

# Ersa i-CON 1V & i-CON 1VC

## Soldering station



## Quick guide

### Ersa GmbH

Leonhard-Karl-Str. 24  
97877 Wertheim/Germany  
[www.ersa.com](http://www.ersa.com)

Phone +49 9342/800-0  
Fax +49 9342/800-127  
[service.tools@kurtzersa.de](mailto:service.tools@kurtzersa.de)

<b>1. Introduction .....</b>	<b>3</b>
1.1 Explanation of symbols .....	3
<b>2. Start-up .....</b>	<b>4</b>
2.1 Unpacking the soldering station .....	4
2.2 Mounting the soldering station .....	4
<b>3. Functional description.....</b>	<b>5</b>
3.1 Switch-on and operation .....	5
3.2 Language selection.....	6
3.3 Selecting a soldering tool.....	6
3.4 Setting the temperature .....	6
3.5 Soldering .....	6
<b>4. Operation modes .....</b>	<b>8</b>
4.1 Working mode.....	8
4.2 Parameter mode .....	8
4.3 Configuration mode .....	8
4.4 Contrast .....	9
<b>5. Editing parameters .....</b>	<b>9</b>
<b>6. Troubleshooting .....</b>	<b>10</b>
6.1 General errors .....	10
6.2 Error messages .....	10
<b>7. i-Tool .....</b>	<b>11</b>
7.1 How to change a hot soldering tip.....	11
7.2 How to change a cold soldering tip.....	11
<b>8. Warranty .....</b>	<b>12</b>

## 1. Introduction

This quick guide is intended to provide you with quick reference options when working with i-CON 1V / 1VC. The i-CON 1VC soldering station model is optionally available with a serial PC interface. Control signals for activating the Easy Arm 1 and Easy Arm 2 solder fume extractors or the IRHP 100A heating plate are also available at this interface. A ready signal and a standby signal can be output.



This quick guide does not replace the operating instructions!



You should, therefore, read the instruction manual before operating the equipment for the first time. Pay special attention to the safety alerts listed there!

Keep all instructions in a place that can be accessed by all users at any time!

The accompanying information paper “Safety Alerts” is also part of the safety instructions to be adhered to.



### **Info ESD-hazardous components!**

Electronic components can be damaged by electrostatic discharge. Abide by the warnings on the packaging, or contact the manufacturer or supplier. To protect these components, an ESD-safe workplace (ESD = electrostatic discharge) will be suitable.

### 1.1 Explanation of symbols

The following symbols are used in this quick guide:



This symbol is used to highlight text passages that contain explanations, info or tips.

- This mark highlights
- activities to be carried out, or
- instructions to be strictly abided by.

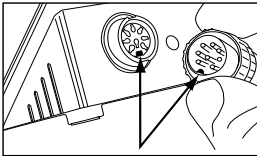
## 2. Start-up

### 2.1 Unpacking the soldering station

Please use your delivery note to check the contents of the packaging for completeness. If the components listed therein are damaged or incomplete, please contact your supplier.

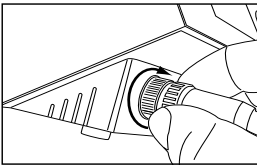
### 2.2 Mounting the soldering station

- Mount the soldering station in a dry place on a heat-resistant, flat surface
- Place the holder next to the soldering station on the heat-resistant surface.
- Place the dry cleaner in the holder.
- Before switch-on, check whether the line voltage matches the value specified on the nameplate.
- Make sure the soldering tip is properly seated.
- To switch off the soldering station, use the on/off switch.



- Connect the soldering tool to the station. In doing so, align the anti-twist protection of the plug with the mark on the bottom socket.

Insert the plug into the socket and then lock it clockwise with the coupling nut.



- Place the soldering tool in the holder
- Connect the supply cable to the soldering station and the power point.
- If the soldering station is equipped with an additional interface on the back of the device, connect it there: Ers solder fume extractor and preheating plate IRHP 100.

- Place the soldering station and the relevant holder on a heat-resistant, conductive ESD work surface with a connected earthing plug, as described under ESD-hazardous components. Tipping over must be ruled out for any equipment at all events. Place boards on an ESD work surface only.

### 3. Functional description

#### 3.1 Switch-on and operation



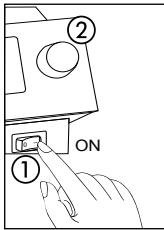
**Attention!** Burning hazard!

The connected soldering tools are heated immediately after switch-on!



**Attention!** Flammable substances!

Risk of fire from highly flammable substances! Before switching on the soldering station, remove all highly combustible objects, liquids and gases from the work area



Make sure that the soldering iron is placed in the holder.

