JBC

www.jbctools.com

INSTRUCTION MANUAL

SKR

Communication Debugger for Robot

This manual corresponds to the following references:

SKR-A

Packing List

The following items are included:

Communication Debugger Module* ....1 unit

USB A/B Cable ....1 unit
Ref. 0021042

Communication Cable 3m ....1 unit
Ref. 0029626

EU   US

AC Adapter .... 1 unit
Ref. 0028084

Manual ....1 unit
Ref. 0021922

Download the **Robot Control software, available in*
www.jbctools.com/jbcsoftware.html

Features

SKR facilities the integration of the following JBC Devices in automated soldering processes:

- **UCR** - Control Unit for Robot (serial communication RS-232*)
- **SFR** - Solder Feeder for Robot (serial communication RS-232*)
- **CLMR/CLMRP** - Tip Cleaner for Robot (on/off switch input*)

*See corresponding "Communication Protocol" at www.jbctools.com/jbcsoftware.html.

Green LED (PLC Activity)

Green LED (PC Activity)

Green LED (JBC Device Activity)

Blue LED

USB-B Connector

Power Supply Connector

Communications Connector (Female)

Push Button

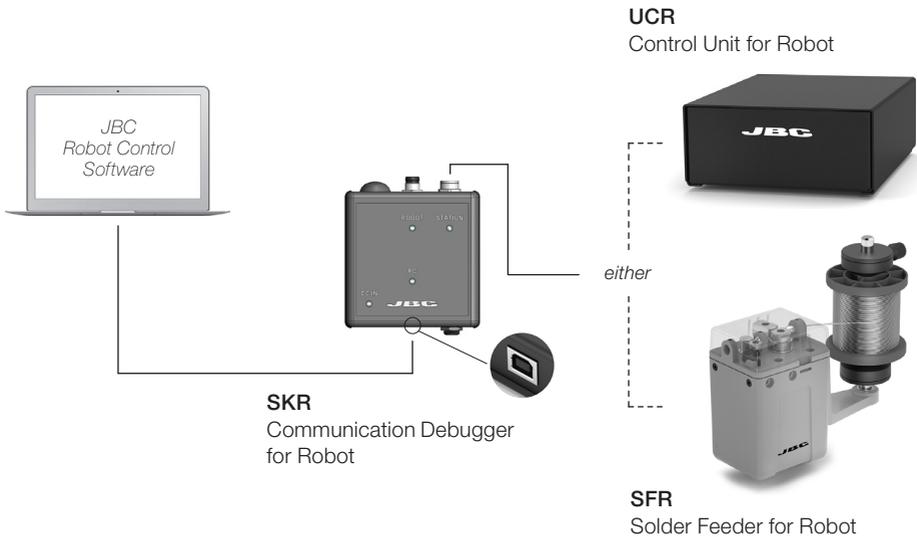*Communications Connector (Male)*

Connection Modes

SKR allows two connection modes, the **Control Mode** and the **Sniffer Mode**. In both modes, the SKR and a PC are needed. PC must have the **Robot Control** previously installed (download at www. jbctools.com/jbcsoftware.html).

- **Control Mode**: This mode is used to command/get answered communications frames, which are sent between the PC and the JBC Device.

- **Sniffer Mode**: This mode is used to intercept the communication frames sent/answered between the Robot/PLC and the JBC Device. This mode also facilitates the debugging of the **Robot Control** software by Frame decoding and visualization in real-time.

Assembly: Control Mode

1. Connect the PC and SKR using the USB A/B Cable.

2. Connect the JBC Device and SKR using the Communications Cable.

3. Connect SKR to the mains connection with the power supply cable. Blue LED indicates that the connection to the mains is established.

