



## QUICK START GUIDE

# ODT-HH-MAH300 Handheld





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# 1 Introduction

## 1.1 Purpose of this Quick Start Guide

This Quick Start Guide is designed to help you learn the basic functions for operating the device. The guide also contains brief instructions for using the device again at a later stage. However, this Quick Start Guide does not replace the manual on the CD supplied.

The Quick Start Guide does not explain complex scenarios or offer detailed information. If you wish to use the full range of device functions, refer to the manual. We also recommend reading the manual if you are unsure about handling the device or experience device malfunctions.

## 1.2 Intended use

Operating the Handheld in a way different from that described in these instructions may have a negative effect on the reliability and function of the device and connected systems. Protection of operating personnel and the overall system is no longer guaranteed if the device is not used as specified.

The handheld was designed for identifying 1D and 2D codes and should be used for this purpose only. The handheld is flexible and can therefore be used to decode codes in many branches of industry, such as the logistics sector.

### 1.3 General safety notes



Class 2M laser product

This handheld is a class 2M laser product:



**Warning!**

Class 2M laser radiation

Laser targeting beams can cause serious eye injuries.

Do not look directly at the laser beam. Do not use optical instruments to view the laser beam directly.

These safety instructions are also printed on the back of the handheld next to the battery compartment:





**Warning!**

Class 3R laser radiation

Laser beam emissions can cause serious eye injuries when the housing is opened.

Do not open the housing of the handheld. If the device develops a fault, please contact Pepperl+Fuchs. Avoid looking directly into laser beams.

These safety instructions are also printed on the inside of the housing:



CAUTION - CLASS 3R  
LASER RADIATION  
WHEN OPEN  
AVOID DIRECT EYE  
EXPOSURE

Do not open, burn or short-circuit the battery. The battery may ignite, explode, leak or heat up and become irreparably damaged.

Always charge the battery using approved cables.

Only use recommended original accessories.

Operating the Handheld in a way different from that described in these instructions may have a negative effect on the reliability and function of the device and connected systems. Protection of operating personnel and the overall system is no longer guaranteed if the device is not used as specified.

The operating company bears responsibility for observing locally applicable safety regulations.

Installation and commissioning of all devices must be performed by a trained professional only.

Independent interventions and separate modifications are dangerous and will void the warranty and exclude the manufacturer from any liability. If serious faults occur, stop using the device. Secure the device against inadvertent operation. In the event of repairs, send the device to Pepperl+Fuchs.

Do not dispose of storage batteries with the household refuse.



Consumers are obliged by law to dispose of used storage batteries in accordance with regulations. You can hand in your used batteries at public collection points in your area or sales points where batteries of that particular kind are sold. You can also send your used batteries directly to us for disposal. Please remember that this service is only available within the scope of normal use. If you wish to send back your used batteries, please affix sufficient postage stamps and send to our address. There are no extra charges for disposal.

## 2 Installation

### 2.1 Preparation



#### Unpacking the unit

1. Check that all package contents are present and undamaged.  
If anything is damaged, inform the shipper and contact the supplier.
2. Check that all items are present and correct based on your order and the shipping documents.  
If you have any questions, please contact Pepperl+Fuchs.
3. Keep the original packing material in case you need to store or ship the unit at a later time.



#### Fitting the battery

Fit the battery as follows:

1. Turn the battery so that you can remove it as shown in the illustration.



2. Slide the plastic tab on the battery into the corresponding recess on the Handheld.



3. Push the locking device upwards and push in the battery.



4. Push the battery in the Handheld, hold in position and release the locking device so that the battery engages.





## Charging battery

Charge the battery as follows:

1. Connect the Handheld, including battery, to an interface cable.
2. Connect the interface cable to the switched-on computer.

When the Handheld is switched on, the symbols displayed in the toolbar indicate the charging status of the Handheld.



### **Note!**

If you are operating the handheld via an RS 232 interface, connect the RS 232 interface power supply unit to the socket to charge the battery.



### **Note!**

#### ***Completely discharged storage batteries***

If the storage battery is completely discharged, you will have to wait at least 10 minutes before the Handheld is ready for operation again.

## 3 Commissioning

### 3.1 Connection



#### Connecting the interface cable to the Handheld

To connect the interface cable to the Handheld, proceed as follows:

1. Turn the 8-pin DIN plug so that the arrows on the plug are pointing downwards.
2. Hold the Handheld in your hand with the controls facing upwards.
3. Insert the plug into the corresponding cable connection socket on the Handheld.
4. Press the plug firmly into the cable connection socket until the locking device audibly engages.

