EN

CSMH00x

1D/2D Handheld Scanners

Operating Instructions

Translation of the Original Operating Instruction
Subject to change without notice
Available as PDF version only
Version: 1.1.0
Status: 04.04.2019
www.wenglor.com

Table of Contents

1. General

1.1 Information Concerning these Instructions

- These instructions apply to the product with ID code CSMH00x.
- They make it possible to use the product safely and efficiently.
- These instructions are an integral part of the product and must be kept on hand for the entire duration of its service life.
- Local accident prevention regulations and national work safety regulations must be complied with as well.
- The product is subject to further technical development, and thus the information contained in these operating instructions may also be subject to change. The current version can be found at www.wenglor.com in the product's separate download area.

NOTE!
The operating instructions must be read carefully before using the product and must be kept on hand for later reference.

1.2 Explanations of Symbols

- Safety precautions and warnings are emphasized by means of symbols and attention-getting words
- Safe use of the product is only possible if these safety precautions and warnings are adhered to
- The safety precautions and warnings are laid out in accordance with the following principle:

ATTENTION-GETTING WORD!
Type and Source of Danger!
Possible consequences in the event that the hazard is disregarded.
- Measures for averting the hazard.

The meanings of the attention-getting words, as well as the scope of the associated hazards, are listed below.

DANGER!
This word indicates a hazard with a high degree of risk which, if not avoided, results in death or severe injury.

WARNING!
This word indicates a hazard with a medium degree of risk which, if not avoided, may result in death or severe injury.

CAUTION!
This word indicates a hazard with a low degree of risk which, if not avoided, may result in minor or moderate injury.

ATTENTION!
This word draws attention to a potentially hazardous situation which, if not avoided, may result in property damage.

NOTE!
A note draws attention to useful tips and suggestions, as well as information regarding efficient, error-free use.

1.3 Limitation of Liability

- The product has been developed in consideration of the current state-of-the-art and applicable standards and guidelines. Subject to change without notice.
- A valid declaration of conformity can be accessed at www.wenglor.com in the product's separate download area.
- wenglor sensoric elektronische Geräte GmbH (hereinafter referred to as "wenglor") excludes all liability in the event of:
    - Non-compliance with the instructions
    - Use of the product for purposes other than those intended
    - Use by untrained personnel
    - Use of unapproved replacement parts
    - Unapproved modification of products
- These operating instructions do not include any guarantees from wenglor with regard to the described procedures or specific product characteristics.
- wenglor assumes no liability for printing errors or other inaccuracies contained in these operating instructions, unless wenglor was verifiably aware of such errors at the point in time at which the operating instructions were prepared.

1.4 Copyrights

- The contents of these instructions are protected by copyright law.
- All rights are reserved by wenglor.
- Commercial reproduction or any other commercial use of the provided content and information, in particular graphics and images, is not permitted without previous written consent from wenglor.

2. For Your Safety

2.1 Use for Intended Purpose

This hand scanner is used to decode 1D/2D codes.

This product can be used in the following industry sectors:

- Automotive industry
- Food industry
- Packaging industry
- Pharmaceuticals industry
- Clothing industry
- Plastics industry
- Consumer goods industry
- Paper industry
- Electronics industry
- Glass industry
- Printing industry
- Special machinery manufacturing
- Heavy machinery manufacturing
- Logistics
- Woodworking industry
- Steel industry
- Aviation industry
- Construction industry
- Chemicals industry
- Agriculture Industry
- Alternative energy
- Raw materials extraction
-

2.2 Use for Other than the Intended Purpose

- Not a safety component in accordance with 2006/42/EC (Machinery Directive)
- The product is not suitable for use in potentially explosive atmospheres.
- The product may only be used with accessories supplied or approved by wenglor, or combined with approved products. A list of approved accessories and combination products can be accessed at www.wenglor.com on the product detail page.

DANGER!
Risk of personal injury or property damage in case of use for other than the intended purpose!
Use for other than the intended purpose may lead to hazardous situations.
- Observe instructions regarding use for intended purpose.

2.3 Personnel Qualifications

- Suitable technical training is a prerequisite
- In-house electronics training is required
- Trained personnel must have uninterrupted access to the operating instructions

DANGER!
Risk of personal injury or property damage in case of incorrect initial start-up and maintenance!
Personal injury and damage to equipment may occur.
- Adequate training and qualification of personnel.

2.4 Modification of Products

DANGER!
Risk of personal injury or property damage if the product is modified!
Personal injury and damage to equipment may occur. Non-observance may result in loss of the CE marking and the guarantee may be rendered null and void.
- Modification of the product is impermissible.

2.5 General Safety Precautions

NOTE!
- These instructions are an integral part of the product and must be kept on hand for the entire duration of its service life.
- In the event of possible changes, the respectively current version of the operating instructions can be accessed at www.wenglor.com in the product's download area.
- Read the operating instructions carefully before using the product.
- Protect the sensor against contamination and mechanical influences.

2.6 Approvals

CE

3. Technical Data

Order Number / Technical Data	CSHM001	CSHM002	CSHM003	CSHM004
Optical data				
Scanning distance	38...394 mm			
Resolution	1280×960 pixels			
Light source	Red light			
Max. permitted ambient light	97,000 lux			
Electrical data				
Supply voltage	5 V DC			
Power consumption	< 2250 mW			
Temperature range	–20…55 °C			
Interface	USB	RS-232	USB	RS-232
Acoustic signal	Yes			
Vibrational signal	Yes			
Visual signal	Yes			
Mechanical data				
Housing material	Plastic			
Protection	IP54			
Weight	110 g			
Connector type	Cable			
Cable length	180 cm			

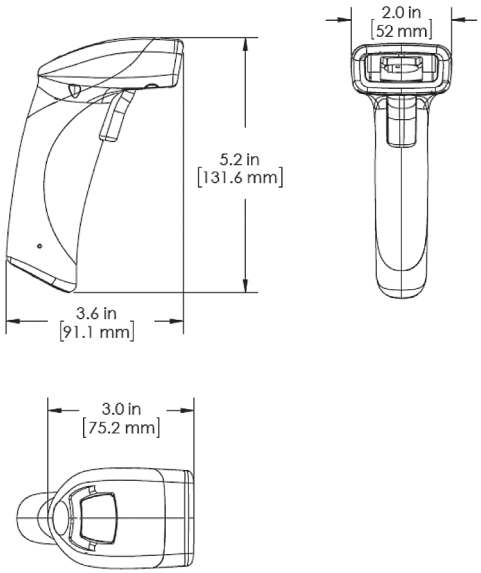
3.1 Scanning field / working distances

Test code	Minimum distance	Maximal distance
0,076 mm (Code 39)	80 mm	102 mm
0,190 mm (Code 39)	33 mm	182 mm
0,267 mm (GS1 DataBar)	20 mm	220 mm
0,330 mm (UPC)	28 mm	280 mm
0,107 mm (DataMatrix)	48 mm	110 mm
0,127 mm (DataMatrix)	43 mm	115 mm
0,16 mm (DataMatrix)	33 mm	150 mm
0,254 mm (DataMatrix)	20 mm	180 mm
0,528 mm (DataMatrix)	28 mm	343 mm

NOTE!

