

# JBC

[www.jbctools.com](http://www.jbctools.com)

## INSTRUCTION MANUAL



## Soldering Station

Ref. LC-SA

# Packing List

The following items are included:

**LC Control Unit** ..... 1 unit  
Ref. LC-1SA (120V)  
LC-2SA (230V)



**Precision Purpose Handle** ..... 1 unit  
Ref. T210-A



**Power Cord** ..... 1 unit  
Ref. 0019162 (230V)



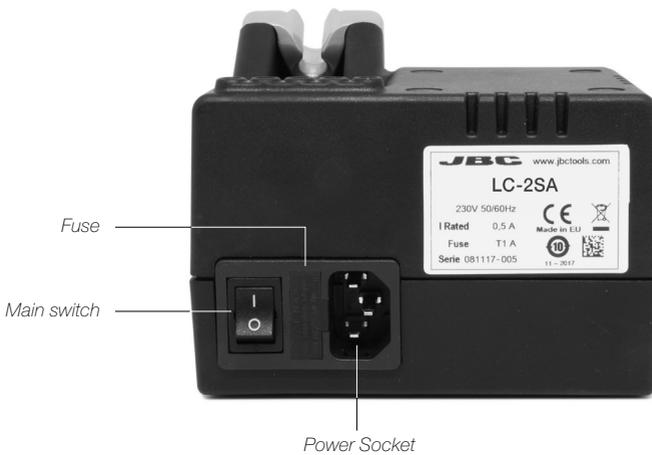
**Sponge** ..... 1 unit  
Ref. S2027



**Manual** ..... 1 unit  
Ref. 0021006



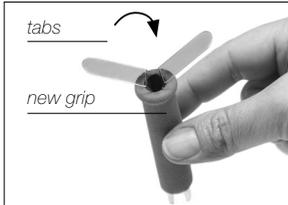
## Features



# Changing the Grips

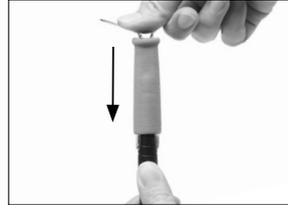
Easily replace the **Grips for T210-A** using the slip-on tabs (Ref. 0016057)

## 1. Inserting tabs



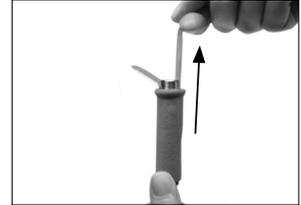
Put the slide-on tabs into the new grip.

## 2. Inserting handle



Push the grip with the tabs onto the handle.

## 3. Removing tabs



To remove the tabs, hold the grip and pull. Use a pliers if necessary.

# Quick Tip Changer

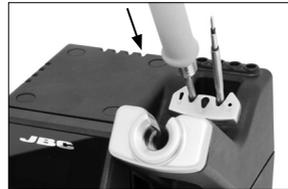
Save time and change cartridges safely without switching the station off.

## 1. Removing



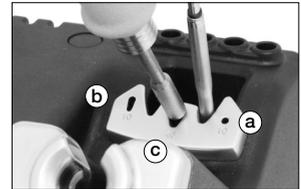
Place the handpiece in the extractor and pull to remove the cartridge.

## 2. Inserting



Place the handpiece on top of the new cartridge and press down slightly.

## 3. Fixing



Use the holes for fixing the cartridge\* as follows:  
**a.** For straight C210.  
**b.** For curved C210.  
**c.** For C245.

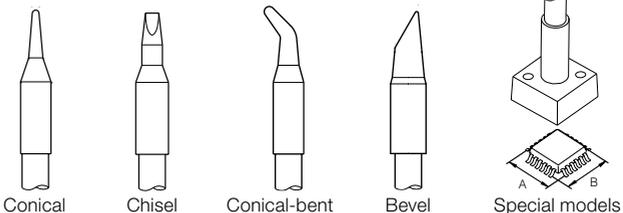
### \*Important

It is essential to insert the cartridges as far as the mark for a proper connection.



## Compatible cartridges

The **LC-2SA** stations work with **C210** cartridges. Find the model that best suits your soldering needs in [www.jbctools.com](http://www.jbctools.com)



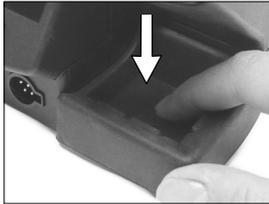
## Accessories\*

### Wiper LC Ref.CL1170

#### Placing the Wiper



1. Insert the wiper in the cleaning place of the LC Unit Control.



2. Press the wiper down to fix it in place.



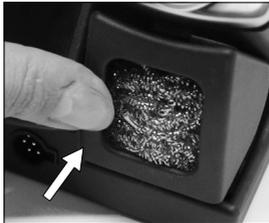
3. Make sure that the wiper is inserted correctly.

