

# PROGLOVE

## USER MANUAL MARK BASIC



Technical  
Document



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# PROGLOVE

## ABOUT THESE OPERATING INSTRUCTIONS

### FUNCTION OF THIS DOCUMENT

This user manual contains a system overview, technical data about the Hardware and Wearables, detailed step-by-step instructions for using ProGlove system and information about configuration settings and troubleshooting.

It is intended for process planners, integrators and maintenance technicians who are using ProGlove system for the first time. It is designed so that ProGlove system can be used safely without prior knowledge.

→ Read carefully before use and keep for future reference.

Workaround GmbH and/or all its affiliated companies (hereinafter "Workaround" or "ProGlove").

ProGlove User Manual is part of the ProGlove General Terms and Conditions. This User Manual is of mandatory nature and in case of any breach of the instructions contained herein ("misuse"), ProGlove waives any liability for any damages/injuries that could arise based on such misuse.



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## EXPLANATION OF SYMBOLS

Warning notices are used throughout the instructions in the user manual. Always read and pay attention to a warning notice. A warning notice is introduced with the word **CAUTION**, as shown below.



#### CAUTION

Slight bodily injury or danger of physical damage to ProGlove system is possible.

In addition, other symbols are used that mean the following:



#### NOTE

Additional notices provide more information about the respective chapter.



#### TIP

Additional tips facilitate the implementation of a certain procedure.



#### RESULT

The result will show the outcome of the prior action.

**DOCUMENT TITLE:** User Manual - Mark Basic

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# SAFETY INSTRUCTIONS

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## HARDWARE

- ! CAUTION**  
Keep all cables and wires away from high voltage sources or power supplies! This may otherwise lead to damage or faults due to overvoltage, line noise, electrostatic discharge or other irregularities.
- ! CAUTION**  
Do not use damaged cables or power supplies! Otherwise the safe functioning of ProGlove system cannot be ensured.
- ! CAUTION**  
Do not unscrew the Hardware housing! This may otherwise lead to ProGlove system not functioning properly.
- ! CAUTION**  
Do not replace the battery of the scanner! This may otherwise lead to ProGlove system not functioning properly.
- ! CAUTION**  
Do not modify ProGlove system! This may otherwise lead to ProGlove system not functioning properly.
- ! CAUTION**  
Do not stare directly into beam! Use of controls, adjustments or performance of procedures other than those specified herein may result in hazardous laser light exposure. Class 2 laser scanners use a low power, visible light diode. As with any very bright light source, such as the sun, the user should avoid staring directly into the light beam. Momentary exposure to a Class 2 laser is not known to be harmful.

- ! CAUTION**  
Do not use, charge, or leave the device near/or in fire, heaters, high-temperature sources, or in a car under the blazing sun. Such a high temperature may cause damage to the protection structure in the battery, which may result in an abnormal reaction, and then heat generation, explosion, or fire.
- ! CAUTION**  
Do not use the scanners in a place where static electricity (more than the limit of the manufacturer's guarantee ) occurs. Otherwise, the protecting device in the battery might be damaged and cause heat generation, explosion, or fire.
- ! CAUTION**  
Do not ship any severely damaged device especially if the battery is also severely damaged. Otherwise, the protecting device in the battery might be damaged and cause heat generation, explosion, or fire.

## WEARABLES

- ! CAUTION**  
Keep Wearables away from moving machine parts and do not use without a scanner. Otherwise the Wearables may get stuck on objects.
- ! CAUTION**  
Use Wearables in the right size!  
Otherwise this may cause pain or pressure points on your hand.



## PROGLOVE

### BATTERY SAFETY

The area in which the units are charged should be clear of debris and combustible materials or chemicals. Particular care should be taken where the device is charged in a noncommercial environment.