- Working ranges are a combination of both the wide and high density fields. All samples were high quality codes and were read along a physical center line at a 10° angle. Default AGC settings were used. Accuracy= +/–10 %.

3.2 Housing Dimensions



3.3 Accessory Products

wenglor can provide you with suitable connection technology for your product.

Suitable mounting technology no.	431
Interface cable	ZDNV001
Interface cable	ZDNV002
Mains power pack	ZNNN001
Mains power pack	ZNNN002
Mounting bracket	Z0075
Mounting bracket	ZSLM001
Gooseneck stand	ZSLM002

3.4 Scope of Delivery

- Product
- USB cable (CSHM001, CSHM003)
- RS-232 cable + power supply (CSHM002, CSHM004)

4. Transport and Storage

4.1 Transport

Upon receipt of shipment, inspect the goods for damage in transit. In the case of damage, conditionally accept the package and notify the manufacturer of the damage. Then return the device making reference to damage in transit.

4.2 Storage

The following points must be taken into condition with regard to storage:

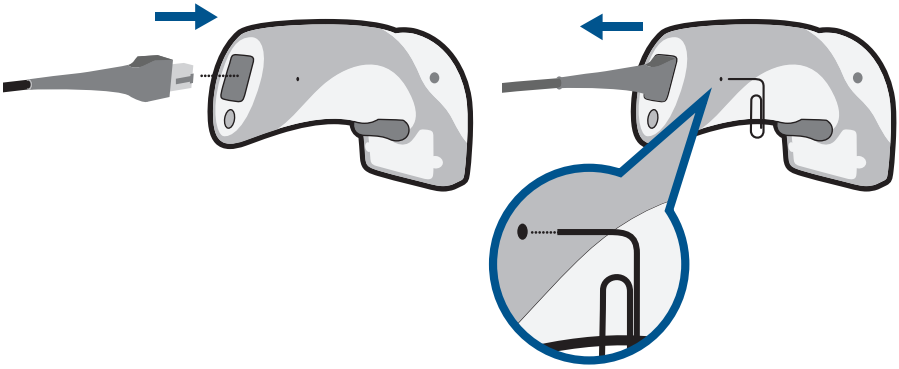
- Do not store the product outdoors
- Store the product in a dry, dust-free place
- Protect the product against mechanical impacts
- Protect the product against exposure to direct sunlight

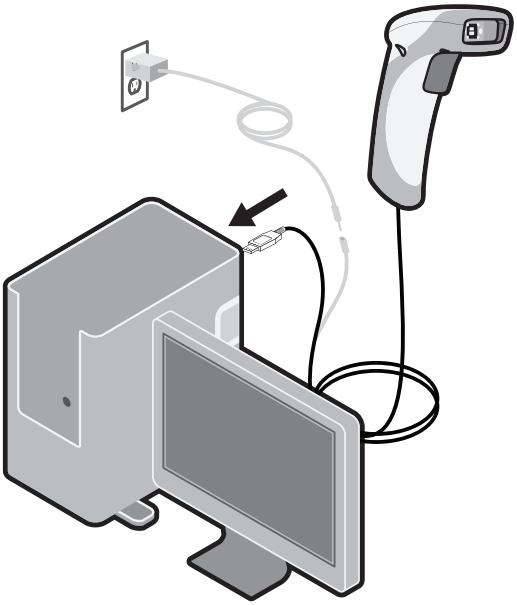
ATTENTION!
Risk of property damage in case of improper storage!
The product may be damaged.
- Comply with storage instructions.

5. Installation and Electrical Connection

5.1 Installation

- Protect the product against contamination during installation.
- Observe all applicable electrical and mechanical regulations, standards, and safety rules.
- Protect the product against mechanical influences.
- There must not be any objects underneath the working range.





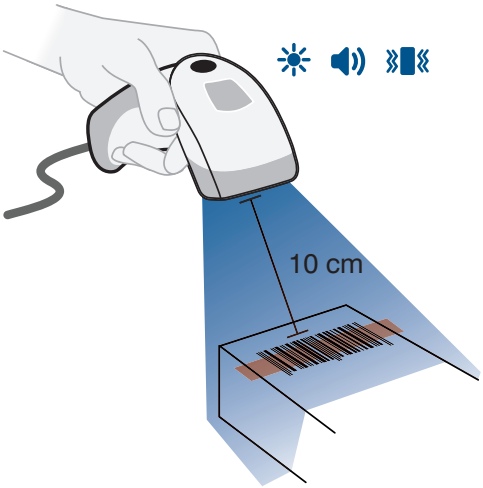
① Plug in

② 10 Sec. Wait 10 seconds

③ LED will flash

④ 2× Reader will beep

⑤ Reader will vibrate



ATTENTION!
Risk of property damage in case of improper installation!
The product may be damaged.
• Comply with installation instructions.

CAUTION!
Risk of personal injury or property damage during installation!
Personal injury and damage to the product may occur.
• Ensure a safe installation environment.

5.2 Electrical Connection

The CSMH00x hand scanner has an RJ-50 connector with the following configurations:

Pin 1	+ 5 V
Pin 2	USB_DM
Pin 3	USB_DP
Pin 4	RS-232 TX (scanner output)
Pin 5	RS-232 RTS (scanner output)
Pin 6	RS-232 RX (scanner input)
Pin 7	RS-232 CTS (scanner input)
Pin 8	External trigger (active low scanner input)
Pin 9	N/C
Pin 10	Grounding

NOTES:
1. Part to be ROHS and Reach compliant.
2. Maximum Voltage Tolerance = 5 V +/– 10 %.
3. Caution: Exceeding the maximum voltage will void manufacturer warranty.

