User Manual

Digital Soldering Iron RX-LK-900M-01 – 90W

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–1–
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ruthex GmbH
Schlehdornstraße 6
DE–26215 Wiefelstede

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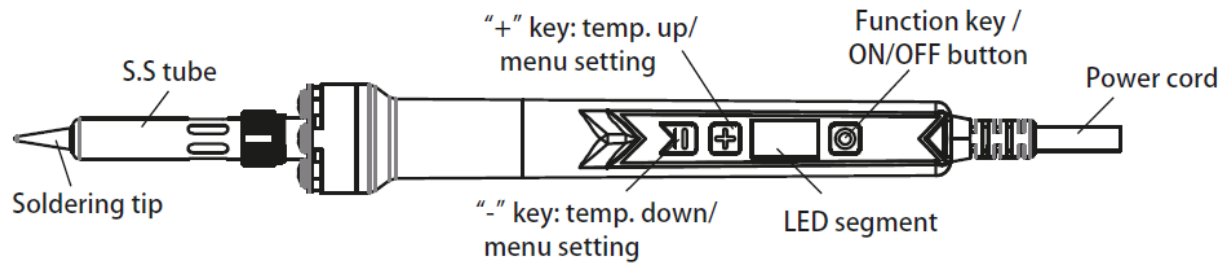
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–2–
Version 1.0, Date 02/2026
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Table of Contents

info@ruthex.de
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–3–
Version 1.0, Date 02/2026

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Components

S.S tube

Soldering tip

"+" key: temp. up/
menu setting

"-" key: temp. down/
menu setting

Function key /
ON/OFF button

LED segment

Power cord

Scope of Delivery

- Digital Soldering Iron RX-LK-900M-01
- Soldering tip (pre-assembled)
- Power cable
- Quick start guide
- Soldering iron stand
- Cleaning sponge

Technical Data

Model	RX-LK-900M-01
Power	90W
Rated voltage / frequency	120V~ / 230V~ , 50 Hz (~ = AC voltage)
Protection class	IPX0 (no water protection)
Temperature range	150-500℃（302-932°F)
Heating element	PTC ceramic
Temperature unit	°C / °F switchable

General Information

Always place the soldering iron in the safety stand when not in use

This manual contains all important instructions for the safe and proper use of the soldering iron RX-LK-900M-01 (hereinafter referred to as soldering iron).

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–4–
Version 1.0, Date 02/2026

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Please read the instructions carefully, especially the safety instructions, before using the device. Failure to comply with the safety instructions may result in danger to life and limb. Keep the instructions in a safe place so that you can refer to them at any time. If you pass the device on to other people, always include these operating instructions.

Note!

Users with no previous experience or those using the device for the first time must take particular care. In particular, it is essential to switch the device on and off correctly, operate it properly, and strictly observe the maintenance instructions.

Intended Use

This device is intended for private use and comparable occasional applications. It is not designed for continuous use in industrial or commercial environments.

The soldering iron is exclusively intended for soldering electronic components and fine soldering work. Thanks to the stepless temperature control of 150-500 °C, it is suitable for a wide range of applications.

Use for other materials such as wood, leather, or similar materials is not permitted. Any unintended use or structural modification of the device is considered improper use and may cause significant hazards.

Explanation of Symbols

	Read the user manual before initial operation.
	Warning: This symbol warns of potential personal injury or property damage.
	Burn hazard: Hot surfaces. Do not touch. Residual heat may be present even after switching off.
	Safety glasses: Wear safety glasses.

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–5–
Version 1.0, Date 02/2026

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	Respiratory protection: Wear a respiratory mask if necessary.
C E	**CE marking: The manufacturer hereby declares conformity with the relevant EU regulations.**
	Disposal: Do not dispose of old electrical equipment with household waste. Please dispose of via collection points according to local regulations.

Product Safety

General safety instructions for power tools

⚠️ WARNING!

Read all safety instructions and all directions. Failure to follow warnings and instructions may result in electric shock, fire, and/or serious injury.