- Follow battery usage, storage, and charging guidelines found in the user guide.
- Improper battery use may result in a fire, explosion, or another hazard.
- To charge the device battery, the battery and charger temperatures must be between +41 °F and +104 °F (5 °C and +40 °C). Do not use incompatible batteries and chargers. Use of an incompatible battery or charger may present a risk of fire, explosion, leakage, or another hazard. If you have any questions about the compatibility of a battery or a charger, contact ProGlove support.
- Do not disassemble or open, crush, bend or deform, puncture, or shred.
- Severe impact from dropping any battery-operated device on a hard surface could cause the battery to overheat.
- Do not short circuit a battery or allow metallic or conductive objects to contact the battery terminals.
- Do not modify or remanufacture, attempt to insert foreign objects into the battery, immerse or expose to water or other liquids, or expose to fire explosion or other hazards.
- In the event of a battery leak, do not allow the liquid to come in contact with the skin or eyes. If contact has been made, wash the affected area with large amounts of water and seek medical advice.



### BATTERY INFORMATION

ProGlove approved rechargeable devices are designed and constructed to the highest standards within the industry. However, there are limitations as to how long a device can operate or be stored before needing replacement.

Many factors affect the actual life cycle of a battery pack such as heat, cold, harsh environmental conditions, and severe drops. When batteries are stored over six months, some irreversible deterioration in overall battery quality may occur.

Store batteries at half of full charge in a dry, cool place, removed from the equipment to prevent loss of capacity, rusting of metallic parts, and electrolyte leakage.

When storing batteries for one year or longer, the charge level should be verified at least once a year and charged to half of full charge. Replace the device when a significant loss of run time is detected.

The standard warranty period for all ProGlove devices is one year.



# SCOPE OF DELIVERY

## SCANNER | MARK Basic

standard range



mid range



multi range



## WEARABLES

Index Trigger



Hand Strap



Reel



## ! CAUTION

Do not use any damaged Hardware or Wearables!

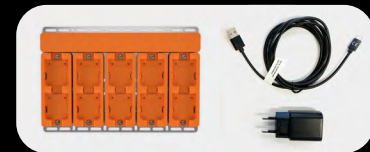
→ Check whether Hardware and Wearables are properly packaged and undamaged.

## CHARGING STATIONS

Charging Station S\*



10-Slot Charging Station\*



\*with power cable (USB-C) and power supply



**PROGLOVE**

# SCANNER

## OVERVIEW

After scanning a barcode, the scanner returns feedback signals: haptically by vibrations, acoustically by audio signals and optically by LEDs.

Range: 10 - 90 cm | 4 - 35 in

### MARK Basic standard range



Connection  
symbol

Battery  
symbol

LED's

Serial  
number







## TECHNICAL DATA - MARK BASIC | standard range

### MECHANICAL PROPERTIES:

Dimensions: ..... 50 x 45 x 16 mm (1.47 x 1.77 x 0.63 in)

Weight: ..... 40 g (1.41 oz)

### ELECTRICAL PROPERTIES:

Battery type: ..... 670 mAh, Lithium polymer (rechargeable)

Charge duration: ..... 2 hours with ProGlove Charging Station

Number of scans: ..... approx. 8000 scans depending on the application and environmental conditions

### WIRELESS COMMUNICATION:

BLE : ..... 2400 - 2483.5 MHz

Max radio-frequency power transmitted: ..... < 20dBm

**BARCODE TYPES - 1D:** Auto decodes all standard 1D codes including GS1 DataBar linear codes et al.

**BARCODE TYPES - 2D:** PDF417, MicroPDF417, Data matrix, QR Code, Micro QR Code, Aztec, MaxiCode, et al.

**BARCODE TYPES - POSTAL:** US PostNet, US Planet, UK Postal, Australia Postal, Japan Postal, Dutch Postal (KIX) et al.

**LASER CLASSIFICATION :** Standard range: Excluded risk group LED product according to IEC/EN 62471



### **i** NOTE

Further technical specifications are available on [docs.proglove.com](https://docs.proglove.com)



# PROGLOVE

## SCANNER

### OVERVIEW

After scanning a barcode, the scanner returns feedback signals: haptically by vibrations, acoustically by audio signals and optically by LEDs.