Connector A	Name	Wire	Color	Connector B
1	VIN	24 A WG	Red	1
2	DM	28 A WG	White	2
3	DP	28 A WG	Green	3
4	GND	24 A WG	Black	10
Shell	—	Shield	Bare	Shell

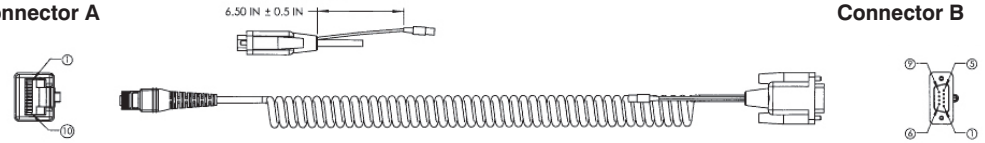
Connector A **Connector B**

NOTES:
1. Part to be ROHS and Reach compliant.
2. Maximum Voltage Tolerance = 5 V +/–10 %.
3. Caution: Exceeding the maximum voltage will void manufacturer warranty.

Conn A	Name	Wire	Color	Conn B	Wire	Color	Conn C
1	VIN	24 A WG	Red	9	24 A WG	Red	TIP
4	TX	28 A WG	Brown	2			
5	RTS	28 A WG	Orange	8			
6	RX	28 A WG	Yellow	3			
7	CTS	28 A WG	Green	7			
10	GND	24 A WG	Black	5	24 A WG	Black	RING
Shield	—	Shield		Shield			

Connector C

Connector A **Connector B**



5.3 Diagnostics

Required action in case of fault:

NOTE!
- Shut down the machine.
- Analyze and eliminate the cause of error with the help of the diagnostics information.
- If the error cannot be eliminated, please contact wenglor's support department
- Do not operate if malfunctioning indeterminately.
- The machine must be shut down if the error cannot be definitively explained or properly eliminated.

DANGER!
Risk of personal injury or property damage in case of non-compliance!
The system's safety function is disabled. Personal injury and damage to equipment.
- Required action as specified in case of fault.

6. Functions Overview

6.1 Default Settings

The following code types are activated upon delivery:

- Codabar
- Code 39
- Code 93
- Code 128:
- Data matrix
- Data matrix rectangle
- All GS1 DataBars
- Interleaved 2 of 5
- MSI Plessey
- PDF417
- QR Code
- UPC/EAN/JAN

Additional types of codes can be activated using either the wenglor eazyScan parametrization software or the parametrization codes in chapter 9 on page 24.

7. Installing the eazyScan software

7.1 Installation procedure

First verify whether there is a current version of the software available on the website. Go to www.wenglor.com and download the most current version of the software, as needed.
If the software on the CD is the latest version, proceed as follows:

1. Insert the installations CD into the CD drive.
• Double-click on the “Install_eazyScan” setup program to begin. Administrator rights are required here.

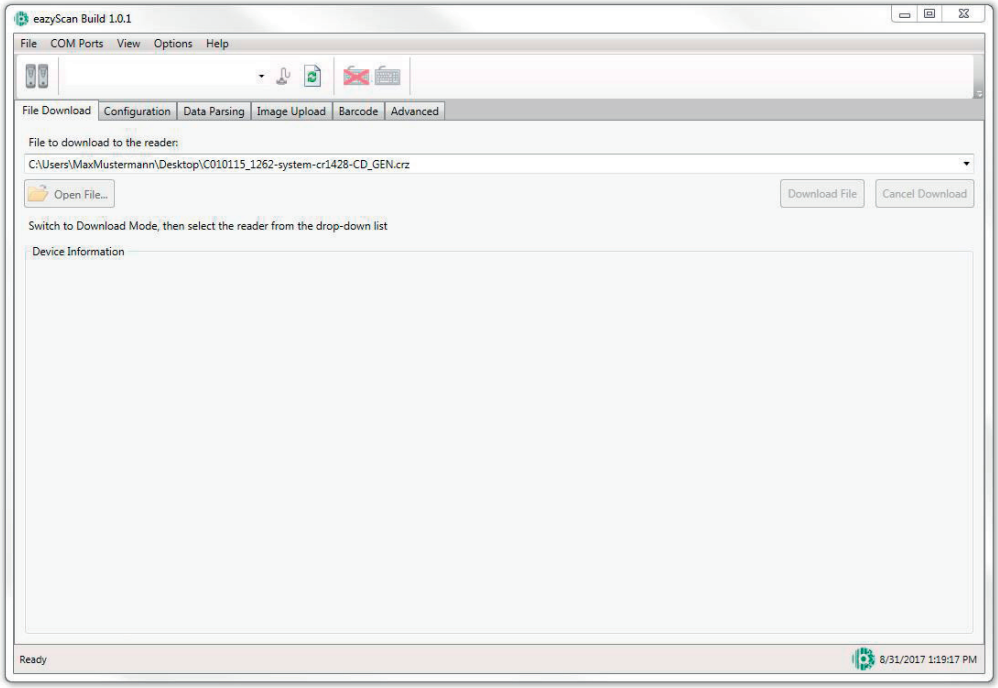
2. Installation instructions will follow.
• The eazyScan software is installed.

The language setting for the software is the same as for the operating system. If a different language is desired, it can be selected in the Settings menu.

8. General setup of the eazyScan software

8.1 Start screen

The following start window appears after the program has been started. Various options are provided by the software.

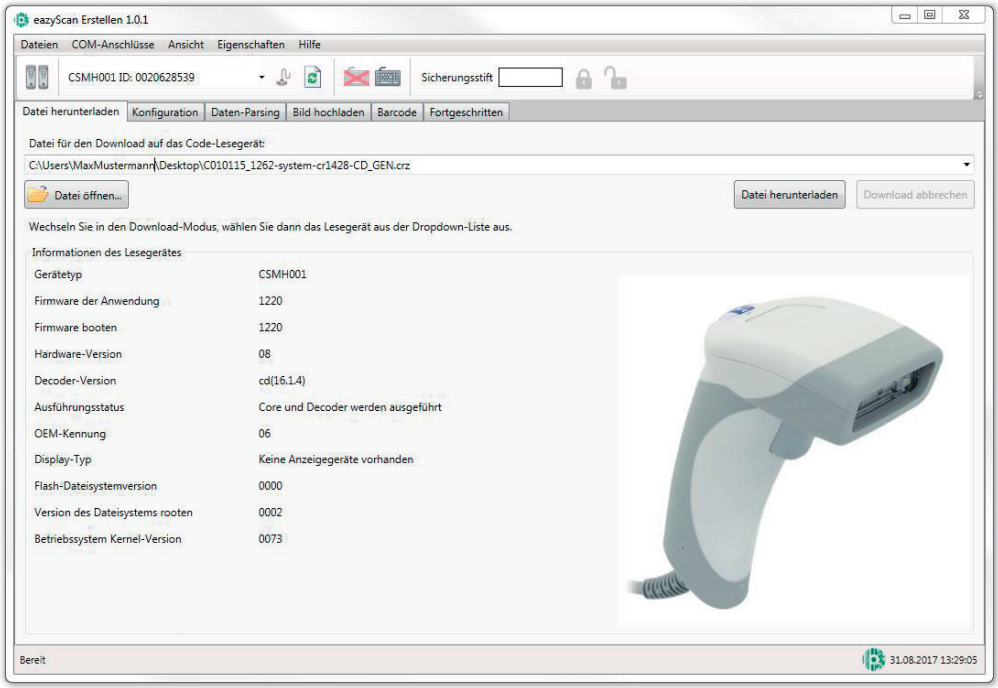


8.2 Operator interface

The depicted layout of the operator interface shows the standard configuartion of the software upon first use. However, the user interface can be adapted to meet your individual needs.

