 V)

For all ALE Stations:
- Package Dimensions / Weight: 545 x 345 x 275 mm / 6.72 Kg
  (L x W x H)   21.46 x 13.58 x 10.83 in / 14,82 lb

Complies with CE standards.
ESD safe.

JBC

www.jbctools.com

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