The interface cable is now connected to the Handheld.



**Note!**

**Connection cable with fitted grip**

If you have mounted the Handheld to the optional grip, connect the interface cable to the cable connection socket on the grip.



**Note!**

The trigger button at the handle is only working with handheld firmware higher than version 3280.



## Connecting the handheld to the computer via the USB interface cable

Connect the handheld to the computer as follows:

1. Insert the USB connector on the cable into a free USB port on the computer. You can do this during operation.

The handheld switches on automatically once you have connected it to the computer.

2. To change the operating mode to USB, scan the code **USB Keyboard Mode**:



M134\_02

3. To save the settings, scan the code **Save Settings**:



M188\_02

Voltage is supplied to the handheld via the USB interface. An additional power supply unit is therefore not necessary. If you use a 1950 mAH battery for batch operation, the battery is charged automatically as soon as the handheld is connected to a switched-on computer via the USB interface.



Connecting the handheld to the computer via the RS 232 interface cable



**Note!**

The operating mode **USB Mode** is preset in delivery state. As a result, an error message may appear on the handheld when the following steps are carried out.

Connect the handheld to the computer as follows:

1. Switch off the computer.
2. Connect the RS 232 connector on the interface cable to the RS 232 interface on the computer.
3. Connect the low-voltage connector on the power supply unit to the low-voltage socket on the RS 232 interface cable.
4. Connect the power supply unit to the mains power supply.
5. Switch on the computer.

If the operating mode **USB Mode** was preset beforehand, an error signal sounds after approx. 20 seconds because the handheld was connected to the RS 232 interface.

6. To change the operating mode to RS 232, scan the code **RS 232 One Way Mode**:



M131\_01

7. To save the settings, scan the code **Save Settings**:



The handheld then uses the default settings for operation via an RS 232 interface cable (RS 232 one way mode, 56700 baud, 2 stop bits, 8 data bits, no parity) and is ready for operation.



### Connecting the handheld to the computer via the PS/2 interface cable

Connect the handheld to the computer as follows:

1. Switch off the computer.
2. If an external keyboard is connected to the computer, disconnect it.
3. If you are using a USB keyboard, connect the keyboard to the PS/2 socket on the interface cable using a suitable adapter. If you are using a keyboard with PS/2 connector, insert the connector directly into the PS/2 socket on the interface cable.
4. Connect the PS/2 connector on the interface cable to the keyboard port on the computer.
5. Switch on the computer.
6. To change the operating mode to PS/2, scan the code **PS2 Mode**:



- To save the settings, scan the code **Save Settings**:



The handheld is ready for operation. Voltage is supplied to the handheld via the PS/2 interface. An additional power supply unit is therefore not necessary.



### Selection of the operation mode

To select the favored operation mode, scan one of the following codes.

USB Keyboard  
Mode



M134\_02

USB Downloader  
Mode



M133\_01

PS/2  
Mode



M126\_01

RS 232 One Way  
Mode



M131\_01



## Connecting the handheld via Bluetooth



### **Note!**

You will require a MAC-address to establish a connection between the handheld and a Bluetooth-compatible device. This 12-digit numerical code is usually found on the Bluetooth-compatible device or in the manual accompanying your Bluetooth-compatible device.

If you are using a Pepperl+Fuchs Bluetooth modem, use the data matrix code printed on the top of the modem as a QuickConnect code.

Establish a connection between the handheld and a Bluetooth-compatible device (e.g. laptop with corresponding Bluetooth USB dongle) as follows.

1. Connect the Bluetooth-compatible device or the Pepperl+Fuchs Bluetooth modem to the computer.
2. Generate a data matrix code using the MAC-address on the Bluetooth-compatible device: visit [www.pepperl-fuchs.com](http://www.pepperl-fuchs.com) and use the **Quick Connect Code Generator** to generate the data matrix code. Print this data matrix code.
3. Scan the code **Reset to RF Factory Defaults:**



M684\_01

4. Scan the generated data matrix code or scan the code printed on the top of the Pepperl+Fuchs Bluetooth modem.  
The handheld automatically attempts to establish a connection to the computer via Bluetooth.
5. To save the settings, scan the code **Save Settings**:



The handheld is now ready for operation. Open the application on the computer to which you wish to send data.

