PROGLOVE

PROGLOVE MARK - USER MANUAL

First Steps | Configuration | FAQ | Error Correction | Safety and Regulations | Technical Specification

www.proglove.com

"Production processes cannot do without the flexibility and adaptability of people. Our aim is to improve and facilitate processes for people."

Thomas Kirchner
ProGlove Co-Founder

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Safety Information

Before integrating and commissioning the ProGlove system, please read this manual carefully and follow all safety guidelines.

Document Information

Title of the document: ProGlove MARK - User Manual (US)

Date of publication: 25.01.2018

Version: V1.2 us

Declaration of Conformity

If you require a declaration of conformity or other certification documents, please contact us@proglove.com We will gladly send you the requested documents and information.

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1. OVERVIEW

ProGlove MARK

The ProGlove MARK intelligent glove enables workers in manufacturing and logistics to work faster, safer and more ergonomically. This makes work processes more efficient while improving quality and sustainability.

Scanning can be done hands free and the user receives direct feedback via their ProGlove MARK.

About this Manual

This User Manual contains product specifications, installation instructions, and programming instructions for the ProGlove MARK system.

ProGlove scanners are factory pre-programmed for the most common terminal and communication devices.

If you want to change settings, follow the instructions in this manual to reconfigure the ProGlove Scanner using the ProGlove Configuration Tool.

Unpacking

After opening the shipping carton with the ProGlove items, proceed as follows:

- Check the contents to make sure everything has been delivered correctly

- Store the shipping container for future storage or shipping

- Check the goods for damage. Immediately report any damage to the shipping company or ProGlove Support

DELIVERY SCOPE

MARK	
	• ProGlove Scanner MARK

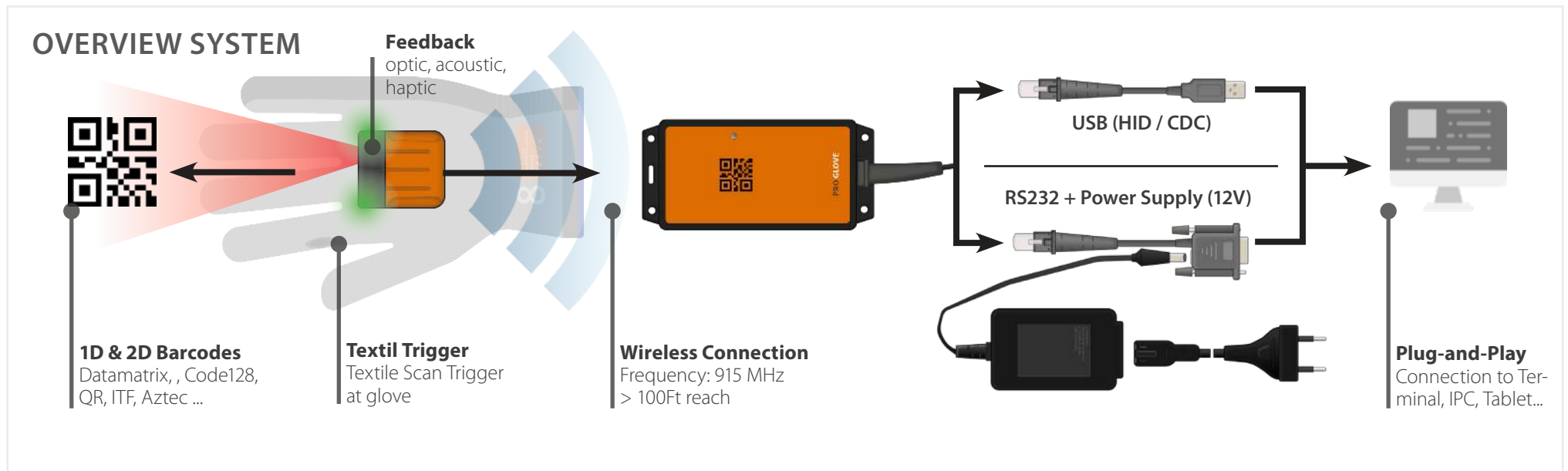| Access Point USB / RS232		
	USB Bundle: • ProGlove Access Point • USB-Patch Cable	
	RS232 Bundle: • ProGlove Access Point • RS232-Patch Cable	• Power Supply • Power Cable for Power Supply Unit

Charging Station	
	EU Bundle: • ProGlove Charger • Power Supply

The ProGlove system consists of a scanner with which all common 1D and 2D barcode types can be read. The scanning process is triggered by a tactile button integrated in the ProGlove standard glove. Alternatively, ProGlove Longlife can be used. The barcode data is transmitted to the Access Point via 915 MHz. The Access Point can be connected via USB (HID / CDC) or via RS232 with any PC, terminal, tablet, IPC, or similar device. ProGlove MARK can give the user direct feedback via optical, haptic, and acoustic signals.

OVERVIEW SYSTEM

Feedback
optic, acoustic, haptic

USB (HID / CDC)

RS232 + Power Supply (12V)

1D & 2D Barcodes
Datamatrix, , Code128, QR, ITF, Aztec ...

Textil Trigger
Textile Scan Trigger at glove

Wireless Connection
Frequency: 915 MHz
> 100Ft reach

Plug-and-Play
Connection to Ter-minal, IPC, Tablet...

MARK

The scanner MARK is a lightweight, compact, and robust scanner that handles 1D and 2D barcodes. The short-range scanning module is designed for barcode scanning in the gripping range. The lithium polymer battery has a running time of 8-10 hours depending on the intensity of use of the MARK scanner. Feedback signals are returned haptically via a vibration module, acoustically via audio signals, and optically via LEDs (see signal table).

Clip Rail

Feedback LED

Scan LED

Focus LED

Pins

Imager

Label with Serial Number

Locking Screws

Dimensions:	2 x 1.75 x 0.5 in
Weight:	approx. 1.4 oz
Battery:	Lithium Polymer (430mAh)
Feedback Signal:	haptic, optical, acoustic
Transmission:	Sub-1 GHz (915 MHz)
IP-Protection Class:	IP 54 (dust and splash-proof)
Operating Temperature:	32 to 120 °F

ACCESS POINT

The access point receives data from the barcodes scanned by the MARK scanner. This is connected to the PC, IPS, terminal or tablet via USB or RS232 cable. The pairing code is located on the top of the access point. A connection between the scanner and the access point is established by scanning with MARK.

Pairing
Barcode

Cable Release
Opening

Feedback
LED

Fixing Hole

Label with
Serial Number

RJ45 Socket

Dimensions:	5.5 x 2.5 x 1.3 in
Weight:	approx. 3.5 oz
Connection:	RJ-45
Feedback Signal:	optical
Transmission:	Sub-1 GHz (915 MHz)
IP-Protection Class:	IP 22
Operating Temperature:	32 to 120°F

CHARGING STATION

The charging station can be used to charge two MARKs in parallel. The charging station is powered by a USB power supply. It takes approximately 3 hours to fully charge a MARK scanner. The charging status is indicated by the LEDs of the MARK scanners. In charging mode, the LEDs of the MARK are pulsating red. When the battery is charged, the LEDs are pulsating green. When charging the MARK scanner is automatically unpaired from the access point. For more information, please refer to the keyword „cradle function".

Charging Cradle

Pins

Label with Serial Number

Dimensions::	4.75 x 2.5 x 1.5 in
Weight:	approx. 7 oz
Charging Time:	3hrs via Power Supply SAW-0501200
Power Supply:	5 VDC (1,2A) via Power Supply SAW-0501200
IP-Protection Class:	IP 40
Operating Temperature:	32 to 120 °F

STANDARD GLOVE

The standard glove has a tactile trigger worked into the fabric of the glove and fastening clip that enables the user to safety and ergonomically scan hands free. The glove is a breathable working glove (EN399:2131) with nitrile/Pu coated palm. Trigger and cable are glued inside the glove to protect the electronics and maximize comfort. The trigger is reinforced with a Diamond polyacrylic cap to ensure long life and intensive use. The standard glove comes in four different sizes to ensure optimal fit and comfort when in use. Gloves are available with the trigger button on either the left or the right side for use preference.

