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Installation Instructions Bluetooth module

KERN KUM-06

Type TYKUM-06-A
Version 1.1
2023-06
GB



The current version of these instructions can also be found online under:
<https://www.kern-sohn.com/shop/de/DOWNLOADS/>
under the rubric Instruction manuals

TYKUM-06-A-IA-e-2311



Bluetooth module
Version 1.1 2023-06
Installation Instructions

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1 Scope of delivery

- Bluetooth module

2 General and safety information

DANGER



The electrical shock caused by touching live components

An electrical shock results in serious injury or death.

- ⇒ Before opening the device, disconnect it from the power source.
- ⇒ Only perform installation work on devices that are disconnected from the power source.

NOTICE



Electrostatically endangered structural components

Electrostatic Discharge (ESD) can cause damage to electronic components. A damaged component may not always malfunction immediately but may take some time to do so.

Make sure to take precautions for ESD protection before removing hazardous components from their packaging and working in the electronic area:

- ⇒ Ground yourself before touching electronic components (ESD clothing, wristband, shoes, etc.).
- ⇒ Only work on electronic components at suitable ESD workplaces (EPA) with suitable ESD tools (antistatic mat, conductive screwdrivers, etc.).
- ⇒ When transporting electronic components outside the EPA, only use suitable ESD packaging.
- ⇒ Do not remove electronic components from their packaging when they are outside the EPA.

3 Installation

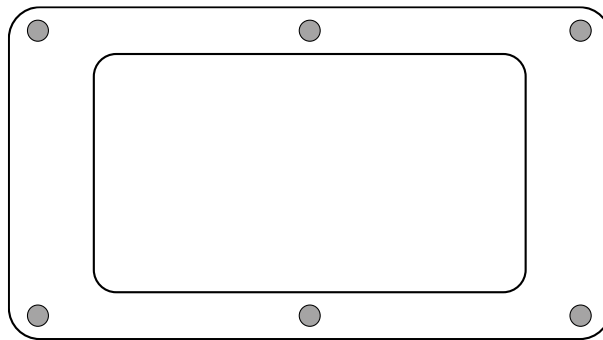
INFORMATION



- It is important to follow the instructions in this manual before starting work.
- The illustrations shown are examples and may differ from the actual product (e.g. positions of the components).

3.1 Opening the terminal

1. Disconnect the device from the power source.
2. Loosen the screws on the back of the terminal.



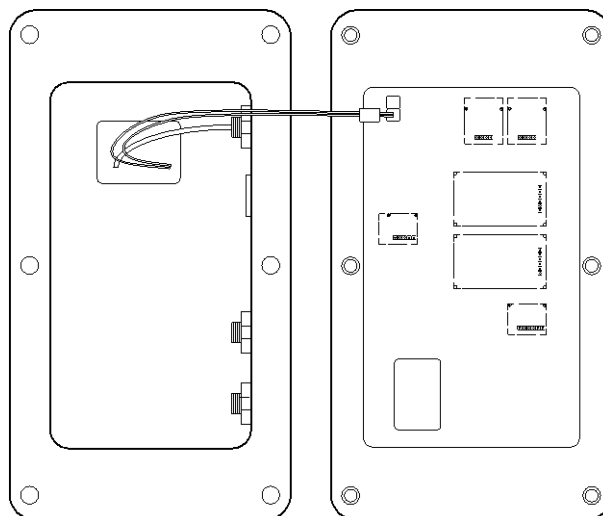
3.

NOTICE



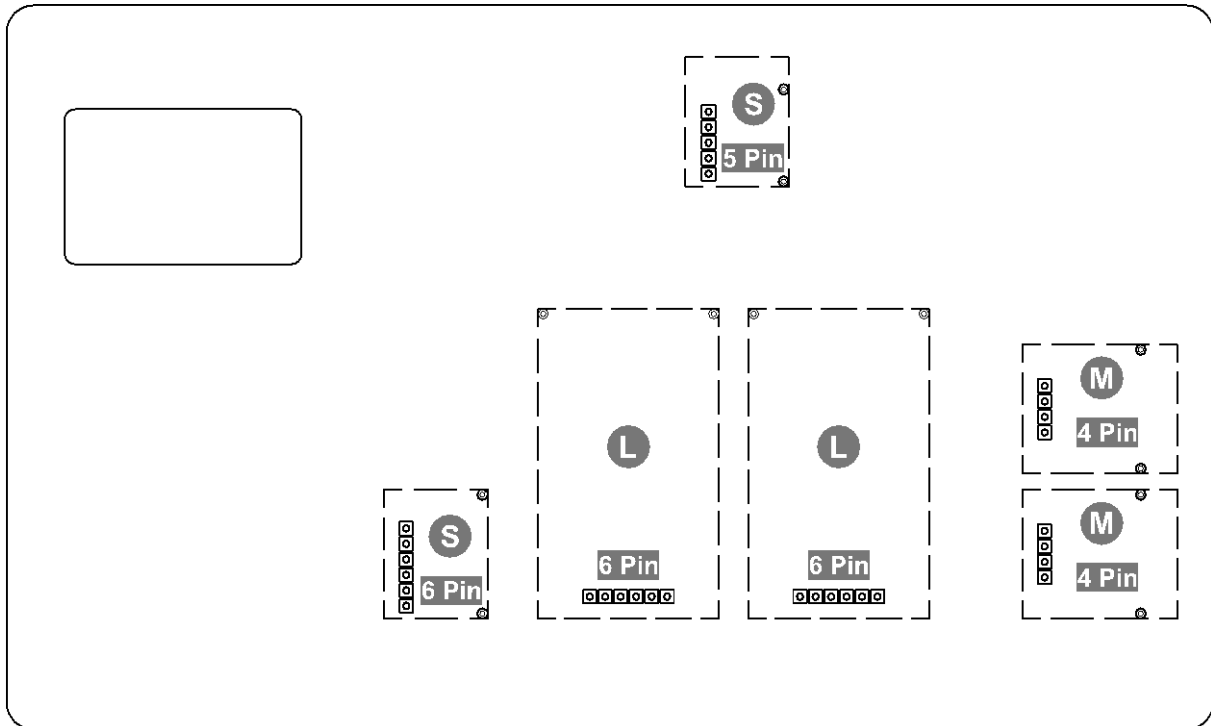
- ⇒ Make sure that you do not damage any cables (e.g. by tearing them off or pinching them).