Range: 30 - 150 cm | 12 - 59 in

### MARK Basic mid range



Connection  
symbol

Battery  
symbol

LED's

Serial  
number





## TECHNICAL DATA - MARK BASIC | mid range

### MECHANICAL PROPERTIES:

Dimensions: ..... 50 x 45 x 16 mm (1.47 x 1.77 x 0.63 in)

Weight: ..... 40 g (1.41 oz)

### ELECTRICAL PROPERTIES:

Battery type: ..... 670 mAh, Lithium polymer (rechargeable)

Charge duration: ..... 2 hours with ProGlove Charging Station

Number of scans: ..... approx. 8000 scans depending on the application and environmental conditions

### WIRELESS COMMUNICATION:

BLE : ..... 2400 - 2483.5 MHz

Max radio-frequency power transmitted: ..... < 20dBm

**BARCODE TYPES - 1D:** Auto decodes all standard 1D codes including GS1 DataBar linear codes et al.

**BARCODE TYPES - 2D:** PDF417, MicroPDF417, Data matrix, QR Code, Micro QR Code, Aztec, MaxiCode, et al.

**BARCODE TYPES - POSTAL:** US PostNet, US Planet, UK Postal, Australia Postal, Japan Postal, Dutch Postal (KIX) et Al.

**LASER CLASSIFICATION :** Mid range: According to EN 60825-1: 2014 and IEC 60825-1 (Ed. 3.0) Laser class 2 device. Caution Laser Radiation - Do not stare into beam.



### **i** NOTE

Further technical specifications are available on [docs.proglove.com](https://docs.proglove.com)



**PROGLOVE**

# SCANNER

## OVERVIEW

After scanning a barcode, the scanner returns feedback signals: haptically by vibrations, acoustically by audio signals and optically by LEDs.

Range: 10 - 250 cm | 4 - 98 in

### MARK Basic multi range



Connection  
symbol

Battery  
symbol

LED's

Serial  
number





## TECHNICAL DATA - MARK BASIC | multi range

### MECHANICAL PROPERTIES:

Dimensions: ..... 50 x 45 x 17 mm (1.47 x 1.77 x 0.67 in)

Weight: ..... 39 g (1.38 oz)

### ELECTRICAL PROPERTIES:

Battery type: ..... 670 mAh, Lithium polymer (rechargeable)

Charge duration: ..... 2 hours with ProGlove Charging Station

Number of scans: ..... approx. 8000 scans depending on the application and environmental conditions

### WIRELESS COMMUNICATION:

BLE : ..... 2400 - 2483.5 MHz

Max radio-frequency power transmitted: ..... < 20dBm

**BARCODE TYPES - 1D:** Auto decodes all standard 1D codes including GS1 DataBar linear codes et al.

**BARCODE TYPES - 2D:** PDF417, MicroPDF417, Data matrix, QR Code, Micro QR Code, Aztec, MaxiCode, et al.

**BARCODE TYPES - POSTAL:** US PostNet, US Planet, UK Postal, Australia Postal, Japan Postal, Dutch Postal (KIX) et al.

**LASER CLASSIFICATION :** Multi range: According to EN 60825-1: 2014 and IEC 60825-1 (Ed. 3.0) Laser class 2 device. Caution Laser Radiation - Do not stare into beam.