The soldering station is turned on/off with the on/off switch on the front ①.

The soldering station is operated through a rotary encoder ② with a push button function (press function), the i-OP. The i-OP enables the desired functions to be selected or the values to be changed. Turn clockwise for higher values and counterclockwise for lower ones. Turn slowly to edit values in steps of one. Turn quickly to edit the selected values in steps of 10/50/100 (depending on the parameter).

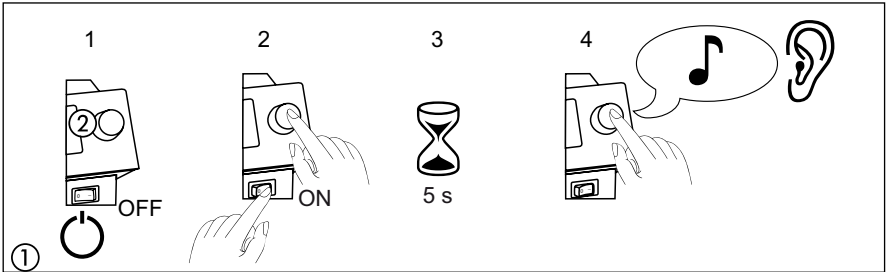
The i-OP has a push button function as well. The selected parameters and values are confirmed through this push button (press) function, thereby becoming effective for the station. All setting steps and measured values are shown in plain text in a clear display window, the “display”.

### 3.2 Language selection

To select your national language, proceed as follows:



- switch off the soldering station
- press and hold the i-OP
- switch back on the soldering station
- hold the i-OP until you hear a beep, then let go.



- Select the [Change] item by turning the i-OP.
- Select the [Language] menu item.
- Press the i-OP.
- Select the required national language by turning the i-OP.



- Press the i-OP.
- Select the **[\*\* END \*\*]** menu item, then press the i-OP. The national language has been changed.

### 3.3 Selecting a soldering tool



- Select the desired soldering tool by pressing the i-OP. Pressing the i-OP repeatedly will enable the soldering tool connected to the left or to the right.

### 3.4 Setting the temperature

- To set the desired soldering tip temperature, turn the i-OP.
- Press the i-OP to apply the setting.

## 3.5 Soldering

- Perform some soldering trials.



If you are not satisfied with the result, you can adapt the parameters to your requirements. As to this, read the following sections

## 4. Operation modes

### 4.1 Working mode

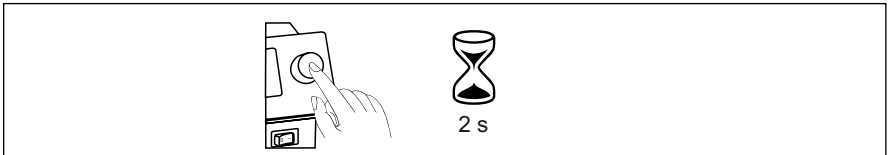


After switching on the station, the switch-on dialog appears for approx. 2 seconds. This shows the station name ① and software version ② of the i-CON 1V. The station will then automatically switch to working mode.

### 4.2 Parameter mode



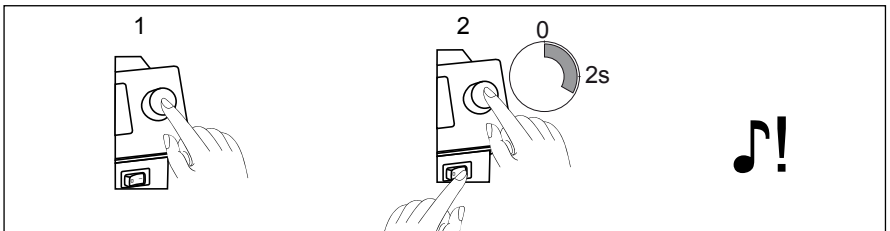
The parameter mode for the soldering tool is activated by pressing and holding the i-OP for approx. 2 seconds.



### 4.3 Configuration mode



You can access the configuration mode by pressing and holding the i-OP for 5 seconds when switching on the i-CON 1V.



By turning the i-OP and pressing it accordingly, the station can be configured or rewritten with the factory settings.

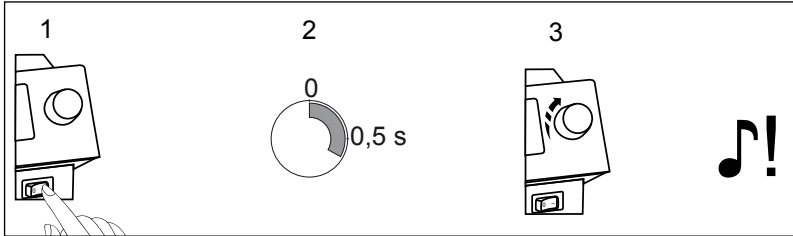


## 4.4 Contrast



To adjust the contrast on the display to the single working environments, proceed as follows:

- Switch on the station and immediately turn the i-OP. This will enable the contrast mode:



The buzzer signals with a beep sound that the contrast mode is active.