Carefully open both halves of the terminal.



3.2 Overview of the circuit board

The circuit board of certain display devices offers several slots for KERN accessories, which allow you to extend the range of functions of your device if necessary. Information on this can be found on our homepage: **www.kern-sohn.com**



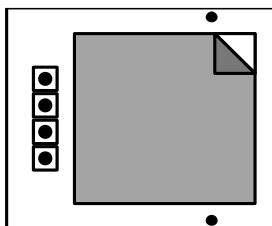
The illustration above shows examples of the various slots. There are three slot sizes for optional modules: S, M, L. These have a certain number of pins.

The correct position for your module is determined by the size and number of pins (e.g. size L, 6 pins), which is described in the respective installation steps.

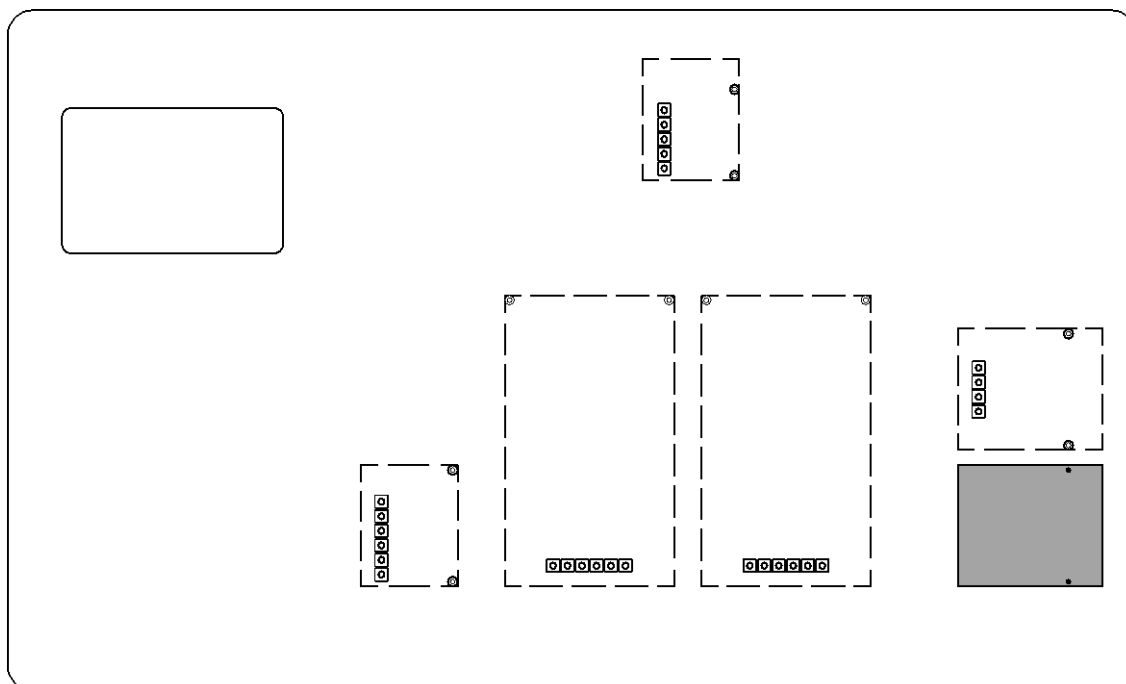
If you have several identical slots on the board, it does not matter which slot you select from these. The device automatically recognizes which module it is.

3.3 Installing the module

1. Open the terminal (see chapter 3.1).
2. Remove the module from the packaging.
3. Remove the protective foil from the sticky pad on the bottom of the module.



4. Plug the module into a **size M, 4 pin** slot.



5. The module has been installed.

3.4 Closing the terminal

1. Check the module for a tight fit.

2.



NOTICE

- ⇒ Make sure that you do not damage any cables (e.g. by tearing them off or pinching them).
- ⇒ Make sure that any existing seals are in their intended place.

Carefully close both halves of the terminal.

3. Close the terminal by screwing it together.

3.5 Set up the interface

Interface: Bluetooth	
Transmission frequency	2402 - 2480 MHz
Maximum transmission performance	< 20 dBm

The KUM module is compatible with Bluetooth Low Energy (BLE) and is visible under "KERN BLE" with a unique MAC address for Bluetooth Master devices.

To access this, please use an appropriate software program / app which supports Bluetooth Low Energy (BLE). Applications exclusively using Bluetooth Classic (BLC) will not work.

The following profile must be adjusted:

Service UUID
0000fff0-0000-1000-8000-00805f9b34fb

Read characteristic UUID
0000fff1-0000-1000-8000-00805f9b34fb

Write characteristic UUID
0000fff2-0000-1000-8000-00805f9b34fb