8.3 Establishing connection

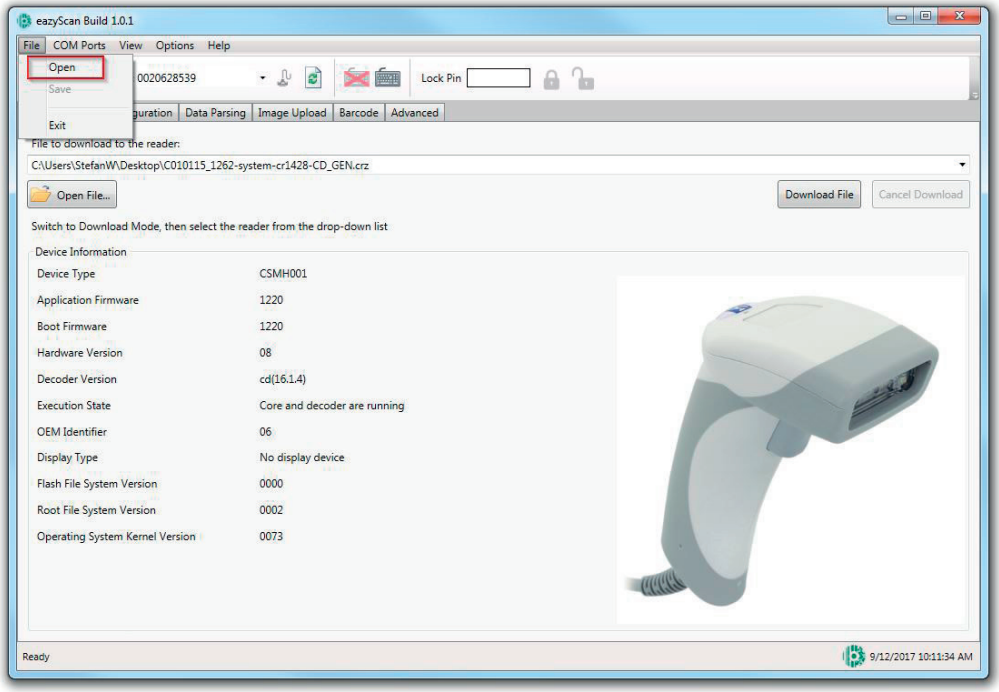
1. Open the eazyScan software
2. Plug the USB cable or RS-232 jack into your PC
3. If an RS-232 scanner is to be connected, the COM port used must be selected in the software.
4. The scanner will connect automatically. Two beeps will be heard when the scanner was connected correctly. With an RS-232 scanner, the Reload symbol must be pressed to start the search for RS-232 scanners.



5. USB scanners start in USB keyboard mode, which is set in download mode by clicking the -icon. When the mode has been changed, the scanner and its device information will appear in the software.

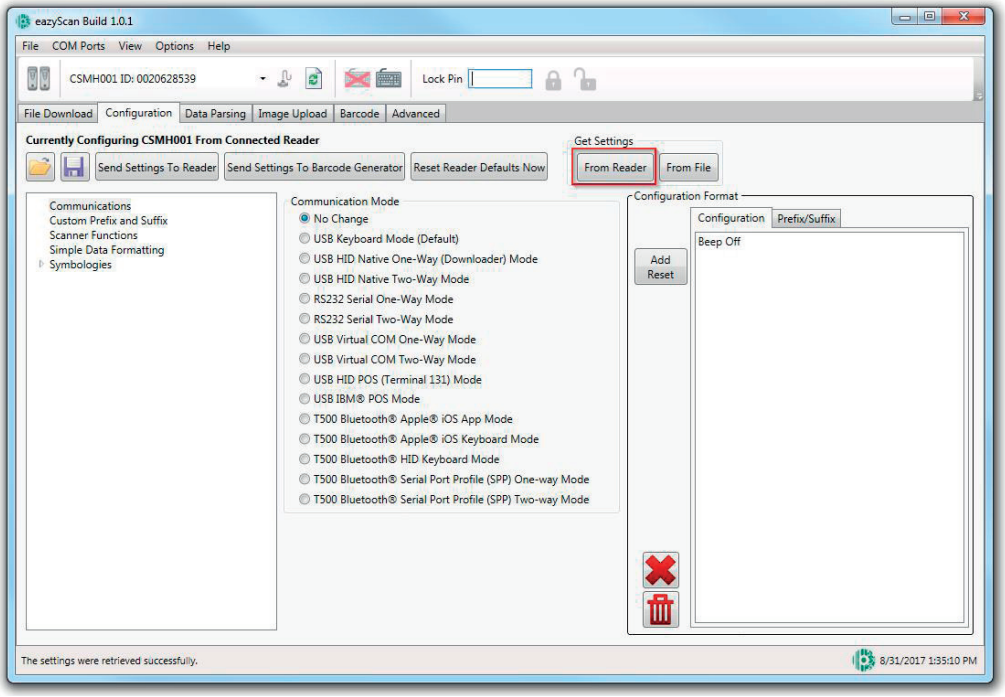
8.4 Firmware updates

Click on Open file... to look for firmware files on the PC. When a firmware file has been selected, the firmware update process is started by clicking on Download file.