### **i** NOTE

Further technical specifications are available on [docs.proglove.com](https://docs.proglove.com)



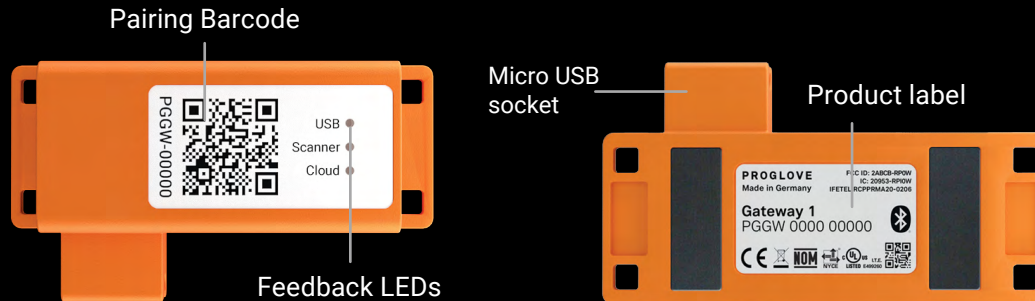
PROGLOVE

# CONNECTIVITY DEVICE

## OVERVIEW

The Gateway receives the scanned barcode data from the scanner via BLE. This barcode data is transmitted to the end device via USB cable. In the USB HID mode, the Gateway simulates a computer keyboard. A serial connection is emulated in the USB CDC mode. In order to use the USB CDC mode, the device must be set to “USB CDC” in the ProGlove INSIGHT Configuration Tool (<https://insight.proglove.com/>) under “Connectivity Configuration - Integration path”. Also multipairing is possible. The Gateway can be connected with up to 5 scanners simultaneously.

## GATEWAY





## TECHNICAL DATA - GATEWAY

### MECHANICAL PROPERTIES:

Dimensions: ..... 95 x 52,3 x 23,8 mm (3.74 x 2.06 x 0.94 in)

Weight: ..... 42,5 g (1.50 oz)

### ELECTRICAL PROPERTIES:

Power supply of Gateway via USB cable: ..... 5 V DC (0.5A) (via host computer)

### UTILITIES & ACCESSORIES:

ProGlove Configuration Tool: ..... <https://insight.proglove.com/> Use for barcode, interface, device configuration et al.

### UTILITIES & ACCESSORIES:

USB: ..... USB HID (keyboard input on host)  
USB CDC (virtual com port)  
ProGlove Deep Integration Protocol via USB

### **i** NOTE

Further technical specifications are available on [docs.proglove.com](https://docs.proglove.com)

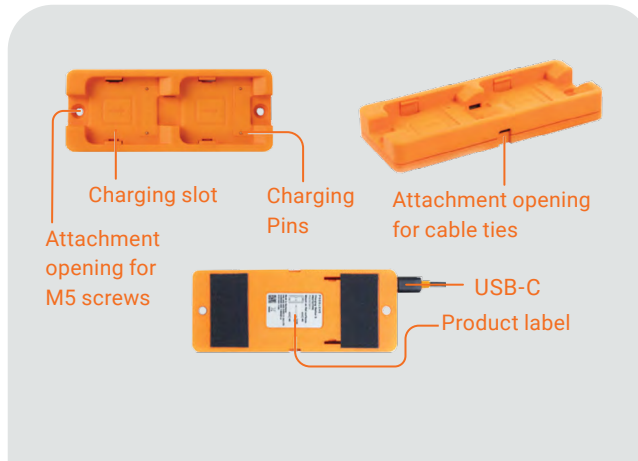


## PROGLOVE

# CHARGING STATION S

## OVERVIEW

The Charging Station S consists of two charging trays that charge two scanners at the same time. The charging status is indicated by the LEDs of the scanner. The LEDs pulse red while in charging mode. When the battery is fully charged, the LEDs pulse green constantly. The Charging Station S can be attached to work stations, for example, through the attachment openings (with M5 screws or cable ties).



