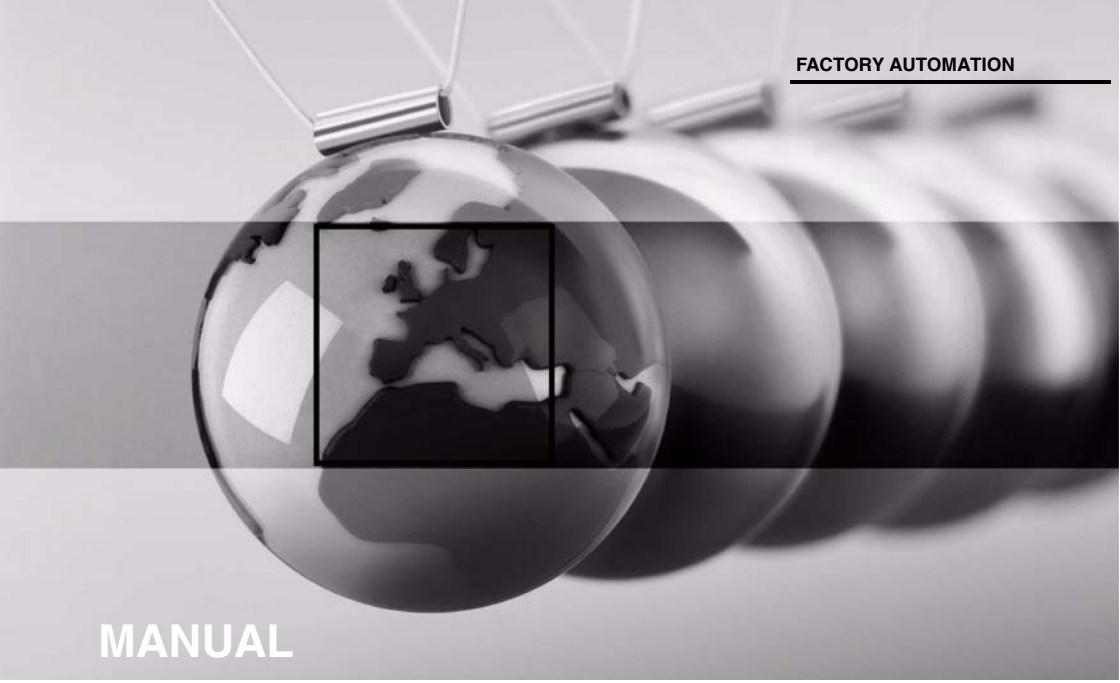

MANUAL

ODZ-MAH-B15-M3

EN Bluetooth modem for data matrix/RFID handhelds

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With regard to the supply of products, the current issue of the following document is applicable: The General Terms of Delivery for Products and Services of the Electrical Industry, published by the Central Association of the Electrical Industry (Zentralverband Elektrotechnik und Elektroindustrie (ZVEI) e.V.) in its most recent version as well as the supplementary clause: "Expanded reservation of proprietorship"

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1 Introduction

Informative Symbols

Note!

This symbol brings important information to your attention.

Action

This symbol indicates a paragraph with instructions.

Contact

If you have any questions about the device, its functions, or accessories, please contact us at:

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68307 Mannheim
Telephone: +49 621 776-4411
Fax: +49 621 776-274411
E-Mail: fa-info@pepperl-fuchs.com

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2 Safety

2.1 Symbols Used

This document contains information that you must observe for your own personal safety and to prevent property damage. Warning messages are shown in descending order according to the risk level, as follows:

Safety-Relevant Symbols

Danger!
This symbol indicates an imminent danger.

Non-observance will result in personal injury or death.

Warning!
This symbol indicates a possible fault or danger.

Non-observance may cause personal injury or serious property damage.

Caution!
This symbol indicates a possible fault.

Non-observance could interrupt the device and any connected systems and plants, or result in their complete failure.

2.2 Intended Use

The Bluetooth modem can be connected to a PC via USB or RS232. It allows wireless data transfer between the PC and a Bluetooth-enabled device, e.g., a handheld.

Always operate the device as described in these instructions to ensure that the device and connected systems function correctly. The protection of operating personnel and plant is only guaranteed if the device is operated in accordance with its intended use.

2.3 Operation, Maintenance, Repair

Responsibility for planning, assembly, commissioning, operation, maintenance, and dismounting lies with the plant operator.

Mounting, installation, commissioning, operation, maintenance and dismounting of the device may only be carried out by appropriate trained and qualified personnel. The instruction manual must be read and understood.

Only use accessories specified by the manufacturer.

The device must not be repaired, changed or manipulated.

If there is a defect, always send back the device to Pepperl+Fuchs.

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2.4 Delivery, Transport, Disposal

Check the packaging and contents for damage.

Check if you have received every item and if the items received are the ones you ordered.

Keep the original packaging. Always store and transport the device in the original packaging.

Store the device in a clean and dry environment. The permitted ambient conditions (see datasheet) must be considered.

Disposing of device, packaging, and possibly contained batteries must be in compliance with the applicable laws and guidelines of the respective country.

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3 Product Description

3.1 Use and Application

The Bluetooth modem establishes a wireless connection between a PC and a handheld. This connection can be used to transfer data read and stored by the handheld to the PC.

Depending on the handheld used, the Bluetooth modem can be connected to the PC using either the USB interface or the RS232 interface.

- If you are using a data matrix handheld, the interfaces can be changed by reading a control code. See chapter 4.2
- If you use an RFID handheld, you can change the interface via the keyboard. See chapter 4.3

Note!

The Bluetooth modem connects to the PC using the USB interface and a US English keyboard layout by default.