Textile Trigger

Fastening Clip

Label with size Designation

Nitrile / PU coating

Trigger: The tactile trigger on the side of the index finger

Sizes: Industry Standard Sizes 7 - 10
                    (Textile Trigger on left or right)

Coating: Nitril-/ PU Coating
                    Back of hand and fingers free of coating

Standarts: EN 388 (2131)
                    EN 420
                    RoHS
                    CE-Marking

LONGLIFE

The ProGlove Longlife is an alternative to the ProGlove Standard glove. The flexibility of the ProGlove Longlife allows the user a wide range of use cases. The Longlife topcoat can be used in situations where fingertips are required.

The ProGlove Longlife can also be worn over other (specialized) gloves. This enables use cases where there are specific industrial safety requirements (high cutting protection, thermal insulation, protection against substances, etc.). The scan trigger button is located on the palm of the ProGlove Longlife. The Longlife is characterized by a long service life.

Trigger: Trigger sewn into the palm

Sizes: S, M, L (left or right release)

ESD: ESD version available on request

Standards: CE marking
                    RoHS

Fastening Clip

Variable Velcro Fastener

Palm Trigger

2. FIRST STEPS WITH PROGLOVE MARK

Charging the ProGlove MARK...

Connect the Charging Station to the Power Supply.
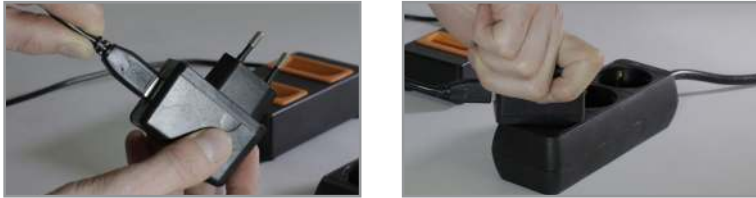
1. Connect the USB power supply unit to the plug. Connect the plug to an external power source.

Charging the ProGlove MARK in the Charging Cradle.

1. Insert the MARK scanner diagonally into the charging station. The pins point downwards. Two short, high-pitched beeps and a green flashing of the LEDs on the scanner confirm correct insertion.

2. During the charging process, the LEDs of the scanners glow a pulsating red. When charging is complete, the scanner's LEDs will glow a pulsating green.

Hint: In standard configuration a complete charge takes 3 hours. A quick charge mode can be activated with the configuration tool. The charging time is reduced to 1 hour and 30 minutes.

Connecting the Access Point...

Connect the connecting cable to the Access Point.

1. Connect the RJ45 connector of the USB or RS232 cable to the RJ45 jack of the access point.

2. A clear clicking-in sound can be heard when the fastening is correct.

3. Then connect the USB or RS232 cable to the PC, terminal, tablet or similar.

4. When using the RS232 cable, connect the supplied power supply unit to the RS232 connector. See the Hint below.

Disconnect the connection cable from the Access Point.

1. When unplugging the connection cable, the safety lock must be pressed. This can be unlocked with the help of an elongated object (e. g. paper clip) through the opening on the top of the access point.

2. Pull the connection cable out of the RJ45 socket while holding down the safety lock.

Hint: If the Access Point is connected with the RS232 cable, an external power source must be used. The RS232 connector is equipped with the corresponding socket. Power supply and connection cable are included in the package.

Switch on the ProGlove MARK...

Attach ProGlove MARK to the glove and switch it on.

	1. Position the MARK scanner with the back towards the front end of the mounting clip. The pins point downwards.
	2. Push the scanner backwards until it clicks into place. The correct fastening is clearly audible with a clicking sound.
	3. Hold the tactile trigger on the index finger for approximately 1 second with your thumb. This starts the scanner.
	4. The scanner's LEDs light up green briefly. A short beep confirms that the scanner is ready for use.

Hint: After 15 minutes (default setting, customizable), the MARK scanner switches to „sleep mode". To reactivate the unit, repeat step 3. This time period can be set with the configuration tool.

Connect the ProGlove MARK...

Connect ProGlove MARK to the Access Point via scanning.
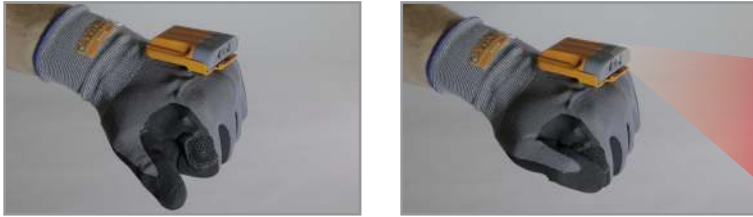
1. Pressing the tactile trigger triggers the scanning process. The LED illumination and the 1D/2D scan module are activated.

2. Pressing and holding down the button will keep both the LED illumination and the 1D/2D scan module active.

3. Point the sighting point of the red scanning field towards the access point to scan the pairing code.

4. The scanner flashes green for a moment, then blue. Two short beeps with a vibration are returned as feedback.

5. The scanner is now connected to this access point. The connection is disconnected when a pairing code of another access point is scanned. The connection is also disconnected when the scanner is placed in the charger.

Hint 1: It is possible to connect several ProGlove MARKS to one access point.

Hint 2: The automatic disconnection of the connection between the scanner MARK and the access point can be deactivated with the configuration tool under „Cradle function".

Scanning with the ProGlove MARK.......

1. Press the textile trigger with your thumb on the index finger to activate the red illumination of the 1D/2D scan module.

2. Hold down the tactile trigger to keep the 1D/2D scan module active.
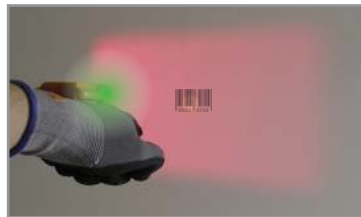
3. Barcodes can be detected within the red rectangular field. The point in the middle of the barcode can be used to target the barcode (for further information see chapter 3 - Scanning with MARK).

4. The lighting is deactivated when a barcode is detected. A short beep and a green light on the LEDs on the scanner confirm the scan.

5. After the barcode information has been transmitted, ProGlove MARK returns the respective feedback signal.

Positive feedback - successful transmission: the LEDs on the scanner glow green and a short beep is heard. The barcode was detected and sent.

Negative Feedback - failed transmission: the LEDs on the scanner turn red. A short vibration signal can be felt. The barcode was not recognized and not sent.

Hint 1: The feedback signals can be set with the configuration tool under „Device settings".

Removing the MARK Scanner from the glove.

1. Press with your fingers between the scanner and the glove attachment clip.

2. Press the scanner slightly up and slide it forward.

! **Hint:** ProGlove MARK switches itself off automatically after a predefined time (factory setting of 15min) when switching into „sleep mode".

Signal Table MARK

Optical Signal	Acoustic Signal	Haptic signal	Description
In Scan Mode ...			
green	short ascending beep	-	scanner is operational
short green, short blue	two short high-pitched beeps	short vibration	pairing code on Access Point is scanned
twice green	two short high-pitched beeps	short vibration	positive feedback: barcode has been captured and sent
twice red	short low-pitched beep	short vibration	negative feedback: barcode not caputred and not sent
orange	-	-	battery of the MARK scanner is 95% empty
In Charge Mode...			
twice green	two short high-pitched beeps	-	scanner was inserted correctly into the charger cradle
pulsating red	-	-	scanner is being charged
pulsating green	-	-	scanner is charged

Signal Table for the Access Point

none	-	-	Access Point is not connected to terminal device
green	-	-	Access Point iis correctly connected to terminal device
short blue	-	-	Configuration was transferred by scanning configuration barcode

Scanning Module Specifications

Omni-directional scanning:

The ProGlove MARK is an omni-directional scanner. This means that the ProGlove MARK scans a wide range of barcodes and symbols. For this purpose, the scan reading field is simply placed over the barcode. The ProGlove MARK will then record and decode it.

Decoding:

The ProGlove MARK can reliably scan all relevant 1D (linear) barcodes, 2D-stack codes (such as PDF417) or 2D matrix symbols (such as DataMatrix) with the help of powerful algorithms. The information from the barcode is sent to the host immediately after decoding. The scanner is then ready for scanning further symbols.

Data formatting:

The string of a decoded code can be processed and linked by simple or extended data formatting.