- Set the desired contrast by turning the i-OP.
- Confirm your entry by pressing the i-OP.

## 5. Editing parameters



To edit the value of a parameter, proceed as follows:

- Activate the soldering tool whose parameters are to be edited by pressing the i-OP.
- Press the i-OP and hold it for approx. 2 seconds.
- Select the desired parameter by turning the i-OP.
- Activate the cursor by pressing the i-OP; pressing it again will switch the cursor back off.

When the cursor is activated, the value of the parameter can be changed accordingly by turning the i-OP.

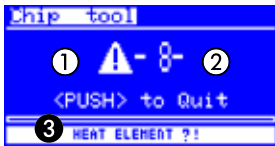
## 6. Troubleshooting

### 6.1 General errors

If the soldering station is not working as expected, please check the following points:

- Is line voltage available? Properly connect the power cord to the equipment and the power point.
- Is the fuse defective? The fuse is located on the back of the equipment in the mains connection socket.
- Please observe that a defective fuse may also indicate a deeper cause of failure. Simply changing the fuse is, therefore, generally not sufficient.
- Is the soldering tool properly connected to the supply unit?

### 6.2 Error messages

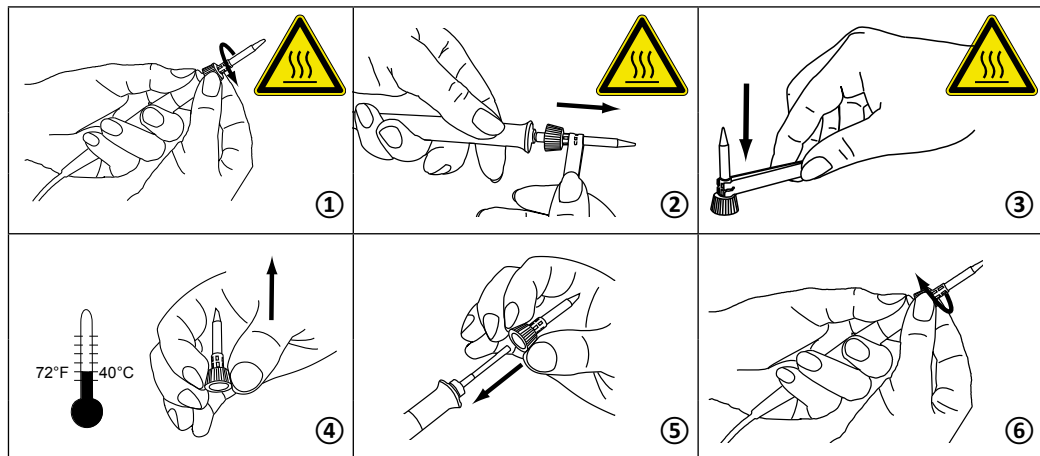


The i-CON 1V carries out fault diagnoses independently. The result of a diagnosis is output as an error code: In this case, the triangular pictogram ① appears in the display of the soldering station. The error code ② is shown as a number between 2 and 99.

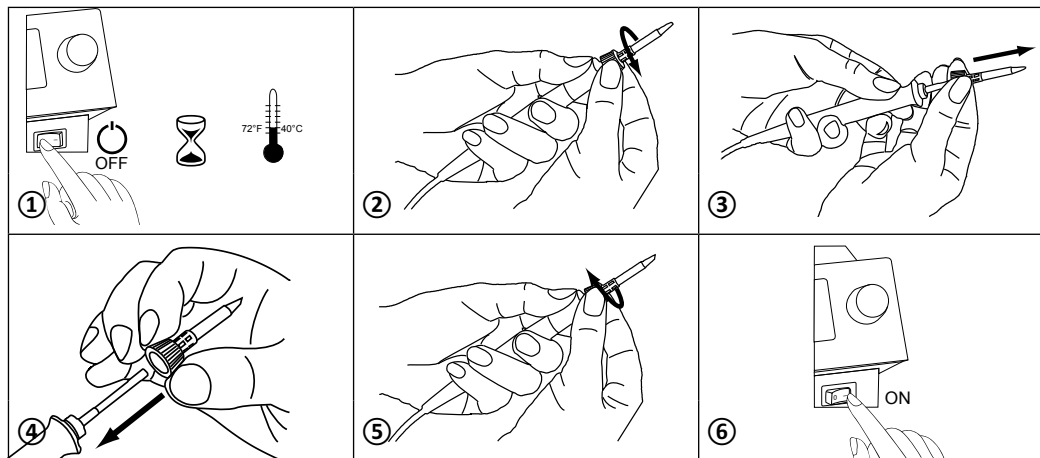
An info note ③ is also displayed in the bottom line. For error codes, please refer to the error code table in the operating instructions. Error messages must be acknowledged through the i-OP. The connected soldering tool will be heated again only after the error has been acknowledged and eliminated.