The Bluetooth modem does not need an additional driver or software. Connecting the Bluetooth modem to a PC as described in this manual will allow you to begin data transfer from the handheld immediately. The detection range of the Bluetooth modem is up to 100 m.

3.2 Accessories

Interface Cable

Designation	Description
ODZ-MAH-CAB-B14	Connection cable for USB interface
ODZ-MAH-CAB-R2	Connection cable for RS232 interface

Power Supply

Designation	Description
ODZ-MAH-SUPPLY	Power Supply

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4 Commissioning

4.1 Connecting a Bluetooth modem to a PC

Establishing a USB Connection

To establish a USB connection between the Bluetooth modem and the PC, use the ODZ-MAH-CAB-B14 connection cable.

1. Insert the 8-pin DIN plug on the connection cable into the Bluetooth modem.
2. Insert the USB plug on the connection cable into the PC.

   ↳ The blue LED on the Bluetooth modem lights up as soon as it is supplied with power.

Establishing an RS232 Connection

To establish an RS232 connection between the Bluetooth modem and the PC, use the ODZ-MAH-CAB-R2 connection cable.

1. Switch off the PC.
2. Insert the 8-pin DIN plug on the connection cable into the Bluetooth modem.
3. Insert the RS232 plug on the connection cable into the RS232 interface on the PC.
4. Insert the mains power plug on the power supply unit into the low-voltage socket on the RS232 connection cable.
5. Connect the mains power plug on the power supply unit to the mains.

   ↳ The blue LED on the Bluetooth modem lights up as soon as it is supplied with power.
6. Switch on the PC.

   ↳ A connection to the PC is established.

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4.2 Using a Data Matrix Handheld

Connecting the Data Matrix Handheld to the Bluetooth Modem

Ensure the handheld is ready for operation.

Use the handheld to read the data matrix code on the top of the Bluetooth modem.

↳ A connection to the Bluetooth modem is automatically established.
If a connection was successfully established, an audible signal sounds and both LEDs on the handheld flash green.
If a connection was not successfully established, an audible signal sounds three times at short intervals and both LEDs on the handheld flash red.

Configuring the Interface for Connection to the PC

Note!

The Bluetooth modem connects to the PC using the USB interface by default.

1. Connect the Bluetooth modem using the relevant cable for your preferred interface. See chapter 4.1
2. To connect the handheld to the Bluetooth modem, use the handheld to read the data matrix code on the top of the Bluetooth modem.
3. Read one of the following data matrix codes for the desired interface.

   ↳ The Bluetooth modem is configured to the corresponding interface

USB connection	RS232 connection
 M708_01	 M661_01

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Configuring the Baud Rate for an RS232 Connection

Note!

The Bluetooth modem uses a baud rate of 9600 as standard for an RS232 connection.

Ensure that the handheld is connected to the Bluetooth modem.

To change the baud rate for the RS232 connection, read the corresponding data matrix code with the handheld.

9600

M316_01

19200

M317_01

38400

M318_01

57600

M319_01

115200

M320_01

Configuring the Keyboard Layout for a USB Connection

Note!

The Bluetooth modem uses a US English keyboard layout by default. For correct data transfer, it is important that the keyboard layout is selected. Depending on the keyboard selected, individual characters, e.g., special symbols, are output differently.

Ensure that the handheld is connected to the Bluetooth modem.

To change the keyboard layout, read the corresponding data matrix code with the handheld.

English (default)

M590_01

Universal

M591_01

French

M594_01

German

M595_01

Japanese

M596_01

Non-printable ASCII keyboard (no leading 0)

M593_01

Non-printable ASCII keyboard (CTRL+ character)

M597_01

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4.3 Using the RFID Handheld

Connecting the RFID Handheld to the Bluetooth Modem

Ensure the handheld is ready for operation.

1. On the RFID handheld, select **Settings** > **Interface**.
2. Activate the **Bluetooth** interface.

   ↳ The **Bluetooth** submenu opens.
3. Activate **2way** mode.
4. In the field **BD_MAC**, enter the MAC address of the Bluetooth modem. This 12-character MAC address can be found on the top of the Bluetooth modem.
5. To confirm your entry, press the left soft key.

   

   ↳ A connection is established between the two devices. This process may take a few moments under certain circumstances. The symbols  and  are displayed in the status bar.

Configuring the Interface for Connection to the PC

You can choose between the following types of connection.

- RS232 interface (BT_RS232)
- USB interface (BT_USB)
- Keyboard wedge (BT_KBoard Map)

Using the RS232 Interface (BT_RS232)

Ensure that the handheld is connected to the Bluetooth modem.

1. On the RFID handheld, select **Applications** > **BTModemCfg.js** > **OK**.

   ↳ The **BTModemCfg.js** application starts.
2. Activate the **BT_RS232** interface.
3. To confirm your entry, press the left soft key.

   
4. Adjust the communication parameters via the interface on the PC where necessary. The Bluetooth modem is set to the following values by default: baud rate: 9600, data bits: 8, stop bits: 1, parity: N (none).

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Using the USB Interface (BT_USB)

Ensure that the handheld is connected to the Bluetooth modem.

1. On the RFID handheld, select **Applications** > **BTModemCfg.js** > **OK**.

   ↳ The **BTModemCfg.js** application starts.
2. Activate the **BT_USB** interface.
3. To confirm your entry, press the left soft key.

Using the Keyboard Wedge (BT_KBoard Map)

1. On the RFID handheld, select **Applications** > **BTModemCfg.js** > **OK**.

   ↳ The **BTModemCfg.js** application starts.
2. Activate the **BT_KBoard Map** interface.
3. Select a keyboard layout, e.g., **German**.
4. To confirm your entry, press the left soft key.

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