## TECHNICAL DATA

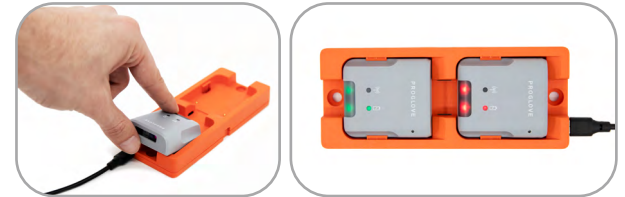
### MECHANICAL PROPERTIES:

Dimensions: ..... 140 x 56 x 19mm (5.5 x 2.2 x 0.7 in)

Weight: ..... 125g (4.4 oz)

### ELECTRICAL PROPERTIES:

Power supply: ..... 5 V DC (1.2 A)



## iNOTE

Further technical specifications are available on [docs.proglove.com](https://docs.proglove.com)





# 10-SLOT CHARGING STATION

## OVERVIEW

The 10-Slot Charging Station provides multiple options to mount to flat surfaces, workstations and racks. The charging status is indicated by the LEDs of the scanner. The LEDs pulse red while in charging mode. When the battery is fully charged, the LEDs pulse green constantly.

## MOUNTING

### ! CAUTION

Do not mount the 10-Slot Charging Station higher than 2m!

On the front and back side are different holes and recesses to enable secure mounting of the 10-Slot Charging Station (with screws and/or zip-ties). Two wall mount slots on the back side can be used to fix the device with screw heads 135mm apart from each other. The rail slot on the back enables mounting to a standard DIN rail, facilitating the installation in an IT rack or similar constructions. Additionally, the 10-Slot Charging Station can be installed on a monitor arm or stand with holes 75mm apart horizontally and vertically.

## TECHNICAL DATA

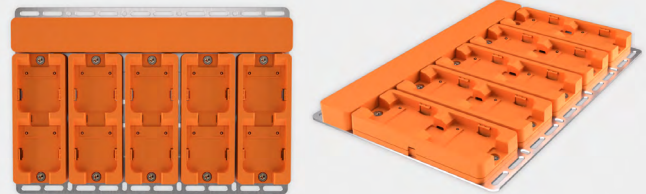
### MECHANICAL PROPERTIES:

Dimensions: ..... 298 x 203 x 25 mm (3.74 x 2.06 x 0.94 in)

Weight: ..... 840g (26.4 oz)

### ELECTRICAL PROPERTIES:

Power supply: ..... 24 V DC (1.67A)





## PROGLOVE

# WEARABLES

## HAND STRAP

The ProGlove Hand Strap offers an elastic, adjustable Velcro closure that ensures an optimal fit for any user's hand size and shape. It can be worn with or without other gloves underneath. The trigger is located on the side of the index finger and is activated with the thumb. The Hand Strap is a consumable that must be replaced regularly after use.



## PROPERTIES

### GENERAL:

Packaging unit: ..... 10 pieces per package

Available sizes: ..... one size

Available variants: ..... right / left

### SAFETY & CERTIFICATION:

Standards: ..... EN388 (2131) / EN420

Certification: ..... RoHS / REACH CE mark



### **i** NOTE

Further technical specifications are available on [docs.proglove.com](https://docs.proglove.com)



# WEARABLES

## INDEX TRIGGER

The ProGlove Index Trigger offers hand size optimized variants and can be wrapped around the hand in one movement. The thumb hole fixes the wrap in the correct position and the flexible Velcro mechanism allows it to be securely fastened to the user's hand. It can be worn with or without other gloves underneath. The trigger is located on the side of the index finger and is activated with the thumb. The Index Trigger is a consumable that must be replaced regularly after use.



## PROPERTIES

### GENERAL:

Packaging unit: ..... 3 or 10 pieces per package

Available sizes: ..... S, M, L

Available variants: ..... right / left

### SAFETY & CERTIFICATION:

Standards: ..... EN388 (2131) / EN420

Certification: ..... RoHS / REACH CE mark

### **i** NOTE

Further technical specifications are available on [docs.proglove.com](https://docs.proglove.com)