Decoder Reading Area

Smallest symbol in the barcode (the mil (mm) number at the front shows the size of the smallest function in the barcode)	Possible distance between user and barcode
4 mil (0.102 mm) Code 39	3.3 in./8.4 cm to 8.8 in./22.4 cm
5 mil (0.127 mm) Code 128	2.8 in./7.1 cm to 8.2 in./20.8 cm
5 mil (0.127 mm) Code 39	2.0 in./5.08 cm to 13.5 in./34.3 cm

5 mil (0.127 mm) PDF417	3.1 in./7.9 cm to 8.4 in./21.3 cm
10 mil (0.254 mm) DataMatrix Example: A 10 mil DataMatrix symbol that can carry 25 alphanumeric characters has a size of 4.57 mm * 4.57 mm.	2.9 in./7.4 cm to 10.1 in./25.7 cm
100% UPCA	1.8 in./4.6 cm to 26.0 in./66.0 cm
20 mil (0.508 mm) Code 39	2.0 in./5.08 cm to 30.0 in./76.2 cm

Decoder Settings

The ProGlove Mark automatically detects barcodes when the user activates the trigger. The ProGlove MARK supports different reading configurations, which are described below:

- **Pick-List mode: The LED pointer is activated. MARK will only read LED barcodes.**

- **Manual (default): The scan unit starts capturing images when you press the shutter release button. As soon as a barcode is detected in the scan field it is automatically decoded and transmitted.**

- **Display mode: When scanning barcodes from displays or digital displays the ProGlove MARK can compensate for reflections and detect barcodes faster via the display mode.**

The ProGlove configuration tool can be used to change the trigger modes.

4. ACCESS POINT CONNECTION

The ProGlove system supports RS232, USB HID, and USB CDC. Information on the individual interface types is described in the following section:

USB HID (Human Interface Device)

The ProGlove emulates keyboard input via USB HID. The following keyboard layouts are supported:

Croation
Czech
English (GB)
English (US)
French (Belgium)
French (Canada)
French (France)
German (Germany)
German (Switzerland)
Italian
Portuguese (Brazil)
Portuguese (Portugal)
Spanish
Slovak
Slovenian

The keyboard layout can be changed with the ProGlove configuration tool.

USB CDC (Communications Device Class)

The ProGlove supports USB CDC. In USB CDC mode, the Access Point is recognized by the operating system as a serial device.

Baud Rate:	All standard baud rates are supported. Can be set with the configuration tool.
Data-Bits:	8
Stop Bits:	1
Parity:	NONE
Data Flow:	OFF
Handshake Controll:	OFF

RS232

The ProGlove Access Point can be connected and operated serially via an RS232 cable.

The Baud Rate can be set with ProGlove configuration tool. All standard baud rates are supported:

Data-Bits:	8
Stop Bits:	1
Parity:	NONE
Data Flow:	OFF
Handshake Controll:	OFF

5. CONFIGURATION TOOL

The configuration tool, which can be accessed online, is used for the individual configuration of the ProGlove system. It's under the link: http://config.proglove.de/ and can also be used offline on all operating systems by downloading it. For mobile access, the tool is optimized for smart-phones and tablets (responsive), so you can customize the configuration of the system anytime, anywhere. The configuration is done in four steps:

1. First of all, general settings are made for the barcodes used (e. g. exclusion of certain barcode types or inverse codes, etc.).

2. Subsequently, the data can be „manipulated" with the help of simple and complex rules (e. g. pre- and suffix, if-then rules etc.).

3. Thirdly, further device settings are made (e. g. type of connection, sleep mode, feedback options, etc.).

4. Finally, the configurations made are transferred to the devices by scanning configuration barcodes. The individually set configuration can be saved and printed to distribute to further customize at a later time.

Overview Configuration Tool

1. Barcode Settings	2. Data Formatting	3. Device Setting	4. Configuration Barcordes
Barcode type specific settings Inverse codes	Prefix und Suffix Advanced Formatting (complex rules)	I/O (Connection) Feedback Energy Cradle Engine	Overview Settings Configuration Barcodes Print / Save Configuration

CONFIGURATION

The individual configuration of the ProGlove system can be done via the configuration tool which is available online. It can be accessed via the link: http://config.proglove.de/ It is optimized for use on mobile devices and is also available as an offline version that can be downloaded. This means that the configuration tool can be used on almost any device and with all conventional operating systems.

General Navigation in the User Interface

After you have downloaded the configuration tool or opened it in your browser, you will find the following user interface. The three marked areas are described below:
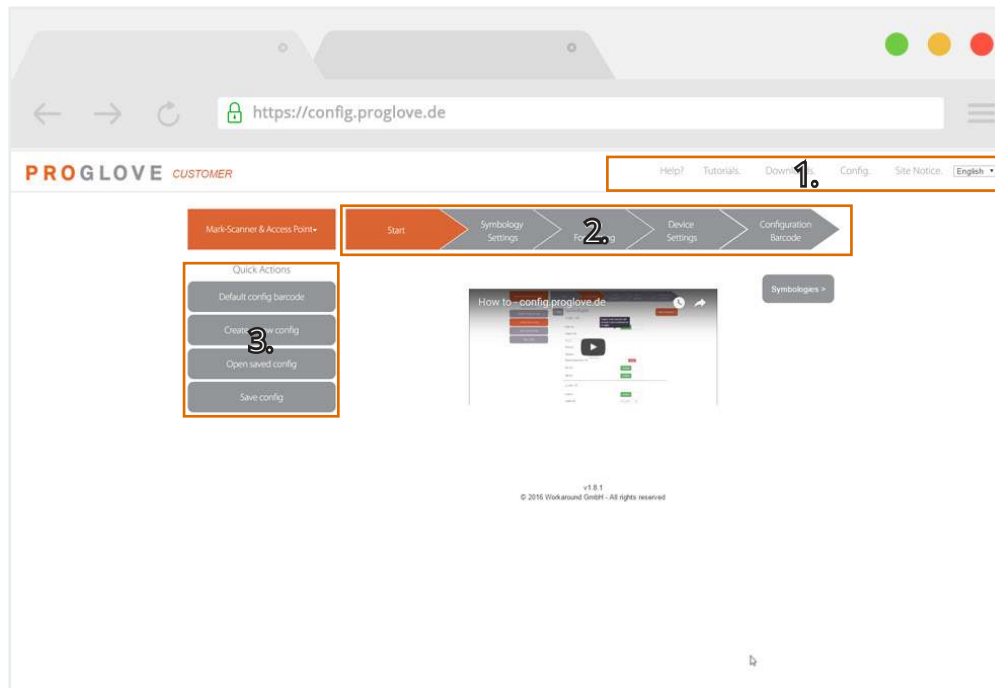
1. Header line - General use of the configuration tool	
Help	ProGlove address and contact details for support requests by email or phone.
Instructions	Video tutorials for general use of the configuration tool and setting up complex rules.
Downloads	Download the configuration tool for offline availability at the workstation for different operating systems (Linux, OS X, Windows).
Configs	Video tutorials for general use of the configuration tool.
Imprint	Imprint
Language Selection	German/English/French/Spanish
2. Configuration - Step-by-step presentation of the configuration via tabs	
Start	Video tutorial on how to use the configuration tool.

|	
Barcode settings	Settings specific for certain barcode types and inverse barcodes.
Data formatting	Barcode data manipulation through pre- and suffix rules as well as advanced rules for more complex logic over if-then links.
Device settings	Settings for system connection, feedback options, energy, cradle and engine settings.
Configuration barcode	Transferring the settings made by scanning configuration barcodes.
3. Quick settings - Quick access for configuration	
Standard config barcode	Default configuration to reset to factory defaults.
Create new config	Create a new configuration.
Open config	Open a configuration that has already been saved locally as a file.
Save config	Local saving of a created configuration as a file.

Navigation within the configuration settings:

You can use the tabs above the settings to set the configuration in sequence. To complete an operation and go to the next step, either click on the following tab or the button to the right with the same name. If you want to go back to the previous step, click the button on the left with the name of the previous step.

Example:
Current step: Barcode settings
Previous step: Start
Next step: Data formatting

Hint: By moving the mouse over the configuration interface, you can obtain description texts for each selectable variant which explains the individual configuration options in detail.
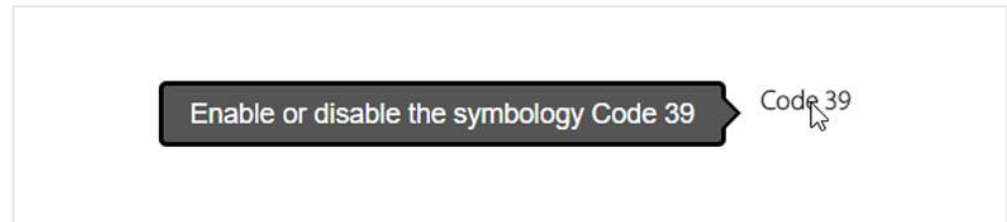
To configure the ProGlove system, please follow the steps below.