Special Instructions for User Groups

- This device is not intended for use by persons (including children) with reduced physical, sensory, or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety..
- Children should be supervised to ensure they do not play with the device.
- Do not let children play with the packaging film. They can become entangled and suffocate.

Additional Safety Instructions

⚠️ **Electric Shock**

- Do not use the soldering iron in damp environments or with wet hands.
- Do not work on components that are under voltage.

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–6–
Version 1.0, Date 02/2026
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| ⚠ WARNING! | **Burn Hazard** |

The soldering tip becomes very hot during soldering. Contact can cause burns. Even after soldering, the soldering tool and stand remain hot for a long time.

- Always place the soldering tool in the safety stand when not in use. Make sure the stand is stable.
- Never touch the hot soldering tips and do not keep flammable objects nearby.
- Only change soldering tips when cold.
- Protect yourself from splashes of liquid solder, as these can cause burns.
- Wear appropriate protective clothing and safety glasses to protect hands, body, and eyes.

| ⚠ WARNING! | **Fire Hazard** |

- Keep the work area free of flammable materials.
- Never leave the heated soldering iron unattended.
- The soldering tip reaches temperatures of 150-500 °C – fire and burn hazard!
- Switch off the device and unplug it from the socket when not in use.
- Do not operate the device with a damaged power cable.

Getting Started

- Remove the device from the box and inspect it for external damage. If you notice damage, do not use the device.
- Remove all packaging parts and make sure that the complete scope of delivery is included.
- Remove the soldering tip protector from the device.

⚠ **DANGER -** Do not let children play with the packaging film. There is a risk of suffocation.

| ⚠ WARNING! | **Allow the device to cool completely before inserting or removing soldering tips.** |

Temperature Behavior

The function indicator (On/Off switch) signals the current operating state of the device:

- **Flashing red:** Device is in heating or high-temperature mode.

- **Switched off:** Even when switched off, the color of the function indicator can serve as an indication of the soldering tip temperature.

Button LED indicator color	Soldering tip temperature
Red	> 160 °C
Yellow	ca. 100 °C
Green	< 40 °C

Plus and minus button display:

- In operating mode, the plus and minus buttons are illuminated.

- In OFF mode, the buttons are not illuminated.

WARNING – Burn Hazard.
Do not touch the heating element until you have safely determined the temperature. The button LED indicator color only serves as a rough **guide** for the current soldering tip temperature.

Display Indicators

The following abbreviations may appear on the display and have the meanings listed below:

Display	Meaning
OFF	Device switched off
SLP	Automatic sleep mode (Sleep)
Unt	Temperature unit (°C/°F)
CAL	Temperature calibration

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–8–
Version 1.0, Date 02/2026
ruthex GmbH
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Display	Meaning
LOC	Temperature locked (Lock)
Stb	Automatic standby, reduced temperature (max. 250 °C)
u XX	Software version

Operation

Place the soldering iron in the safety stand. Remove all flammable objects from the vicinity of the soldering tool.

1. Function Button (ON/OFF) Switch

a. Connect the device to the power supply. The button illumination turns on and the LED display shows 888 for approx. 1 second.
b. If the standby/sleep function is activated, SLP appears for 1 second. The device then automatically enters sleep mode and displays „OFF".
c. Briefly press the function key to switch to operating mode and start the heating process.

⚠ **WARNING!**

Never heat the device without an attached tip or accessory. Never leave the device unattended during heating.

2. Temperature Setting

- During operation, the temperature can be adjusted using the + or – button.
- By pressing briefly or holding, you can increase or decrease the temperature step by step.

3. Function Menu

a. Press and hold the function button (ON/OFF) to enter the settings menu.
b. Use the + and – buttons to select the desired function.
c. Confirm your selection with a short press of the function button (ON/OFF).
d. Press and hold the function button (ON/OFF) to exit the menu.