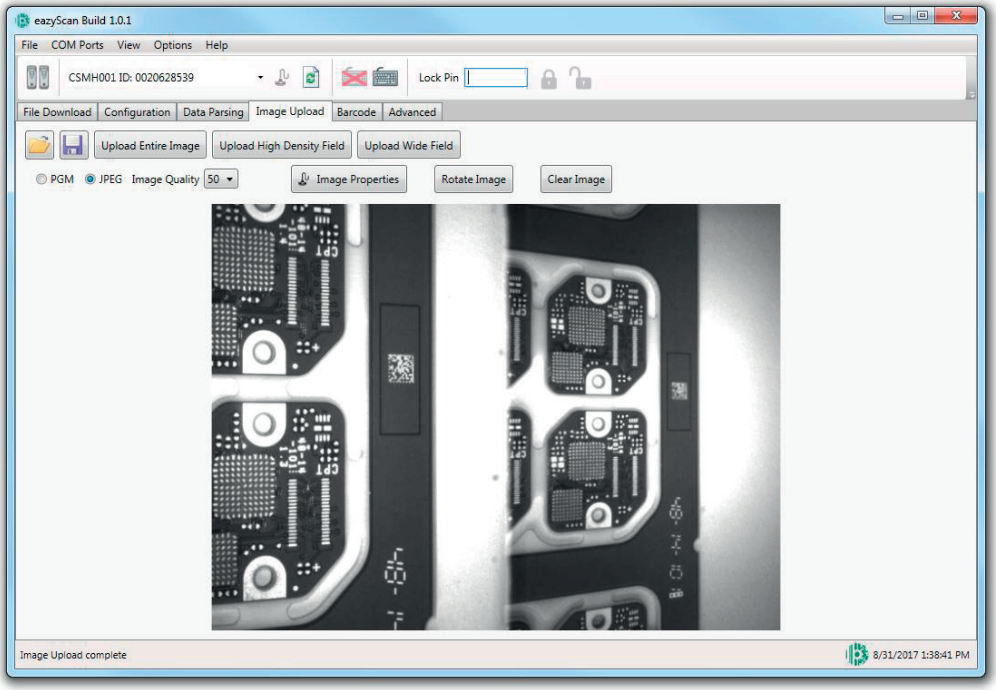


8.5 Configuration

The scanner configuration can be found under the Configuration tab. All available scanner setup parameters are displayed there.



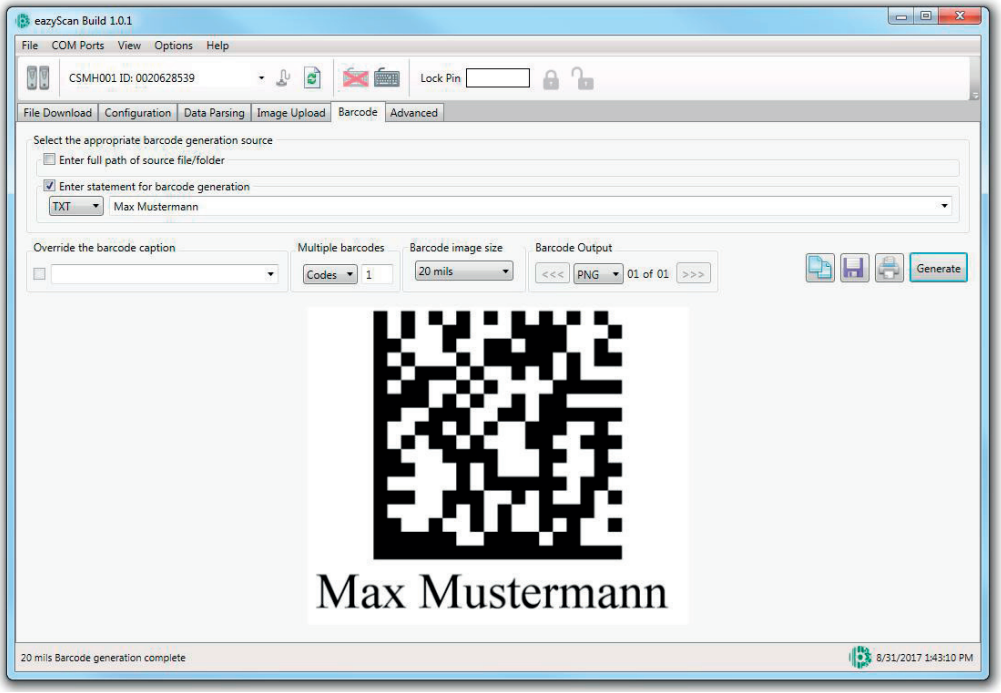
8.6 Image capturing



1. Select the image type in which you would like to save the image. You may choose PGM or JPEG. If JPG is selected, you may also choose the image quality.
2. Position the scanner where the barcode is to be read.
3. Select image windows from which readouts are to be made.
4. If the image was captured, three additional buttons will become visible. Image properties, Rotate image, Delete image.

8.7 Data Matrix Code Generator

Click on the barcode and the data matrix code generator will open. After entering the data into the free field and defining the module size of the code, generate a code by clicking on Create.



9. Setup using data matrix code

9.1 USB port

The scanner is normally set to USB native mode (HID)
In this mode, unformatted, unpacked data is usually sent to the scanner via the USB port.


M10002_02

Reset to USB Factory Defaults

Scan this barcode to place the reader in USB Downloader Mode. This mode allows file transfer to/from the reader. File types eligible for transfer include firmware, configuration, and images (also default mode for CortexTools).


M10004_02

USB Downloader Mode

Scan this barcode to use Virtual COM mode to transfer batch data. The reader will talk to a virtual COM port on the host device and transmit data serially (i.e. like an RS232 device).


M10005_01

USB Virtual COM - 1 Way Mode - Batch Mode Only


M10431_01

USB Virtual COM Multiple Ports


M10432_01

USB Virtual COM Common Ports

Scan this barcode to place the reader in bi-directional, packetized USB mode with automatic retry on packets.


M10006_02

USB Native Two Way Mode

9.2 RS-232 Interface

With RS-232 communication, the scanner communicates with the host using a communication program like ESP Terminal.
The standard settings for creating an RS-232 connection are:
Baud rate: **115.2 K**
Parity: **None**
Stop bits: **1**
Data bits: **8**

If the RS-232 interface is active, USB communication is turned off, and you will have to reset the scanner or press the “USB Keyboard Mode” symbol to return to USB.


M10389_03

Reset to RS232 Factory Defaults

Baud Rate (RS-232)
The baud rate is the speed at which the scanner and host transmit data. It only needs to be changed when the host settings need to be adjusted.


M10392_01

RS232 Interface 1200 Baud Rate


M10393_01

RS232 Interface 2400 Baud Rate


M10394_01

RS232 Interface 4800 Baud Rate


M10395_01

RS232 Interface 9600 Baud Rate


M10396_01

RS232 Interface 19200 Baud Rate


M10397_01

RS232 Interface 38400 Baud Rate


M10398_01

RS232 Interface 57600 Baud Rate


M10399_01

RS232 Interface 115200 Baud Rate

Parity (RS-232)
Parity is an error detection routine in which every character in a data bit is set to 1 or 0 so that the total number of 1 bits in each data field is even or odd. It only needs to be changed when the host settings need to be adjusted.