Step 0: Start

Start your configuration by either going to Create New Config under Quick Settings or selecting Barcode Settings in the top of the tab.

Step 1: Barcode Settings

Target:
Setting the MARK scanner for specific barcode types and inverse barcodes.

Application examples:
1. Avoid miss-scanns with multiple barcode types on one label by switching off all barcodes that are not required.
2. Increase of the scan performance by reducing the amount of data to be processed.

Standard configuration:
All barcode types are switched on and can be scanned. Inverse Barcodes are deactivated.

Barcode Settings	
Barcode Types	Activation/deactivation of specific barcode types.
	Detection of certain barcode lengths, edge tolerances and specific check digits.
	Specific settings can be made for the following barcode types:
	Code 128, Code 39, Interleaved 2 of 5 (ITF), UPC/EAN, Data Matrix, Portable File (PDF417), Code 93, Aztec

Inverse	Enables the detection of inverse barcodes.
	Individual activation for each barcode type.
	Activation of the function guarantees simultaneous scanning of inverse and non-inverse barcodes.

Step 2: Data Formatting
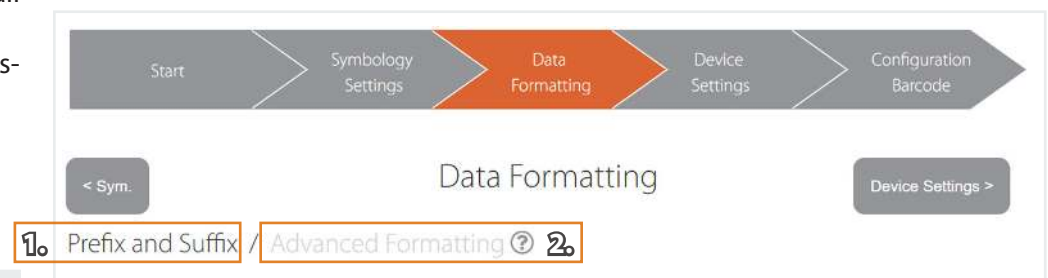
When data formatting, it is possible to perform two different „levels" of data manipulation. First, the „simple" **prefix and suffix formatting** is discussed (1.):

Target::
Manipulation of the data output by specifying prefixes and suffixes.

Application examples:
1. Confirmation „Enter" as suffix to jump to the mask of the next control panel.

2. Certain digit identifier (e. g. workstation number) as prefix to identify the respective workstation.

Default configuration::
No prefix defined, suffix set with „Enter".

Data Formatting - Prefix und Suffix

Prefix	Selection of a prefix from the presets or manual text input via the keyboard.
	Configuration example prefix H-Tab: *To define the desired prefix, first click in the prefix field and then click on the H-Tab character in the specifications.*
Suffix	Selection of a suffix from the defaults or manual text input via the keyboard.
	Configuration example suffix „D": *To define the desired suffix, first click in the suffix field and then enter the text character „D" on your keyboard.*

Hint:
1. You can delete the entry by moving the mouse over the field and clicking on the X that appears.

2. If you want to enter more than one character manually, you must do this in advanced data formatting, which you will find next to the tab Prefix and Suffix.

Advanced Formatting

Target:
Conversion of specific logic with resulting data manipulation is based on rules that can be provided with conditions and actions.

Application Examples:
1. Replacing defined sequences within a barcode if it starts with a defined specific starting digit.

2.Replace each Group Seperator (GS) with a hash (#).

Default Configuration
Does not include extended data formatting.

Navigation:
1. The sequence of the individual rules can be changed using the arrows in the «Sequence» column.

2. Rules and conditions can be deleted by clicking on the trash symbol.

3. Within a rule, up to four conditions and actions can be added.

4. Up to 16 rules can be defined in total. You can add your own rules by clicking on «Add rule».

5. Frequently used rules can be added via «Add predefined rule».
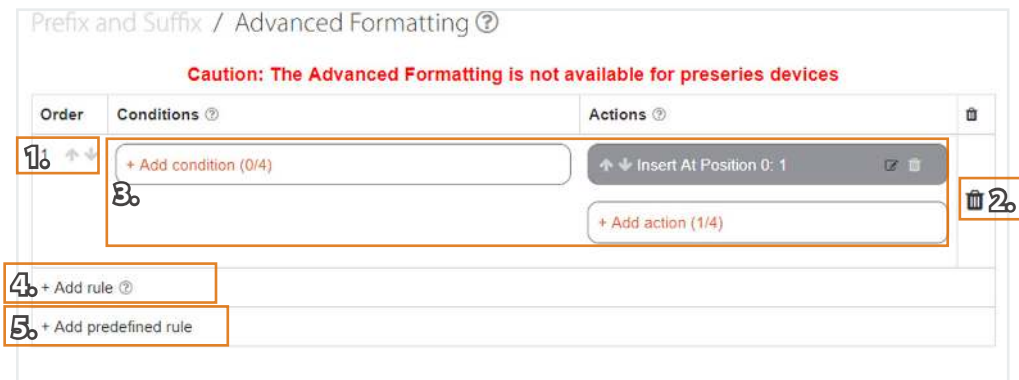
Data Formating - Prefix und Suffix

Terms

Selection of the barcode according to the criteria: code types, barcode length, and barcode data.

The system has the ability to configure four different conditions per rule that are linked to an AND function and are checked at every scan. If you omit conditions, the action is executed automatically.

Configuration example, condition Type 128:
To modify type 128, choose Code types in the condition, „Include Code Types" and „Code 128". The selection is then confirmed by clicking on the Save icon.

Actions

Selection of the action to be executed: Insert, Replace, and Delete.

Configuration example suffix Pro:
To add the suffix „Pro" to barcode type 128, select the Insert and Suffix action and type „Pro" as a sequence. The action is then confirmed by clicking the Save icon.

Hint:
A maximum of 16 rules with 4 conditions and 4 actions can be performed.

The stored complex rules are later transferred to the Receiver (Access Point) by scanning the third barcode in the Configuration Barcode tab. Therefore, it is essential to scan this barcode in the last step «Configuration Barcode».

Step 3: Device Settings
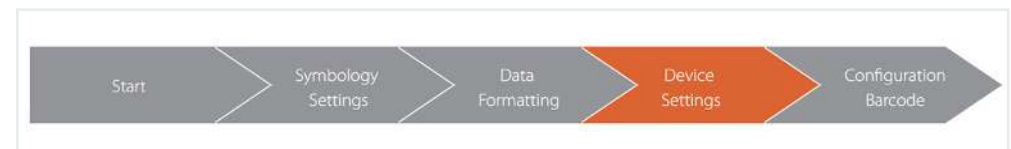
Target:
Settings for system connection, feedback options, energy, cradle, and engine settings.

Application Settings:
1. setting the selected port and keyboard layout.
2. Adjust the audio feedback to silent.
3. Activate Display Mode for optimized scanning performance when scanning barcodes displayed on displays.

Default Configuration:

Feedback Profile:	Normal
ACK/NACK Transmission:	On
Low battery warning:	On
Sleep Mode:	15 min
Delete connection to the access point when loading:	On
Blurred 1D Processing:	Off
Aim Mode:	Off
Mobile Phone/Display Mode:	Off

I/O Settings - Connecting the system to your workstation

USB Output Mode	This setting selects the transfer mode of the USB interface: HID - Human Interface Device CDC - Communications Device Class
USB Keyboard Layout	Here you can set the language settings of the Pro-Glove system according to your keyboard settings at the workstation.
HID Speed	Here you can set the transfer speed of the USB connection to the speed of your terminal.
RS232 Baudrate	If you have a serial port (RS232), you can set the transmission speed here.

Feedback Settings - Feedback to users

Feedback Profile	Here you can adjust the signal length of the LED, vibration unit and the audio signal.
ACK/NACK Transmission Feedback	Here you can switch on and off the standard red LED and the vibration feedback of the MARK in case of a transmission error.
Low battery warning	Here you can turn on or off a feedback warning when the battery is low.

Energy Settings - Saving energy with MARK

Sleep Mode	This is where you can set the time after which MARK enters power saving mode. To activate MARK from sleep mode, the tactile trigger must be operated once. Afterwards it takes about 4 seconds until the boot process is finished.