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–9–
Version 1.0, Date 02/2026

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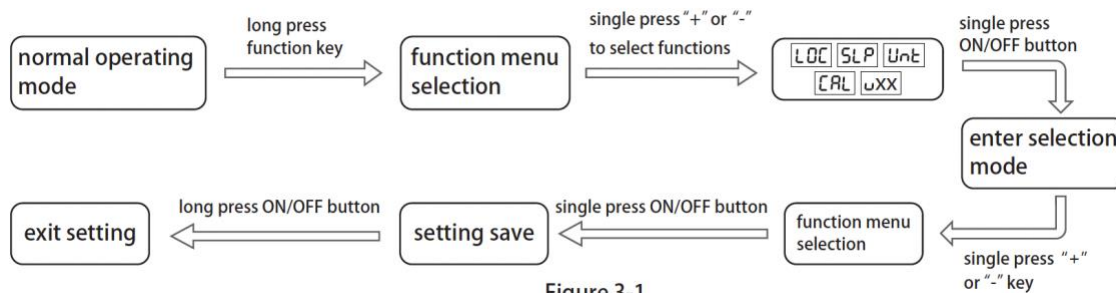
4. Functions Overview:

Figure 3-1

5. Temperature Lock (LOC)

- The display shows LOC in the menu.
- Press the ON/OFF function button briefly to enter the temperature lock setting.
- Use the + or – buttons to activate or deactivate the lock.
- Confirm the selection again with the ON/OFF function button to save the setting.

6. Automatic Sleep Mode (SLP)

- The display shows SLP in the menu.
- Use +/– to activate or deactivate the function.
- When sleep mode is enabled, the device switches to standby mode (max. 250 °C) after 10 minutes of inactivity.
- After another 10 minutes, the device switches off completely automatically and stops heating.

7. Switching between °C and °F (Unit)

- The display shows Unit in the menu.
- Use +/– to switch between Celsius (°C) and Fahrenheit (°F).

8. Temperature Calibration (CAL)

a. The display shows CAL in the menu.
b. Set the temperature to 350 °C (662 °F) and wait about 1 minute until a stable value is reached.
c. Measure the actual temperature with a suitable measuring device.
d. Calculate the correction value: 350 °C – measured temperature = compensation.
e. Adjust the value with + or – (adjustment range: +50 °C to –50 °C / +90 °F to –90 °F).
f. Confirm with the ON/OFF function button.

9. Soldering

a. Place the soldering iron on the designated holder so that the tip is securely fixed and does not touch any surfaces.
b. Plug the power plug into a socket and switch on the device using the ON/OFF function button.

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–10–
Version 1.0, Date 02/2026
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c. Set the desired working temperature (150–500 °C) using the + and – buttons. Heating takes only a few seconds; the target temperature is quickly reached.
d. Hold the soldering iron by the grip like a pen during work.
e. Feed the solder to the heated tip until it melts and flows onto the solder joint. The solder should flow between the soldering tip and the component contact.
f. Allow the solder to harden briefly and avoid any movement or vibration during this time.
g. After finishing work, switch off the device using the ON/OFF button, unplug the power cord, and allow the soldering iron to cool completely before storing it.

⚠ **WARNING!**

Do not leave the device unattended during cooling.

Soldering Tips

- The soldering iron has a power of 90 W and is excellently suited for fine soldering work as well as hard-to-reach areas.
- For best results, the use of electronics solder with flux core is recommended, e.g. with a diameter of 1.0–1.5 mm.
- Only use flux that is suitable for electronics (no soldering grease or liquid flux).
- Do not place or cool the hot soldering tip on the cleaning sponge or plastic surfaces.

Cleaning and Storage

Always switch off the device and allow it to cool down completely before performing any cleaning.

General Cleaning Instructions:

- Make sure you have read the safety instructions before cleaning.
- Clean the device only with a soft, lint-free cloth. If necessary, moisten slightly or use a mild soap solution.

⚠ **WARNING!**

Never use alcohol, acetone, benzene, or other aggressive cleaning agents, hard brushes, metal objects, or similar to clean the device.