M10400_01

RS232 Interface Even Parity


M10401_01

RS232 Interface Odd Parity


M10402_01

RS232 Interface No Parity

Data Bits (RS-232)
Data bits represents the total number of bits in a character. This setting only needs to be changed when the host settings need to be adjusted.


M10390_01

RS232 Interface 8 Data Bits


M10391_01

RS232 Interface 8 Data Bits (Standard)


M10406_01

RS232 Interface Stop Bits 1


M10407_01

RS232 Interface Stop Bits 1


M10408_01

RS232 Interface Flow Control Off


M10409_01

RS232 Interface Flow Control - Hardware

9.3 Communications Mode

Data is transmitted from the scanner to the host in raw format, without packet framing or check characters. One-way communication is conducted in raw format. No response from the host is expected and data will not be resent.


M10387_01

RS232 Raw Mode

Packet mode data is sent with framing (meaning a preamble that communicates the quantity of data to be transmitted and a postamble with error detection) and check characters, and a response is expected from the host. Two-way communication is conducted in packet form.


M10388_02

RS232 Packet Mode

9.4 Keyboard Mapping

The Keyboard Mapping option provides alternative settings for keyboards that do not have the US English keyboard layout.
Note: The universal keyboard layout is somewhat slower than other language-specific options since the keys are assigned using the entire ASCII character set. The advantage of the universal keyboard layout is that every language and keyboard layout can be mapped.
Important: This option should not be confused with the USB keyboard mode, which provides the ability to create wired USB communication.


M10418_02

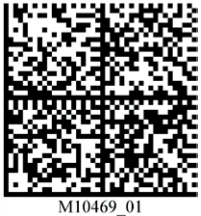
Keyboard Support: Russian Keyboard Mapping for Windows


M10419_02

Keyboard Support: English Keyboard Mapping for Apple


M10460_02

Keyboard Support: English (US) Keyboard Mapping for Windows


M10469_01

Keyboard Support: USInternational (Universal) Keyboard Mapping for Windows

M10471_01

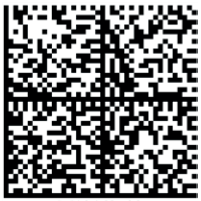
Keyboard Support: English (UK) Keyboard Mapping for Windows

M10461_02

Keyboard Support: Belgian French Keyboard Mapping for Windows

M10420_02

Keyboard Support: French Keyboard Mapping for Apple



M10462_02

Keyboard Support: French Keyboard Mapping for Windows

M10421_02

Keyboard Support: German Keyboard Mapping for Apple

M10463_02

Keyboard Support: German Keyboard Mapping for Windows

M10422_02

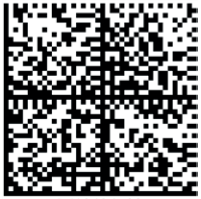
Keyboard Support: German-Swiss Keyboard Mapping for Apple

M10466_02

Keyboard Support: Swiss German Keyboard Mapping for Windows

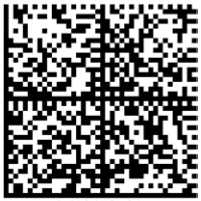
M10423_02

Keyboard Support: Italian Keyboard Mapping for Apple



M10424_02

Keyboard Support: Spanish Keyboard Mapping for Apple



M10472_01

Keyboard Support: Spanish Keyboard Mapping for Windows

M10464_02

Keyboard Support: Japanese Keyboard Mapping for Windows

M10465_02

Keyboard Support: Latin American Keyboard Mapping for Window

M10425_01

USB HID POS Mode (Terminal ID 131)

M10426_02

Translate all Characters to Uppercase Off

9.5 Alternative operating systems

The reader will modify its enumeration and communication scheme to work on Linux, Windows CE, or OS X operating systems.


M10122_02

Alternative operating systems (Linux/Mac) off (Standard)


M10123_02

Alternative operating systems (linux/Mac) on

9.6 Scanning process

When on, reader will constantly flash its LEDs and attempt to decode. Turn on to disable this feature. Continues Read off.


M10011_01

Continuous Scan Off

When on, reader will constantly flash its LEDs and attempt to decode. Turn on to enable this feature. Continues Read on.


M10012_02

Continuous Scan Both Imagers On


M10144_01

Duplicate Scan Disabled


M10145_01

1 Second Duplicate Scan Delay


M10146_01

2 Second Duplicate Scan Delay


M10147_01

3 Second Duplicate Scan Delay


M10148_01

5 Second Duplicate Scan Delay


M10149_01

10 Second Duplicate Scan Delay


M10150_01

30 Second Duplicate Scan Delay


M10151_01

1 Hour Duplicate Scan Delay


M10152_01

1 Day Duplicate Scan Delay

You can activate and deactivate LED alignment assistance using the Targeting parameter. Alignment assistance is activated by default.


M10153_01

Targeting On (Standard)


M10154_01

Targeting On

Use Motion Detection to specify that the scanner start a decoding trial as soon as it detects movement in its visual field.


M10013_02

Motion Detection Off In and Out of Stand


M10014_03

Optimize Motion Detection for Bright Environments


M10015_03

Optimize Motion Detection for Dark Environments


M10016_03

No Motion Detection Delay


M10017_03

500 ms Motion Detection Delay


M10403_02

Motion Detection On in Stand Trigger out of Stand

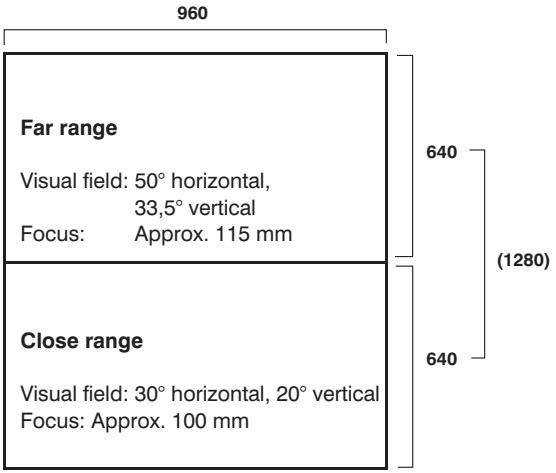

M10404_02

Motion Detection On In and Out of Stand

9.7 Dual scanning area

The scanner can read small 2D codes as well as large 1D codes thanks to its dual scanning area. An image will be captured of every area. First it will attempt to decode the image (at close or far range) that was successfully decoded during the last cycle. If this fails, the next image will be decoded. Move the scanner closer if the symbols are smaller and further away if they are larger.

Image area



M10182_01

Scan this barcode to read from the wide optical field only

M10183_01

Scan this barcode to read from the high density optical field only

M10190_01

Scan this barcode to read from both optical fields.