Cradle Settings - Settings for the charger cradle

Delete connection to the access point during loading	Here you can activate or deactivate the function of the MARK, which automatically disconnects itself from the previously connected receiver (access point) after it has been removed from the charger. **Hint:** If this function is activated, the operator must reconnect the device to the receiver (access point) each time the MARK is removed from the charger. **Application example:** If several MARKs with different receivers are used by different operators, it is possible to prevent the operator from scanning into the wrong access points.

Engine Settings - Adaptation of the MARK scan module

Fuzzy 1D processing	If you often have incorrectly printed, soiled or damaged 1D barcodes in your application, activating this feature enables improved and faster scanning.
Sighting Mode	If you have several barcodes on a label, the activation of this function only reads barcodes that are below the center focus point. This enables a more targeted and faster detection of the desired barcode.
Mobile/Display Mode	If you need to read barcodes on your mobile phone and on screens, this function ensures improved capture.

Step 4: Barcode Configuration

Prerequisite:
The MARK and the Access Point must be connected (supplied with power), switched on and connected to each other.

Target:
Configure the MARK and the Access Point with the settings you have made.

Navigation:
When barcode Configuration is complete, all configured settings are displayed on the left-hand side according to the configuration sequence. Here you can check the settings again.

On the right-hand side you will find instructions for transferring the settings to your devices. To do this, follow the instructions.

Hint:
If you wish to manually install the configuration at your workstation or any other location, you can print the entire page of the configuration barcode by clicking the «Print page» button at the top right of the tab or at the bottom of the page.

Finally, the configuration can be saved as a text file by selecting the «Save Config» button under Quick Settings on the left side.

6. PROGLOVE MARK FAQ

Frequently Asked Questions

The Scanner MARK / Access Point / Charging Station

1.1 How much does the scanner MARK weigh? What are the dimensions? Is the MARK harmful to the user while working?

ProGlove MARK has been designed to be a part of the users natural movements. With a weight of 1.4 oz, there is no additional load during manual work. Due to its compact size of 2 x 1.75 x 0.5 in, ProGlove MARK does not interfere with work in confined spaces (e. g. assembly) in most cases. In addition, the scanner can be worn on both the left and right hand so that it can be adapted to any work situation.

1.2 How long does the battery last in daily operations?

The ProGlove MARK's battery pack is designed for a shift of 8 hours with 2000-3000 scans. Due to environmental influences and depending on the application, deviations may occur. For multi-shift operation, two scanners are therefore required for each workstation, which are used alternately. The scanner's battery is fully charged within approximately 3 hours.

1.3 Which barcode types can be scanned?

All common 1D and 2D barcode standards can be scanned with the ProGlove MARK. The scanable size depends on the resolution.

Supported barcode standards are listed in the following table:

1D	Code 128, GS1-128, EAN-128, EAN-13, GTIN-13, EAN-8, GTIN-8, ISBN-13, ISSN, ISMN, EAN-14, GTIN-14, DUN-14, SCC-14, ITF-14, EAN-18/NVE, SSCC-18, UPC-A, GTIN-12, UPC-E, Code 39, Code 39 Extended, Code 25, Code 25 Interleaved, EAN-5, EAN-2, JAN, EAN-99, EAN-Velocity, ISBN-13 Dual, ISBN-10, Codabar, Code 93, Code 93 Extended, PZN7, PZN8, Leitcode, Identcode, Code 128A, Code 128B, Code 128C, MSI Plessey.
2D	PDF417, MicroPDF417, Datamatrix, QR Code, Micro QR Code, Aztec, RSS, Composite, TLC-39, MaxiCode
Postal	US PostNet, US Planet, UK Postal, Australian Postal, Japan, Postal, Dutch Postal (KIX)

1.4 At what distance can barcodes be detected?

The ProGlove MARK is a short-range scanner which is optimized for use in arms length scanning. Depending on the size and type of the barcode (and external factors such as light), the distance for optimum detection of the barcodes is 6-24 in.

1.5 Is the scanner harmful to my eyes?

In ProGlove MARK, a camera and LEDs are used to detect the barcodes. The scanner is classified in accordance with IEC-62471 as a risk-free device which does not pose any photobiological hazard.

1.6 Is it possible to scan DPM barcodes (direct part marking)?

DPM barcodes can be recorded with the ProGlove MARK, but the individual application should be tested. Due to numerous factors, the performance of needled or lasered barcodes can be limited.

1.7 Can several barcodes be detected at the same time?

Several barcodes cannot be detected at the same time. However, a barcode can contain several pieces of information (e. g., ArtNr, batch, weight, etc.) that can be analyzed and decoded via the access point - e. g., ArtBNr[TAB]Charge[TAB] Weight[ENTER].

1.8 Is the scanner protected against dust and water?

The ProGlove MARK is designed for use in industrial environments. The scanner is protected against dust and water on all sides and has the IP rating IP54 according to DIN EN 60529.

1.9 At what temperatures can the ProGlove MARK be used?

The ProGlove MARK is designed for use at temperatures between 32 to 120°F. The ProGlove MARK can function in sub zero environments (e.g. Freezer Storage) but no long term tests have occurred to date. Therefore, use below freezing is not recommended.

1.10 Can barcodes be read at an oblique angle or on the head?

Yes, the ProGlove MARK can detect barcodes rotated both horizontally and vertically. A rotation on its own axis (upside down) does not limit the scan performance.

1.11 How is data transferred from the MARK to the access point?

The data transmission between the ProGlove MARK and the Access Point takes place via the frequency 915 MHz. This frequency band can be used royalty-free and is reserved for short-range devices (e.g. radio microphones). Data transmission only takes place after a successful decoding event. Therefore, ProGlove is a system with low radiation exposure.

1.12 Can the data be transferred via Bluetooth or WiFi?

No, the data transfer between the MARK and the Access Point is carried out in the sub 1GHz range (frequency 915 MHz) (see 1.11).

1.13 Can the Scanner MARK automatically change the access point depending on the network strength (roaming) or be connected to several access points?

Automatic switching of the connection to different access points (roaming) is not possible. MARK is connected to a single access point by scanning the pairing barcode. However, it is possible to connect several MARKs to one access point.

1.14 Does the ProGlove MARK have electromagnetic compatibility (EMC, EMC, ETSI) certification?

The ProGlove MARK is certified as electromagnetically compatible according to DIN EN 301489-1/-3 and EN 300220-2. The system thus meets the legal requirements for short-range radios (SRD).

1.15 Does the ProGlove system collect user data?

No, the ProGlove system is only used to transmit scanned barcode data. User data about the worker, e. g. name of the operator Movement profiles, location and efficiency figures are neither recorded nor transmitted.

1.16 How is the Access Point connected to my system?

The following interfaces allow us to connect the access point to a system or terminal:

USB-HID: Emulated keyboard input. Simplest solution, works via Plug & Play

USB-CDC: Emulated serial interface. Driver installation required for this. Provided by ProGlove.

RS232: Serial interface (additional external power source required).

No further installation of software is necessary.

1.17 Do access points interfere with each other if there are several access points in the same room?

No, we use a frequency algorithm to ensure that there is no interference between the access points.

1.18 Is the ProGlove MARK compatible with all ERP systems?

The ProGlove emulates a keyboard with the access point, thus the ProGlove system is independent of third-party software. The ProGlove MARK is compatible with SAP, Oracle, Infor, Sage, Excel, text editor - the IPC / Terminal receives the translated barcode as input.

1.19 Can several MARKs be connected to one access point?

It is possible to connect several MARKs to one access point. For example, a workstation would be possible where several users scan barcodes and send them to an input mask of the ERP system. However, it is not possible to trace which user sends the data to the system. In most cases, a user can only operate one input mask - this requires two individual access points, which are connected to a MARK scanner.

1.20 How long does it take to charge a battery?

A complete charging cycle of a scanner MARK takes about 3 hours. During charging, the LED of the devices lights up red. If two devices are charged simultaneously in the charger, the charging time does not change. As soon as the battery is fully charged, the LED of the unit will turn green.

1.21 Is there a charging station with more than two charging stations?

No. Currently there is only one charging station for two MARK scanners.

1.22 Is there a way to increase battery life?

By individually adjusting the scanner MARK it is possible to increase the battery life. The following settings can be made for this:

The Feedback option can be muted in the configuration tool under Device Settings / Feedback Settings / Feedback Profile.