## 4 Operation

### 4.1 Reading codes

This handheld uses digital camera technology to record an image of the code to be read. Once an image has been recorded, the handheld evaluates the data contained in the image using an advanced evaluation process.

The handheld reads both extremely small two-dimensional codes (e.g. data matrix codes) and larger one-dimensional codes (e.g. bar codes). The handheld has an innovative field of vision with two areas that are read simultaneously: the near field covers a lens with an optimal focal point of about 10 cm and is specially designed for reading smaller codes. The far field covers a lens with an optimal focal point of about 23 cm and is specially designed for reading larger codes. These combinations enable the handheld to cover a reading area between 5 and 50 cm.

The handheld is held either directly in the hand or fitted to a handle. The handle has a separate button. The two red trigger buttons on the top of the handheld also function when the handle is fitted.



#### Reading the 1D and 2D code

1. To read smaller codes, hold the handheld nearer to the code. To read larger codes, hold the handheld further away from the code.
2. Depending on the key assignment, press and hold in the trigger button for reading and center the laser targeting in any direction on the code to be read.

If the reading process is successful, the status LED lights up green briefly and the read code appears on the display. If you have activated the buzzer and the vibration alarm, an acoustic signal sounds and the handheld vibrates.

## 4.2 Editing and entering data manually



### Editing data manually

Edit data that has already been entered as follows:

1. Select **Options > View storage**.

2. Press the left navigation key (  ) or right navigation key (  ) to browse to the relevant data record.

3. Press the left softkey (   ) to open the options.

4. Select **Edit**.

5. Press the  button to delete individual characters. You can only delete the last characters entered, not individual characters within the character string.

6. Enter the required modifications using the input keys.

7. Press the left softkey (   ) to confirm the entry.

The edited data is modified in the memory.



## Entering data manually

Enter new data manually as follows:

1. Select **Options > Enter data**.
2. Enter the data using the input keys.
3. Press the Enter navigation key () to confirm your entry.

The input data is saved.

### 4.3

## Entering data manually

You have the option of automatically transferring data stored on the handheld memory to the computer as soon as a connection is available at the USB, RS 232, PS/2 or Bluetooth interface.

There is a separate submenu for transferring files automatically. Refer to the Chapter "CodeViewer Settings" for more information.



## Entering all data manually

To transfer all the handheld memory data to the computer, proceed as follows:

1. Connect the handheld to the computer.
2. Select **Options > Send all**.

The data is transferred to the computer. The transfer process may take a few minutes, depending on the data volume. The message "Ready (Sent all)" appears on the display if the data is transferred successfully.



### Transferring individual data records manually

To manually transfer individual data records from the handheld memory to the computer, proceed as follows:

1. Select **Options > View storage**.

2. Press the left navigation key (  ) or right navigation key (  ) to browse to the relevant data record.

3. Press the left softkey (   ) to open the options.

4. Select **Send**.

The data record is transferred to the computer. The message "#n Sent" appears in the toolbar if the record is transferred successfully.

## 4.4 Deleting data manually

You have the option of automatically deleting data that has already been transferred automatically to the computer.

There is a separate submenu for deleting files automatically. Refer to the Chapter "CodeViewer Settings" for more information.



### Deleting all data manually

To delete all data from the handheld memory, proceed as follows:

1. Select **Options > View storage**.

2. Press the left softkey (   ) to open the options.
3. Select **Delete all**.
4. Press the left softkey (   ) to confirm deletion of the data.  
All data is deleted from the handheld memory.



### Deleting individual data records manually

To delete individual data records from the handheld memory, proceed as follows:

1. Select **Options > View storage**.

2. Press the left navigation key (  ) or right navigation key (  ) to browse to the relevant data record.
3. Press the left softkey (   ) to open the options.
4. Select **Delete**.
5. Press the left softkey (   ) to confirm deletion of the data record.  
The selected data record is deleted from the handheld memory.

## 4.5 Factory defaults



### Resetting the handheld to factory defaults

To reset the handheld to the factory defaults of the operating mode, scan the appropriate code.

| Operating mode | Code   |  | Operating mode | Code   |
|----------------|--|--|----------------|--|
| USB            | <br>M049_03 |  | PS/2           | <br>M060_03 |
| RS 232         | <br>M418_02 |  | Bluetooth      | <br>M684_01 |

# FACTORY AUTOMATION – SENSING YOUR NEEDS



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