9.8 Mirroring

The scanner can decode mirrored symbols with the Mirroring function. When Mirroring is active, all other decoding functions are turned off.
Note: If the scanner is set to Mirroring On, it can now only return to standard mode when the Mirroring Off symbol pictured below is pressed.

M10124_02

Mirroring Off (Standard)

M10125_01

Mirroring On

9.9 Preamble and postamble

attached at the beginning of a decoded data string. The characters are displayed in the order that they are activated (from left to right). If you, for example, enter a comma and then a space, then decode a barcode with the “ABC” data, the following will output:

, ABC

The number of preamble characters that can be entered depends on the total quantity of memory space available. Specify the desired preamble character by pressing the corresponding symbol, shown below.


M10127_01

Prefix Comma


M10128_01

Prefix Space


M10129_01

Prefix Tab (USB Keyboard Mode Only)


M10319_01

Prefix Tab (RS232 Mode Only)


M10405_01

Prefix Carriage Return Line Feed (RS232 Mode Only)


M10126_01

Erase Prefix Data (Standard)


M10131_01

Suffix Comma


M10132_01

Suffix Space


M10133_01

Suffix Tab (USB Keyboard Mode Only)


M10134_01

Suffix Enter (USB Keyboard Mode Only)


M10320_01

Suffix Carriage Return (RS232 Mode Only)


M10321_01

Suffix Line Feed (RS232 Mode Only)


M10322_01

Suffix Carriage Return Line Feed (RS232 Mode Only)


M10323_01

Suffix Tab (RS232 Mode Only)


M10135_01

Erase Prefix & Suffix Data (Standard)


M10342_01

Turn on Timestamp Prefix


M10343_02

Turn off Timestamp Prefix

9.10 Text Command

Use Text Command to determine whether a text command from the host is to be received.


M10136_01

Reader Text Commands Off (Standard)


M10137_01

Reader Text Commands On

9.11 Beeper / Vibrator

Press the configuration symbols below in order to activate or deactivate the beeper and vibrator functions.


M10140_01

Beep On Vibrate On (Standard)


M10141_02

Beep Off Vibrate On


M10142_01

Beep On Vibrate Off


M10143_02

Beep Off Vibrate Off


M10194_01

Beep Volume 0 %


M10195_01

Beep Volume 33 %


M10196_01

Beep Volume 67 %


M10197_01

Beep Volume 100%

9.12 Code settings

9.12.1 Aztec Code


M10019_01

Aztec On (Standard)


M10018_01

Aztec Off


M10020_01

Aztec Inverse On


M10021_01

Aztec Inverse & Normal On

9.12.2 Codabar


M10022_01

Codabar On (Standard)


M10023_01

Codabar Off


M10026_01

Codablock F Off


M10027_01

Codablock F On


M10538_01

Keep Codabar Start and Stop Delimiters – Default


M10537_01

Remove Codabar Start and Stop Delimiters

9.12.3 Code 11


M10028_02

Code 11 Off (Standard)


M10029_02

Code 11 On


M10031_02

Code 11 Checksum Stripped from Result On


M10550_01

Enable Code 11 Decoding with one checksum digit checked, and remove checksum from output

9.12.4 Code 32 (Italian Pharmacode)


M10238_02

Code 32 (Italian Pharmacode) Off (Standard)


M10239_02

Code 32 (Italian Pharmacode) On

9.12.5 Code 39


M10033_02

Code 39 On (Standard)


M10034_02

Code 39 Off


M10035_01

Code 39 Checksum Off


M10036_01

Code 39 Checksum On


M10037_01

Code 39 Checksum Stripped from Result On


M10038_01

Code 39 Extended Full ASCII Off


M10039_01

Code 39 Extended Full ASCII In

9.12.6 Code 49


M10458_01

Enable Code 49


M10459_01

Disable Code 49

9.12.7 Trioptic Barcode


M10040_01

Trioptic Off (Standard)


M10041_01

Trioptic On


M10445_01

Trioptic - Disable Reverse Order option (Bit 3)


M10446_01

Trioptic - Enable Reverse Order option (Bit 3)

9.12.8 Code 93


M10042_01

Code 93 On


M10043_01

Code 93 Off

9.12.9 Code 128


M10044_01

Code 128 On (Standard)


M10045_01

Code 128 off

9.12.10 Composite Barcode


M10046_01

Composite off (Standard)


M10047_02

Composite on

9.12.11 Data Matrix


M10048_01

Data Matrix Rectangular & Rectangular Extended Off


M10049_01

Data Matrix Rectangular On & Rectangular Extended Off (Standard)


M10050_03

Data Matrix Inverse Off


M10051_03

Data Matrix Inverse On (Standard)


M10470_01

Data Matrix Rectangular On & Rectangular Extended On

9.12.12 Grid Matrix


M10535_01

Enable Grid Matrix Symbology


M10536_01

Disable Grid Matrix Symbology – Default


M10544_01

Enable Grid Matrix & Grid Matrix Inverse Decoding


M10545_01

Enable Grid Matrix & Grid Matrix Mirror Decoding


M10546_01

Enable Grid Matrix, Grid Matrix Inverse & Grid Matrix Mirror Decoding

9.12.13 GoCode


M10547_01

Enable GoCode & GoCode Inverse Decoding


M10548_01

Enable GoCode & GoCode Mirror Decoding


M10549_01

Enable GoCode, GoCode Inverse & GoCode Mirror Decoding

9.12.14 GS1 Databar


M10054_01

All GS1 DataBar On (Standard)


M10055_01

All GS1 DataBar Off


M10056_03

GS1 DataBar Limited On


M10057_03

GS1 DataBar Omnidirectional and GS1 DataBar Truncated On


M10058_03

GS1 DataBar Stacked and GS1 DataBar Stacked Omnidirectional On


M10059_03

GS1 DataBar Expanded On


M10353_03

GS1 DataBar Stacked and GS1 DataBar Stacked Omnidirectional Off


M10354_02

GS1 DataBar Limited Off


M10355_02

GS1 DataBar Omnidirectional and GS1 DataBar Truncated Off


M10356_02

GS1 DataBar Expanded Stacked Off


M10357_02

GS1 DataBar Expanded Stacked On


M10417_02

GS1 DataBar Expanded Off

9.12.15 Interleaved 2 of 5


M10060_01

Interleaved 2 of 5 On (Standard)


M10061_01

Interleaved 2 of 5 Off


M10234_01

Int 2 of 5 Checksum Off (Standard)


M10235_01

Int 2 of 5 Checksum On


M10065_01

Int 2 of 5 Checksum Stripped from Result On

9.12.16 Maxicode


M10066_01

Maxicode Off (Standard)