The Sleep Mode setting of the MARK scanner can also be shortened. These settings can be made under Device Settings / Energy Settings / Sleep Mode.

All unused barcode types should be deactivated under Barcode Settings. If only 1D barcodes are used: Activate the function Fuzzy 1D Processing under Device Settings / Engine Settings.

ProGlove Standard Glove

2.1 How long does the ProGlove Standard glove last?

Depending on the application, our gloves last from a few shifts (in production and assembly) up to several weeks (in some logistic applications). We have wear and tear data available upon request.

2.2 What sizes of the ProGlove Standard gloves are offered?

The gloves are available in sizes 7 (small women's hand) to 10 (large men's hand). The gloves come in 5 pair packs with either a left or right hand fastening clip for the scanner.

Hint: If the glove is worn too small, it can lead to pressure marks on the back of the hand. Furthermore, if the gloves are too small, the scanner can be accidentally triggered by simply bending the finger.

2.3 To what extent does the ProGlove standard glove protect against mechanical stress (cut protection, tear resistance, etc.)?

The ProGlove Standard Glove is classified as a protective glove against mechanical risks and covers most requirements for use in industrial environments. The performance classification 2131 is covered in accordance to the basic standard EN 420 and the specific standard EN 388.

Abrasion resistance: Level 2   Cut resistance: Level 1

Tear resistance: Level 3   Puncture resistance: Level 1

2.4 How often can the scan button on the ProGlove standard glove be triggered?

The switch is designed for up to 300,000 trips. The trigger is reinforced with a Diamond polyacrylic cap to ensure long life under intensive use.

2.5 Does the ProGlove Standard glove have ESD certification (Electrostatic Discharge)?

The ProGlove Standard Glove is designed for use in manufacturing, assembly, and logistics and therefore has no ESD certification. A special version of the ProGlove Longlife was developed for use in ESD applications (see 3.1).

2.6 Can a tablet be operated with the ProGlove Standard glove?

This depends on the tablet. Our ProGloves have worked seamlessly with all common tablets so far. These tablets can be easily operated with our gloves.

2.7 Can the ProGlove Standard glove be recycled?

ProGlove is registered with the Foundation „Elektro-Altgeräte Register" (electronic waste register) in accordance with ElektroG and thus ensures that customers have the possibility to return their old equipment and act in compliance with the law. We take care of the recycling and dispose of it for our customers. If necessary, please contact us@proglove.com.

2.8 Is the ProGlove Standard Glove according to the ATEX Directive suitable for use in potentially explosive atmospheres?

 No. The ProGlove Standard Glove has no certification for use in potentially explosive dust and gas atmospheres, as well as for use in mining and underground operations.

ProGlove Longlife

3.1 In which sizes is the ProGlove Longlife available?

The ProGlove Longlife is available in three different sizes (S, M, L). Thanks to a dirt-repellent industrial Velcro fastener, the cuff can be individually adapted and quickly put on and taken off. The variable closure system therefore enables an optimal fit on different hand sizes and shapes with the best wearing comfort.

3.2 Can accidental scanning occur due to the trigger in the palm?

Accidental scanning due to gripping movements is prevented by an integrated plastic protective ring, which adapts to the palm of the hand by means of an elastic foam.

3.3 Why was the trigger on the ProGlove Longlife placed into the palm of the hand?

The ProGlove Longlife has been designed as an overwrap which can be worn over the free hand or over other gloves. The positioning of the trigger in the palm of the palm also allows the user to wear very thick or special gloves (e. g. cold protection or cut protection class 3). The trigger is placed in the depression of the palm of the hand so that triggering is a natural hand movement. Thanks to ergonomic and medical examinations and cooperation with a hand surgeon, it was possible to determine the optimum position for the trigger button.

3.4 Does the ProGlove Longlife have ESD certification (electrostatic discharge)?

Yes - a special version of the ProGlove Longlife was developed for use in ESD applications (electronics production). This is suitable and certified according to D-3-00036 or DIN EN 61340-5-1 for use in the ESD area.

7. TROUBLESHOOTING

Trouble Shooting Tables

Problem	Cause	Solution
The Scanner MARK cannot be turned on.	The battery is not charged.	Load the scanner MARK in the charging station.
	The glove is defective.	Change the glove.
The Scanner MARK does not charge in charging station.	The Charging station is not connected to power source.	Connect the charging station to the power source.
	The Scanner MARK is not inserted correctly into the charger tray.	Place MARK correctly in the charger. Confirmed with a signal tone and 2x green flashing light.
	The Scanner MARK defective (short circuit, cold solder joint etc.).	Replacement of the device via RMA.
	The Charging station is defective.	Insert the second MARK into the charger. If it does not charge, the charger is defective. Replacement of the device by RMA.
The Scanner MARK lights up red 3x when inserted in charger tray, and makes a beeping sound.	The Charger slot is defective.	In this case, the charging station must be replaced via RMA. Please contact support@proglove.com

Problem	Cause	Solution
The Barcode data is not transferred.	The Scanner MARK is not paired with Access Point.	Pairing the scanner MARK with the access point. To do this, scan the pairing barcode on the respective access point.
	The Scanner MARK is out of range of Access Point.	Move the scanner MARK closer to the access point. Access point should be freely accessible (not in metal containers or similar). The distance between. MARK and access point should be less than 100ft.
	The access point does not work.	1. Connect the scanner MARK with the access point. 2. Check that a green light is on at the access point. 3. Scan the barcode. If the MARK scanner lights up green once and red twice, the barcode was not transferred. Repeat the steps with a second MARK scanner. If the data is not transferred and the MARK scanner lights up green once and red twice, the access point is defective. 4. The access point must be replaced with an RMA. Please contact support@proglove.com.
	The Scanner MARK does not work.	1. Connect the MARK to the Access Point. 2. Check whether the green light at the access point is illuminated. 3. Barcode scanning: If the MARK lights red 2x and barcode is not transmitted, this indicates a defect of the scanner MARK. Please contact support. 4. The MARK scanner may need to be replaced with an RMA. Please contact support@proglove.com.

Problem	Cause	Solution
The Scanner MARK flashes yellow after scanning.	The battery level is less than 95 percent.	Charge the MARK scanner for at least 20 minutes. A full battery charge takes about three hours.
The MARK's battery is dead after less than one shift.	Too many false scans are carried out due to poorly legible barcodes or badly illuminated workstations.	The following settings can be adjusted in the configuration tool to increase battery life: Sleep mode: 5min Ack/Nack Transmission Feedback: OFF Feedback Profile: Silent Blurred 1D processing: ON Then reconfigure the MARK and the access point using generated configuration barcodes.
	The disc is dirty, so that many false scans occur.	Clean the front panel.
The MARK can't read barcodes well.	The barcodes are difficult to read due to poor material properties.	Adjust the following settings in the configuration tool, which have a positive effect on readability: Blurred 1D processing: ON Then reconfigure the MARK and the access point using generated configuration barcodes.
The barcode is transferred, but no automatic ENTER input is carried out.	The ENTER suffix is not executed automatically after the bar code transfer.	In the configuration tool, insert the ENTER suffix under "Data formatting". Then reconfigure the MARK and the access point using generated configuration barcodes.

Problem	Cause	Solution
The MARK scanner flashes green after successful transmission, but the data is not displayed on the screen.	The Scanner MARK is connected to the wrong access point.	Pair the MARK scanner with the desired access point.
The red scanning field of the MARK scanner lights up, but no barcodes are scanned.	The barcode is not readable.	Create a new barcode label.
	The barcode type is not readable.	Identify the barcode type (e.g. Code 128) and make sure that this barcode type is activated in the configuration tool.
	The barcode length cannot be read.	In the configuration tool, make sure that the maximum barcode length has been set correctly.
	The window of the scanner MARK is dirty.	Clean the window (see chapter Maintenance and care).
Scanner MARK does not vibrate.	The vibration signal is deactivated.	Activate the vibration signal in the configuration tool.
	The vibration motor is defective.	The MARK scanner must be replaced with an RMA. Please contact support@proglove.com.
The LEDs on the MARK scanner do not light up despite successful data transfer.	The LEDs on the MARK scanner are defective.	The MARK scanner must be replaced with an RMA. Please contact support@proglove.com.
With serial connection: The MARK flashes green after successful transmission, but data is not displayed on the screen.	The System ProGlove MARK is connected to the wrong COM port.	Check the COM port.
	The COM port has been configured incorrectly (e. g. wrong baud rate, prefix or suffix settings).	Check the system requirements in the configuration tool.