## 7. i-Tool

### 7.1 How to change a hot soldering tip



### 7.2 How to change a cold soldering tip



## 8. Warranty

© 4/2021, Ersa GmbH, 3BA00253-01

Heating elements and soldering or desoldering tips are wearing parts that are not covered by the warranty. Material- or production-related defects must be reported through notification by submitting the purchase receipt before the return of the goods, which must be acknowledged; the purchase receipt is then to be enclosed with the return of the goods.

Ersa drew up this instruction manual with utter care. However, no guarantee can be granted for its contents, completeness and the quality of the information provided therein. The contents have been carefully updated and adapted to current conditions.

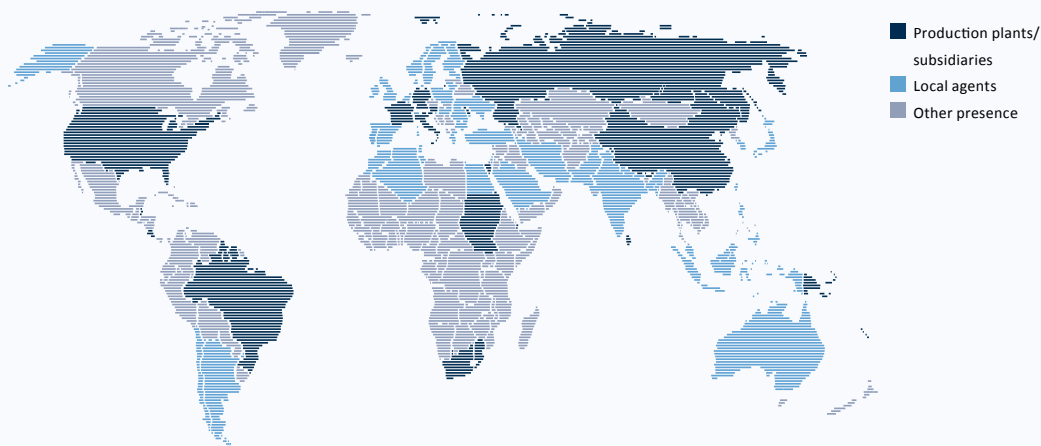
All data as well as any product and process information published in this instruction manual were ascertained by us to the best of our knowledge, using the most cutting-edge technical tools. This information is nonbinding and does not relieve the user of the responsibility to check themselves the equipment before using it. We shall not be held liable for any infringement of third-party property rights due to applications and procedures without prior express written confirmation. We reserve the right to make technical changes as part of a product improvement.

As far as legally possible, liability shall be precluded in cases of any direct, consequential and third-party damage resulting from the purchase of this product.

All rights reserved. This user guide may not be reproduced, changed, transferred or translated into another language, in whole or in part, without the written approval of Ersa GmbH.



# Electronics Production Equipment



## America

Ersa North America  
Pilgrim Road Plymouth,  
WI 53073 USA  
Tel. 800-363-3772  
Fax +1 920-893-3322  
info-ena@kurtzrsa.com  
www.ersa.com

## Asia

Ersa Asia Pacific  
Flat A, 12/F  
Max Share Centre,  
373 King's Road  
North Point, Hong Kong China  
Tel. +852 2331 2232  
Fax +852 2758 7749  
kurtz@kfe.com.hk  
www.ersa.com

## China

Ersa Shanghai  
Room 720,  
Tian Xiang Building.  
No. 1068 Mao Tai Rd.  
Shanghai 200336 China  
Tel. +86 213126 0818  
Fax +86 215239 2001  
ersa@kurtz.com.cn  
www.ersa.com

## Ersa France

Division de  
Kurtz France S.A.R.L.  
8, rue des Moulissards  
F-21240 Talant, France  
Tel. +33 3 80 56 66 10  
Fax +33 3 80 56 66 16  
info@ersa-electronics.fr  
www.ersa-electronics.fr

## Ersa GmbH

Leonhard-Karl-Str. 24  
97877 Wertheim/Germany  
Tel. +49 9342/800-0  
Fax +49 9342 800-1 27  
info@kurtzrsa.de  
www.ersa.com