M10067_02

Maxicode on

9.12.17 Matrix 2 of 5


M10068_01

Matrix Code 2 of 5 Off (Standard)


M10069_01

Matrix Code 2 of 5 On

9.12.18 PDF417


M10070_01

PDF417 On (Standard)


M10071_01

PDF417 Off


M10072_01

Micro PDF417 Off (Standard)


M10073_01

Micro PDF417 On

9.12.19 MSI Plessey


M10076_01

MSI Plessey On


M10077_01

MSI Plessey Off (Standard)

9.12.20 Hong Kong 2 of 5


M10078_02

Hong Kong 2 of 5 Off (Standard)


M10079_01

Hong Kong 2 of 5 On

9.12.21 NEC 2 of 5


M10082_01

NEC 2 of 5 on


M10083_01

NEC 2 of 5 off

9.12.22 QR Code


M10095_04

Standard QR Code On (Standard)


M10101_02

All QR Code on


M10351_03

All QR Code Off

9.12.23 Telepen


M10103_01

Telepen On


M10104_01

Telepen Off (Standard)


M10520_01

Output Telepen as Numeric


M10521_01

Output Telepen as ASCII

9.12.24 UPC/EAN


M10105_01

UPC On
Scanner reads UPC-A, UPC-E, EAN-13 and EAN-8


M10106_01

UPC Off


M10107_01

UPC E Expansion Off (Standard)
Scanner expands UPC-E bar codes into UPC-A barcodes


M10108_01

UPC E Expansion On
Scanner expands UPC-E bar codes into UPC-A barcodes


M10109_01

UPC Supplemental Off (Standard)
Reader will scan the two or five digit supplemental barcode that accompanies some UPC/EAN barcodes


M10110_01

UPC Supplemental On
Reader will scan the two or five digit supplemental barcode that accompanies some UPC/EAN barcodes


M10475_01

Transmit UPC-A Check Digit


M10476_01

Do Not Transmit UPC-A Check Digit


M10477_01

Transmit UPC-A Number System


M10478_01

Do Not Transmit UPC-A Number System


M10479_01

Transmit UPC-E Check Digit


M10480_01

Do Not Transmit UPC-E Check Digit


M10481_01

Transmit UPC-E Number System


M10482_01

Do Not Transmit UPC-E Number System


M10483_01

Transmit EAN-13 Check Digit


M10484_01

Do Not Transmit EAN-13 Check Digit


M10485_01

Transmit EAN-8 Check Digit


M10486_01

Do Not Transmit EAN-8 Check Digit


M10487_01

Do Not Convert EAN-8 to EAN-13


M10488_01

Convert EAN-8 to EAN-13


M10489_01

Do Not Convert UPC-A to EAN-13


M10490_01

Convert UPC-A to EAN-13


M10491_01

Do Not Convert Bookland EAN-13 to ISBN


M10492_01

Convert Bookland EAN-13 to ISBN


M10493_01

Do Not Convert Bookland EAN-13 to ISSN


M10494_01

Convert Bookland EAN-13 to ISSN

9.12.25 UK Plessey


M10236_02

UK Plessey Off (Standard)


M10237_02

UK Plessey ON

9.12.26 Straight 2 of 5


M10240_01

Straight 2 of 5 Off (Standard)


M10241_01

Straight 2 of 5 On

9.12.27 Han Xin


M10248_01

an Xin On


M10249_01

Han Xin Off (Standard)

9.12.28 Pharmacode


M10274_03

Pharmacode Off (Standard)


M10275_02

Pharmacode On


M10280_02

Pharmacode Reverse Barcode Decoding (Right to Left)


M10281_02

Pharmacode Normal Barcode Decoding (Left to Right)

9.12.29 Post Codes


M10282_02

USPS Postnet On


M10283_02

USPS Postnet Off (Standard)


M10284_02

USPS Planet On


M10285_02

USPS Planet Off (Standard)


M10286_02

USPS Intelligent Mail/IMB/ 4-State CB On


M10287_02

USPS Intelligent Mail/IMB/ 4-State CB Off (Standard)


M10288_02

Australian Post On


M10289_02

Australian Post Off (Standard)


M10290_02

KIX (Dutch Post) Code On


M10291_02

KIX (Dutch Post) Code Off (Standard)


M10292_02

Japan Post On


M10293_02

Japan Post Off (Standard)


M10294_02

UK Royal Mail On


M10295_02

UK Royal Mail Off(Standard)


M10358_01

Korean Post On


M10359_01

Korean Post Off (Standard)


M10360_02

Universal Postal Union ID-Tag On


M10361_02

Univeral Postal Union ID-Tag Off (Standard)

9.13 Other commands


M10138_02

Clear All Stored Data and Images


M10139_02

Clear all JavaScript Rules


M10157_01

Reader ID and Firmware Version

Save settings


M10159_01

Save All Reader Settings


M10162_01

Cell Phone Reading Enhancement Off (Standard)


M10163_01

Cell Phone Reading Enhancement On


M10220_03 Scan this barcode to translate all alphabetic data to upper case


M10439_01 Convert Barcode Data to Lowercase


M10441_01

Control Character Input - Language Default - Default


M10442_01

Control Character Input - Ctrl + Character


M10443_01

Control Character Input - Alt + Keypad


M10444_01

Control Character Input -Alt + Leading Zero


M10522_01

Output Good Read on RTS line Off


M10523_01

Output Good Read on RTS line - Active Low

M10524_01

Output Good Read on RTS line - Active High

M10296_01

Reboot Reader

10. Maintenance Instructions

NOTE!

- This wenglor sensor is maintenance-free
- It's advisable to clean the transducer and the display, and to check the plug connections at regular intervals
- Do not clean the sensor with solvents or cleansers which could damage the product
- The product must be protected against contamination during initial start-up

11. Proper Disposal

wenglor sensoric GmbH does not accept the return of unusable or irreparable products. Respectively valid national waste disposal regulations apply to product disposal.

12. Appendix

12.1 List of Changes to Operating Instructions

Version	Date	Description/change	Associated software version
1.0.0	12.09.2017	Initial version of the operating instructions	
1.1.0	04.04.2019	5.2 on page 14	

12.2 Check list for initial start-up

- This checklist is intended to provide assistance during initial start-up.
- This check list does not replace the checks before intitial start-up as well as the regular checks on the part of specialized personnel

1. Standards and guidelines; selecting the ESPE		
Are the safety rules for the machine based on applicable standards and guidelines?	Yes	No
	Yes	No
	Yes	No
2. Safety clearance		
Was the safety clearance calculated according to applicable standards?	Yes	No

12.3 EU Declaration of Conformity

The EU declaration of conformity can be found on our website at www.wenglor.com in download area.