### Dome LC Ref. CL0768

#### Placing the Dome



1. Put the brass wool in the dome and insert it in the cleaning place of the LC Unit Control.



2. Press the dome to fix it in place.



3. Make sure that the dome is inserted correctly.

#### Removing the Dome



To remove the dome press the back tab and pull it out .

\*These accessories are not included.

# Operation

## The JBC Exclusive Heating System

This revolutionary technology is able to recover tip temperature extremely quickly. This allows the user to work at a lower temperature. As a result, tip life increases by 5.

### 1. Work



When the tool is lifted from the stand the tip will heat up to the selected temperature.

### 2. Sleep



When the tool is in the stand, the temperature falls to the preset sleep temperature.

### 3. Hibernation



After longer periods of inactivity, the power is cut off and the tool cools down to room temperature.



- Change temperature (from 90 to 450°C)
- Select temperature levels
- Fix one temperature



- Change Sleep temperature
- Set Sleep delay (from 0 to 9 min or no Sleep)



- Change Hibernation delay (from 0 to 35 min)

## Control Process

### Menu

- By pressing **OK** during three seconds will enter in **Program**.
- Moves by the options with the up and down keys.



Stations settings

- Unit  
*Temperature unit*
- MAX.T  
*Maximum temp.*
- MIN.T  
*Minimum temp.*
- BEEP  
*Beep sound*
- End  
*Go back to menu*



Tool settings

- SLP.d  
*Sleep delay\**
- SLP.t  
*Sleep temperature*
- H I.b.d  
*Hibernation delay*
- FIX  
*Fix temperature*
- ADJ.T  
*Temp. adjust*
- End  
*Go back to menu*



Counters

- tot.H  
*Total hours*
- USE.H  
*Work hours*
- SLP.H  
*Sleep hours*
- H I.b.H  
*Hibernation hours*
- EXC.C  
*Extractor cycles*
- SLP.C  
*Sleep cycles*
- End  
*Go back to menu*



Factory

- no  
*No*
- YES  
*Yes*



Password

- 0000  
*Insert new code*



Program version



\* When the tool is in the stand before enter into sleep mode

# Parameters

Be careful when using these parameters. They can reduce tip life if not used properly. Please follow the recommended guidelines:

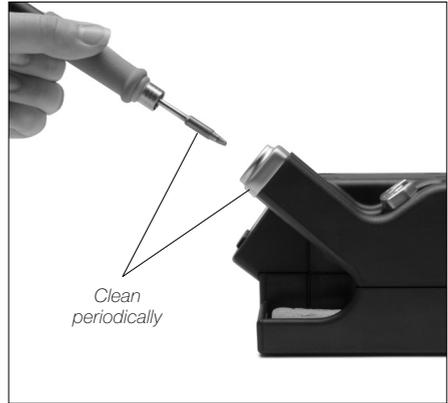
Parameter description	Recommendations	Warnings
<b>Temperature unit</b> Celsius (°C) or Fahrenheit (°F)	N/a	
<b>Maximum temperature</b> Set the maximum temperature to work with. Max. temp by default is 400°C (750°F). This is considered high enough to work with most lead-free applications.	The station temperature range is 90-450°C (190-840°F). Change the temperature limits when working with less common applications such as low / high melting point soldering (HMP) or plastics (e. g. riveting).	 Working with temperatures over 400°C (750°F) can damage the PCB and its components. Even in short time periods of tip contact with the soldering joint, the flux may not work properly and could reduce tip life. If the solder joint requires more power (e.g. multilayered or high dissipation boards), JBC recommends using other aids like preheaters.
<b>Minimum temperature</b> Set the minimum temperature to work with. Min. temp. by default is 200°C (392°F). This is considered to be a proper starting point for leaded applications.		
<b>Beep</b> Enable/disable the beep sound of the keypad.	N/a	N/a
<b>Sleep delay</b> Set the time that the tool will remain at the selected temperature when in the stand before entering sleep mode. The tip temperature will then drop to the Sleep temperature.	Because our tools reach the working temperature from the Sleep mode in a few seconds, this parameter is preset to 0 min. Once the tool is returned to the stand the temperature will drop to the sleep temperature, extending tip life and avoiding oxidation. Retinning the tip before placing the tool in the stand will protect the tip and extend its life.	 Setting these parameters to higher values will unnecessarily accelerate oxidation and shorten tip life especially when working with temperatures up to 450°C (840°F).
<b>Sleep temperature</b> This is the set temperature the tip reaches when returned to the stand.	The sleep temperatures are set to achieve a balance between preventing oxidation and reaching the working temperature in a few seconds.	