8. MAINTENANCE

Storage

The following must be considered when storing the equipment and gloves:

Storage Location: Ensure that you store all equipment, scanner, receiver, charger, and the gloves/overwraps in a dry and clean environment. The storage location should be as free of dust and chips as possible.

Temperature: The temperature at the storage location should be between 32 to 120°F.

Cleaning

Scanner:

Avoid cleaning the scanner with chemicals, especially acetone. Instead, clean the scanner glass regularly with a commercially available cotton swab.

Gloves and overwrap:

To protect against moisture and other particles, gloves and overwrap must not be cleaned. Damaged gloves must not be reused under any circumstances.

9. SAFETY AND REGULATIONS

Regulatory information and guidance

All products are designed to comply with European rules and regulations and are labelled as required. Modifications or changes to equipment not expressly approved by ProGlove may void the type-approval.

The ProGlove system (MARK, access point, charging station and accessories) meets the requirements for safe operation. To ensure safe operation, it is advantageous to operate the devices in accordance with the following guidelines. Read these guidelines carefully before using the device.

RADIO	EN 61000-3- 3:2013 EN 61000-3- 2:2006 + A1:2009 + A2:2009 EN 301 489-3 V1.6.1 EN 301 489-1 V1.9.2 EN 300 220-2 V2.4.1
OTHER	Safety/LVD testing according to EN 60950-1:2006 + AC:2011 + A11:2009 + A12:2012 + A1:2010 + A2:2013
LED CLASSIFICATION	Exempt Risk Group LED product according to IEC/EN 62471
COMPLIANCE WITH ENVIRONMENTAL PROTECTION	Corresponds to EU ROHS

European Compliance

$C\epsilon$	The device complies with the essential requirements of the EU directives 1999/5/EC, 2004/108/EC and 2006/95/EC, if applicable. A corresponding certificate can be requested from your sales partner.
	The ProGlove system complies with the European Parliament and Council Directive 2002/96/EC of 27 January 2003 on waste electrical and electronic equipment (WEEE).

The production of this product requires the extraction and use of natural resources. It may contain hazardous substances which, if not disposed of properly, could harm health and the environment.

In order to avoid the proliferation of these substances in our environment and to reduce the consumption of natural resources, we encourage you to use the appropriate take-back systems for product disposal. From this take-back system, most of the product's materials are reused or recycled.

The crossed-out garbage can symbol informs you that the product must not be disposed of with household waste and invites you to use the appropriate separate collection systems for product disposal. For more information on collection, reuse and recycling systems, please contact your local or regional waste management. You can also contact your supplier for more information on the environmental performance of this product.

10. SUPPORT AND SERVICE

Technical Support

If you have any questions about the integration or use of our devices, please do not hesitate to contact our customer support. They will answer your request as soon as possible. You can reach us by contacting:

support@proglove.com

and via telephone through:

646 641-4619 (United States and Canada)

+49 (0) 1520 2907017 (Abroad)

Precautions

Observe these precautions when installing the ProGlove system to reduce the risk of injury or damage to the unit.

- To reduce the risk of damage or interference from overvoltage, line noise, electrostatic discharge (ESD) or other irregularities, route all cables and wires away from power sources.

- Changes or modifications not expressly approved by the body responsible for compliance may void the user's approval.

- Cable shielding may deteriorate, damage cables, or cause wear and tear if a loop or bend radius is less than 10X of the cable diameter. The bending radius must be at least 15 cm from the plug.

- This device should be used according to the instructions in this manual.

- All information is for reference purposes only and can be changed without prior notification.

TECHNICAL SPECIFICATIONS for PROGLOVE (Workaround Gmbh) SYSTEM "MARK ONE S" containing SCANNER MARK ONE S, ACCESS POINT ONE S, CHARGING STATION

APPLICATION AREA

For use in manufacturing, assembly, warehousing, inbound and outbound logistics, picking and packing, etc.
Anywhere where 1 and 2 D barcodes are in use and being scanned.

TECHNICAL SPECIFICATIONS

WIRELESS COMMUNICATION

FREQUENCY RANGE	902 to 928 MHz
TRANSMISSION POWER	<10 dBm
ENCRYPTION	AES-128
RANGE	Outdoors (LOS) : <260 ft ** Indoors (LOS) 50 to 100 Ft ** **The range can vary if there are walls, racks and machines in the state of use.

This product has Adaptive Frequency Agility (AFA) and an automatic Listen Before Talk (LBT) switch to find unoccupied frequencies to ensure safe, secure and accurate data transmission.

BARCODE DECODING CAPABILITY

1D	All major 1D
2D	PDF417, MicroPDF417, Datamatrix, QR Code, Micro QR Code, Aztec, RSS, Composite, TLC-39, MaxiCode
POSTAL	US PostNet, US Planet, UK Postal, Australian Postal, Japan Postal, Dutch Postal (KIX)

ELECTRICAL

BATTERY TYPE	Lithium Polymer
CHARGING PERIOD	3 hours* with power supply SAW-060120D or SYS1561-4105
OPERATING TIME / SCAN	4 hours (1 shift) and 9000+ Scans or 16 hours (2 shifts) and 1600+ Scans depending on use case and environmental conditions
POWER SUPPLY CHARGING STATION	5 VDC (1.2A) with power supply SAW-060120D or SYS1561-4105
POWER SUPPLY ACCESS POINT USB CONNECTION	5 VDC (0.5A) via Host Computer
POWER SUPPLY ACCESS POINT RS232 CONNECTION	12 VDC (1A) with power supply PU12-10P55

TECHNICAL SPECIFICATIONS for PROGLOVE (Workaround Gmbh) SYSTEM "MARK ONE S" containing SCANNER MARK ONE S, ACCESS POINT ONE S, CHARGING STATION

ENVIRONMENTAL CONDITIONS

DROP RESISTANCE	Scan Module: 50+ drops from 6 ft onto concrete
PROTECTION FROM DUST AND WATER	Scan Module: IP54 Charger: IP40 Access Point: IP52
TEMPERATURE	Operating: 32 to 122 °F Charging : 32 to 122 °F

INTERFACES

ACCESS POINT	USB (2.0) / RS-232, 9600, 19200, 38400, 57600, 115.2K baud USB HID (keyboard input on host), Layouts: • Croatian • Czech • English (UK) • English (US) • French (Belgian) • French (Canada) • French (France) • German (Germany) • German (Switzerland) • Italian • Portuguese (Brazil) • Portuguese (Portugal) • Slovakian • Slovenian • Spanish • Other languages on request

PHYSICAL CHARACTERISTICS

DIMENSIONS	Scan Module: 2 x 1.75 x .5 in Access Point: 5.5 x 2.5 x 1.5 in Charging Station: 4.75 x 2.5 x 1.3 in
WEIGHT	Scan Module: <1.4 oz Access Point: <6.8 oz (including cable) Charging Station: <7 oz

READING PERFORMANCE

FIELD OF VIEW	Horizontal: 42°, Vertical: 28°
SKEW, PITCH & ROLL	Skew Tolerance: ±60° Pitch Tolerance: ±65° Roll Tolerance: 360°
AMBIENT LIGHT	Max: 10 klx (direct sunlight)

TECHNICAL SPECIFICATIONS for PROGLOVE (Workaround Gmbh) SYSTEM "MARK ONE 8" containing SCANNER MARK ONE 3, ACCESS POINT ONE 3, CHARGING STATION

DECODE RANGES

Smallest feature in the barcode (the mil-inch (mm) number in front indicates the size of the smallest feature in the barcode)	Applicable distance between user and barcode
4 mil (0.102 mm) Code 39	3.3 in./8.4 cm to 8.8 in./22.4 cm
8 mil (0.152 mm) Code 128	2.8 in./7.1 cm to 8.2 in./20.8 cm
5 mil (0.127 mm) Code 39	2.0 in./5.08 cm to 13.3 in./34.3 cm
5 mil (0.127 mm) PDF417	3.1 in./7.8 cm to 8.4 in./21.3 cm
10 mil (0.254 mm) DataMatrix Example: A 10 mil Datamatrix symbol capable of carrying 25 alphanumeric characters has a size of 4.57 mm / 4.57 mm	2.9 in./7.4 cm to 10.1 in./25.7 cm
100% UPCA	1.9 in./4.8 cm to 39.0 in./99.0 cm
20 mil (0.508 mm) Code 39	2.0 in./5.08 cm to 30.0 in./76.2 cm