- Make sure no water enters the device. The device offers no protection.
- Thoroughly dry all parts before using or storing the device again.
- Do not place other objects on the product.
- Always store the device dry, dust-free, protected from direct sunlight, and out of reach of children.

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–11–
Version 1.0, Date 02/2026

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Soldering Tip Cleaning Procedure:
1. Set temperature to 250 °C (480 °F).
2. Clean tip with brass wool and check condition.
3. If there is a black oxide layer, apply fresh solder with flux, clean several times, and re-tin.
4. Switch off device, remove tip, and allow to cool down completely.
5. Remove discoloration from flux residue with a suitable cleaning agent if necessary.

Notes!

- Clean the tip before and after each soldering session to remove oxide and old solder residue.
- Tin the tip after each cleaning with fresh solder to prevent oxidation.
- With intensive use, the tip should be thoroughly cleaned at least once a week.
- Do not use sharp tools (e.g. files), as these can damage the tip.

Maintenance

To ensure the longevity of the device, **regular maintenance** is recommended. The service life depends significantly on the set temperature, frequency of use, and the solder and flux used.

This device does not require additional lubrication. Use only original spare parts. Have repairs carried out only by qualified personnel.

Disposal

Information for private households in accordance with Section 18 (4) of the German Electrical and Electronic Equipment Act (ElektroG)

The Electrical and Electronic Equipment Act (ElektroG) contains numerous requirements for handling electrical and electronic equipment. The most important ones are summarized here.

1. Separate Collection of Old Equipment

Electrical and electronic equipment that has become waste is referred to as old equipment. Owners of old equipment must dispose of it separately from unsorted municipal waste. Old equipment does not belong in household waste but must be collected separately.

2. Batteries, Rechargeable Batteries, and Lamps

Owners of old appliances must separate old batteries and accumulators that are not enclosed in the old appliance, as well as lamps that can be removed from the old appliance without causing damage, from the old appliance before handing it in at a collection point. This does not apply if old appliances are sent for preparation for reuse with the involvement of a public waste disposal authority.

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–12–
Version 1.0, Date 02/2026

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3. Options for Returning Old Equipment

Owners of old devices can return them free of charge as part of the return or collection options for old devices set up and made available by public waste disposal authorities to ensure that old devices are disposed of properly. Under certain conditions, it is also possible to return devices to distributors.

For distributors: The return must be free of charge when purchasing a new device of the same type. (1:1 return) Regardless of this, it is possible to return old devices to the distributor free of charge. The prerequisite for this is that the external dimensions are no larger than 25 centimeters and that the return is limited to three old devices per device type (0:1 return).

Retail: Distributors with a sales area for electrical and electronic equipment of at least 400 square meters are obligated to take back old equipment.

Distance selling: Distributors who sell their products using distance communication means are obligated to take back old equipment if the shipping and storage area for electrical and electronic equipment is at least 400 square meters.

B2B manufacturers: In the case of B2B equipment, take-back does not have to be offered free of charge.

4. Data Protection Notice

Old equipment often contains sensitive personal data. This applies especially to information and telecommunications equipment such as computers and smartphones. Please note that as a user, you are responsible for deleting personal data from old equipment before disposal.

5. WEEE Registration Number

Under registration number DE58088479, we are registered with the stiftung elektro-altgeräte register, Nordostpark 72, 90411 Nuremberg, as a manufacturer of electrical and/or electronic equipment.

6. Collection and Recycling Rates

Under the WEEE Directive, EU member states are required to collect data on waste electrical and electronic equipment and submit it to the European Commission. Further information on this can be found on the BMUV website (https://www.bmuv.de/themen/wasser-ressourcen-abfall/kreislaufwirtschaft/statistiken/elektro-und-elektronikaltgeraete).

7. Meaning of the Crossed-out Wheelie Bin Symbol

This device must not be disposed of with normal household waste at the end of its service life. Take the device to a proper disposal facility. By doing so, you ensure that the old equipment is professionally recycled and negative effects on the environment are avoided.

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–13–
Version 1.0, Date 02/2026

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