Parameter description	Recommendations	Warnings
<p><b>Hibernation Delay</b> Set the time the tool will remain at Sleep temperature before entering the Hibernation mode. The power supply is cut off and the tip remains at room temperature.</p>	<p>Protects the tip from oxidation during long periods of inactivity while the tool is in the stand. Retinning the tip before placing the tool in the stand helps prevent oxidation and extends the life of the tip.</p>	<p> Increasing the default value will accelerate oxidation and shorten the tip life.</p>
<p><b>Fix one temperature</b> Fix a value within the temperature range of the station (90 - 450°C / 190 - 840°F).</p>	<p>Ideal for soldering more than one component at a specific temperature. The station will reject any attempt to change the temperature.</p>	<p>N/a</p>
<p><b>Temp Adjustment</b> It provides a more precise adjustment between the selected temperature and the actual one.</p>	<p>Set values within <math>\pm 50^{\circ}\text{C}</math> (<math>\pm 90^{\circ}\text{F}</math>) to achieve zero error. JBC strongly recommends the use of TID-A or TIA-A Thermometers to obtain precise readings.</p>	<p> When you change the cartridge type, the parameter should be reset to 0°C/F or to the value needed for this cartridge. E.g. If a correction of +20°C (+36°F) is set for the C245966 (thick type) and you change the cartridge for a C245030 (which is thinner) without resetting, they would be working at a temperature of +20°C (+36°F) lower for the C245030.</p>
<p><b>Change password</b> Change the default security password number (0105).</p>	<p>The password must be entered every time a parameter is changed.</p>	<p>N/a</p>

# Maintenance

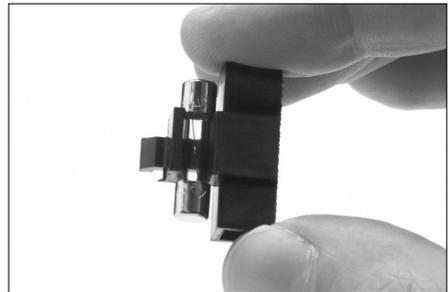
Before carrying out maintenance, always allow the equipment to cool.

- Clean the station screen with a glass cleaner or a damp cloth.
- Use a damp cloth to clean the casing and the tool. Alcohol can only be used to clean the metal parts.
- Periodically check that the metal parts of the tool and stand are clean so that the station can detect the tool status.
- Maintain tip surface clean and tinned prior to storage in order to avoid tip oxidation. Rusty and dirty surfaces reduce heat transfer to the solder joint.
- Periodically check all cables and tubes.
- Replace a blown fuse as follows:



1. Pull off the fuse holder and remove the fuse. If necessary use a tool to lever it off.

2. Press the new fuse into the fuse holder and replace it in the station.



- Replace any defective or damaged pieces. Use original JBC spare parts only.
- Repairs should only be performed by a JBC authorized technical service.

## Safety



**It is imperative to follow safety guidelines to prevent electric shock, injury, fire or explosion.**

- Do not use the units for any purpose other than soldering or rework. Incorrect use may cause fire.
- The power cord must be plugged into approved bases. Make sure that it is properly grounded before use. When unplugging it, hold the plug, not the wire.
- Do not work on electrically live parts.
- The tool should be placed in the stand when not in use in order to activate the sleep mode. The soldering tip, the metal part of the tool and the stand may still be hot even when the station is turned off. Handle with care, including when adjusting the stand position.
- Do not leave the appliance unattended when it is on.
- Do not cover the ventilation grills. Heat can cause inflammable products to ignite.
- Avoid the contact of flux with skin or eyes to prevent irritation
- Be careful with the fumes produced when soldering.
- Keep your workplace clean and tidy. Wear appropriate protection glasses and gloves when working to avoid personal harm.
- Utmost care must be taken with liquid tin waste which can cause burns.
- This appliance can be used by children over the age of eight and also persons with reduced physical, sensory or mental capabilities or lack of experience provided that they have been given adequate supervision or instruction concerning use of the appliance and understand the hazards involved. Children must not play with the appliance.
- Maintenance must not be carried out by children unless supervised.

# Specifications

**LC-1SA** 120V 50/60Hz. Input fuse: 2A. Output: 23.5V

**LC-2SA** 230V 50/60Hz. Input fuse: 1A. Output: 23.5V

- Weight: 1,95 kg (4.30 lb)
- Dimensions: 128 x 105 x 130 mm (5.04 x 4.13 x 5.12 in)
- Output Peak Power: 40 W
- Temperature Range: 90 - 450 °C (190 - 840 °F) (± 5%)
- Idle Temp. Stability (still air): ± 1.5 °C / ± 3 °F
- Tip to ground resistance: <2 ohms
- Tip to ground voltage: <2 mV RMS
- Ambient operating temp: 10 - 50 °C (50 - 122 °F)

Complies with CE standards.  
ESD protected housing.

# JBC

## Warranty

JBC's 2 year warranty covers this equipment against all manufacturing defects, including the replacement of defective parts and labour. Warranty does not cover product wear or misuse. In order for the warranty to be valid, equipment must be returned, postage paid, to the dealer where it was purchased. **Please register your product warranty within 30 days of purchase in [www.jbctools.com/productregistration](http://www.jbctools.com/productregistration).**



This product should not be thrown in the garbage.  
In accordance with the European directive 2002/96/EC, electronic equipment at the end of its life must be collected and returned to an authorized recycling facility.



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