CERTIFICATION AND DETAILS - Access Point, Scan Module and Charger

MARKING:	[symbols] CE FCC FCC Registration: 2AGJL IC Registration: 20459
RADIO:	US (pending approval) FCC Parts 15.107, 15.109 (EMC) FCC Parts 15.207, 15.209 & 15.249 (RF) Canada (pending approval) ICES-003 classes 8.1 and 8.2 (EMC) RSS-210 8.10, RSS-Gen 6.5, 6.12, 6.13 & 6.9 (RF)
OTHER:	EN 60950-1:2006 + AC:2011 + A11:2009 + A12:2012 + A1:2010 + A2:2013
LED CLASSIFICATION:	Exempt Risk Group LED product according to IEC/EN 62471
COMPLIANCE WITH ENVIRONMENTAL PROTECTION:	Complies with the EU's Restriction Of Hazardous Substances (RoHS) Directive

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PROGLOVE - Longlife

ProGlove Longlife
Item number: G003-X (X= SL, SR, ML, MR, LL, LR/ e. g. G003-SL = size S, MARK on the left hand)

Each pack contains three pairs of Proglove Longlife. When ordering right-hand Longlifes, the electronics for using the MARK barcode scanner is attached to the right-hand Longlife. The sizes S, M and L are available for the right or left hand. Available at: **sales@proglove.de**

The PROGLOVE LONGLIFE together with the PROGLOVE MARK barcode scanner enables fast, ergonomic and hands-free scanning in industrial use.

Symbols on the Longlife have the following meaning:

CE   EG-Conformity mark "CE"
S, M, L,   Size S-L
🗑   Disposal information

Workaround GmbH
Friedenstraße 4
81669 Munich/Germany
www.proglove.de

Please read these instructions for use carefully before using it. ProGlove Longlife is not a protective equipment.

During storage and use keep away of (open) fire and other possible hazards. Keep away from sources of ignition. Can get stuck in tight spaces.

Keep away from rotating and moving machine parts. ProGlove Longlife can be attached to objects.

Check the ProGlove Longlife for damage before use. Please do not use a damaged ProGlove Longlife.

ProGlove Longlife surface consists of nylon, polyurethane, ethylene copolymers, polyacrylate resin, polyester. Please do not use it if you are allergic to the above-mentioned materials. There are no health concerns related to the materials mentioned above.

Please use the ProGlove Longlife only in the size that suits you best.

ProGlove Longlife should be firmly seated, but should not cause pressure points or pain after an 8-hour shift. In a clenched fist, the clip must not extend beyond the ankles.

Use ProGlove Longlife only in combination with the original ProGlove Mark Barcode Scanner. Do not use with a faulty ProGlove Mark barcode scanner.

There is no warranty or liability for use with third party manufacturers.

Do not use ProGlove Longlife without ProGlove Mark, otherwise there is a risk of getting stuck to objects with the empty clip.

ProGlove Mark is securely engaged when a click is heard. For more information, see the ProGlove Mark Quickstart Guide.

Do not clean the ProGlove Longlife! Cleaning and reusing can lead to a loss of function.

Do not disassemble or attempt to repair the unit yourself. ProGlove Longlife is made of absorbent material. Do not wear it on naked skin if it has been exposed to dangerous liquids, oils or similar substances.

Do not use in extremely hot or cold environments. Store in a cool and dry place.

PROGLOVE - Standard Glove

ProGlove Standard
Item number: G001-X (X= 7L, 7R, BL, BR, 9L, 9R, 1 OL, 1 OR /
e. g. G001-7L = glove size 7, MARK on the left hand)

Each package contains five pairs of gloves. When ordering right gloves, the electronics for using the MARK barcode scanner is attached to the right glove. The left glove has no electronics in this case. The sizes 7, 8, 9 and 10 are available for the right or left hand. Available at:
sales@proglove.de

The PROGLOVE STANDARD glove together with the PROGLOVE MARK barcode scanner enables fast, ergonomic and hands-free scanning in industrial use. In addition, the glove is suitable for use "against medium risks". It offers good protection against abrasion, cuts and burrs. Suitable for assembly work on mainly dry parts, small parts assembly, motor construction and insertion work on machines. The textile back ensures good ventilation of the hand. Good grip with little effort when gripping. The glove is liquid-repellent but not leak-proof in the nitrile/PU-coated part.

This article has been tested in accordance with EN 420 and EN 388 and achieved the following results.

Abrasion resistance	2
Cut resistance	1
Tear resistance	3
Puncture resistance	1

Symbols on the glove have the following meaning:
CE   EG-Conformity mark "CE"
7,8,9,10   Size 7-10
🖾   Disposal information

Workaround GmbH
Friedenstraße 4
81669 Munich / Germany
www.proglove.de

Check gloves for damage before use. Never use damaged gloves.

Do not use gloves that are too large or too small. The clip should be firmly positioned on the back of the hand, but should not cause pressure points or pain in the hand even after 8 hours of work.

The trigger button on the glove is positioned centrally between the index finger of the primary and middle joint. It should be easy to reach with your thumb.

The clip must not stand above the ankles when the fist is clenched.

The glove may only be used in combination with the original PROGLOVE MARK barcode scanner. We do not assume any warranty or liability for the use of third party devices.

The glove may only be used in combination with a properly engaged PROGLOVE MARK barcode scanner. Otherwise, the empty holder may get stuck on other objects.

The scanner is not securely engaged until a click is heard. Additional information can be found in the PROGLOVE MARK QUICKSTART GUIDE.

May not be cleaned! Cleaning and reusing the glove can lead to loss of function.

If parts of the application have become detached, the glove must not be repaired. Above all, the clip should not be glued back to the glove when it has come loose.

The glove must not be used under any circumstances near moving machine parts, such as rotating spindles, as there is a risk of the glove catching.

Do not use in extremely hot or cold environments. The gloves must be stored in a cool and dry place.

There are no known health risks related to the materials used.

12. FCC Certification Compliance

FCC Certification Compliance
ProGlove Mark

The ProGlove Mark complies with the following FCC product categories:

- FCC Part 15 Sub-part C 249 (intentional radiators = RF transceiver)

- FCC 15 B 107/109 (unintentional radiator)

The ProGlove Mark is a portable device (distance between person's body and the antenna is 20 cm or less) and excluded from SAR (Specific Absorption Rate) requirements.

Under the regulations of the FCC the user has to be aware of the following when using the ProGlove Mark:

1. FCC CAUTION
   Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

2. This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter.

3. Operation is subject to the following two conditions:
   (1) this device may not cause harmful interference, and
   (2) this device must accept any interference received, including interference that may cause undesired operation.

4. This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment and meets the FCC radio frequency (RF) Exposure Guidelines. This equipment has very low levels of RF energy that is deemed to comply without testing of specific absorption rate (SAR).

5. This ProGlove System has been tested and meets the FCC RF exposure guide-

lines when used with the ProGlove accessories supplied or designated for this product. Use of other accessories may not ensure compliance with FCC RF exposure guidelines.

6. Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.

- Increase the separation between the equipment and receiver.

- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

- Consult the dealer or an experienced radio/TV technician for help.

ProGlove Access Point

The ProGlove Access Point complies with the following FCC product categories:

- FCC Part 15 Sub-part C 249 (intentional radiators = RF transceiver)

- FCC 15 B 107/109 (unintentional radiator)

This equipment complies with FCC radiation exposure limits set forth for an occupational/controlled environment. This equipment should be operated with a minimum distance of 20cm between the radiator and your body.

Under the regulations of the FCC the user has to be aware of the following when using the ProGlove Access Point:

1. FCC CAUTION
   Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

2. This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter.

3. Operation is subject to the following two conditions:
   (1) this device may not cause harmful interference, and
   (2) this device must accept any interference received, including interference that may cause undesired operation.

4. This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment and meets the FCC radio frequency (RF) Exposure Guidelines. This equipment has very low levels of RF energy that is deemed to comply without testing of specific absorption rate (SAR).

5. This ProGlove System has been tested and meets the FCC RF exposure guide-

lines when used with the ProGlove accessories supplied or designated for this product. Use of other accessories may not ensure compliance with FCC RF exposure guidelines.

6. Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.

- Increase the separation between the equipment and receiver.

- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

- Consult the dealer or an experienced radio/TV technician for help.