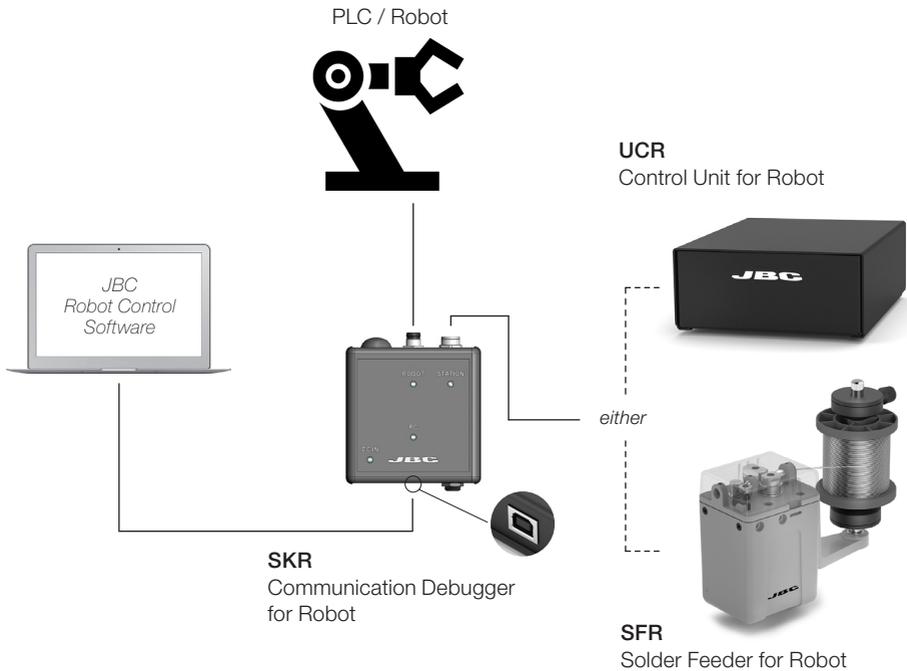**4.** The Push Button allows switching on/off the JBC Device by pushing it.

When communications frames between PC and JBC Device are sent/answered, then the green LEDs will flash.

UCR
Control Unit for Robot

JBC Robot Control Software

either

SKR
Communication Debugger
for Robot

SFR
Solder Feeder for Robot

Assembly: Sniffer Mode

1. Disconnect the Communications Cable from the JBC Device and connect it to SKR's Communications Connector (male).

2. Connect the JBC Device and SKR using the Communications Cable included.

3. Connect de PC and SKR using the USB A/B Cable.

4. Connect SKR to the main connection with the power supply cable. Blue LED indicates that the connection to the main is established.

When communications frames between PC and JBC Device are sent/answered, then the green LEDs will flash.

PLC / Robot

*JBC
Robot Control
Software*

UCR
Control Unit for Robot

either

SKR
Communication Debugger
for Robot

SFR
Solder Feeder for Robot

For more information about the **Robot Control** software, download its manual at **www.jbctools.com/jbcsoftware.html.**

Maintenance

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

- Periodically check all cables and connections.

- Replace any defective or damaged parts. Use original JBC spare parts only.

- Repairs should only be performed by JBC and authorized technical service.

Safety

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

- Do not use the device for any other purpose.

- The main cable must be plugged into approved bases. Make sure that it is properly grounded before use. When unplugging it, hold the plug, not the wire.

- Be sure that the power supply is disconnected before changing any spare parts.

- 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 injury.

Notes

Specifications

SKR
Communication Debugger for Robot
Ref. **SKR-A**

- AC Adapter:	Input Voltage Range: 100-240V ~ 50/60Hz
	IMax. Input Current: 2A
	Output Voltage: 24V
	Max. Output Current: 2A
- Connections:	USB connector type B
	Power connector
	Communications connector (male)
	Communications connector (female)
- Total Net Weight:	505 g / 1.11 lb
- Total Package Dimensions / Weight:	246 x 184 x 42 mm / 567 g
(L x W x H)	9.69 x 7.24 x 1.65 / 1.25 lb

Complies with CE standards.
ESD safe.

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.

This product should not be thrown in the garbage.
In accordance with the European directive 2012/19/EU, electronic equipment at the end of its life must be collected and returned to an authorized recycling facility.

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