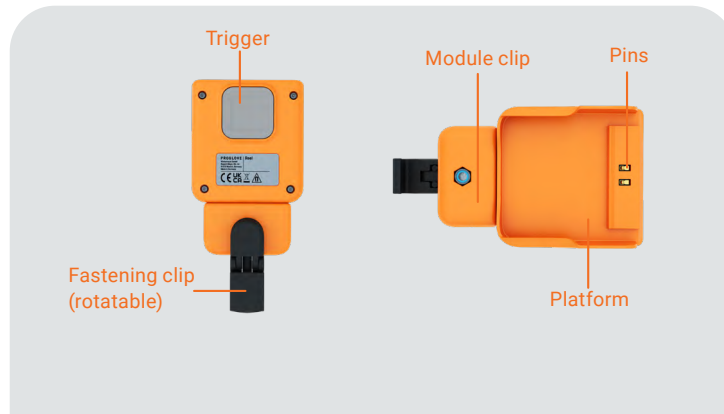


## PROGLOVE

# WEARABLES

## REEL

The ProGlove Reel can be attached with the black, rotating fastening clip to the desired spot. This can be, for example, on the user's clothing or on a belt. Alternatively, the Reel can also be worn on a lanyard around the neck. The trigger is located on the bottom of the Reel and is activated by pressing it. The cord between the mounting clip and the scanner holder is 120cm / 47.2in long and retractable. When retracted, the scanner holder is additionally fixed by magnets to prevent it from dangling.



## PROPERTIES

### GENERAL:

Packaging unit: ..... 2 reels per package

### SAFETY & CERTIFICATION:

Certification: ..... RoHS / REACH CE / UKCA



### **i** NOTE

Further technical specifications are available on [docs.proglove.com](https://docs.proglove.com)



# APPLICATION OF PROGLOVE SYSTEM





# PROGLOVE

## 1ST STEP: CHARGE SCANNER

### ! CAUTION

Only use scanner in a dry Charging Station and only touch with dry hands! This may otherwise lead to the Charging Station not functioning properly.



→ The pins face down.  
Insert scanner in the  
Charging Station.

### ✓ RESULT

Scanner pulses red and charges in the Charging Station.

### i NOTE

The LEDs pulse red while in charging mode. When the battery is fully charged, the LEDs pulse green.

## 2ND STEP: CONNECT THE CONNECTIVITY DEVICE

### ! CAUTION

Only touch the connectivity device with dry hands! This may otherwise lead to the connectivity device not functioning properly.

### i NOTE

The following steps are only needed when connecting via Gateway.

## CONNECTION WITH USB CABLE IN USB HID MODE:



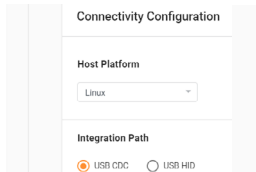
1. Connect the USB cable with the end device. Follow the previous step 1 and step 2 for "Connection with USB Cable in USB HID Mode". Continue with the following steps:



2. Plug the other end of the USB cable into the Micro USB socket of the Gateway. A clear clicking sound confirms the correct fastening.

#### ✓ RESULT

The boot up of the Gateway takes around 2min until the LED 1 lights up green. The connectivity device is connected to the end device.



3. In the configuration tool (<https://insight.proglove.com/>) under “Connectivity Configuration > Integration Path” select USB CDC.

More detailed information about this can be found in chapter “Configure devices and firmware update.”

4. Connect with the COM port on the end device.

#### ✓ RESULT

The boot up of the Gateway takes around 2min until the LED 1 lights up green. The connectivity device is connected to the end device.

### 3<sup>RD</sup> STEP: SWITCH ON THE SCANNER



1. Position scanner on the fastening rail of the wearable. The pins face down.

2. Push scanner down. A clear clicking sound confirms the correct fastening.



3. Press the textile trigger on the glove for about 2 seconds

#### ✓ RESULT

Scanner lights up with all LEDs. You can hear a beeping sound and feel a short vibration. Scanner is switched on.

#### i NOTE

Scanner switches off automatically after 15 minutes without being used.



# PROGLOVE

## 4<sup>TH</sup> STEP: CONNECT THE SCANNER

### CONNECT VIA CONNECTIVITY DEVICE



1. Press the trigger on the wearable in order to activate the scanner.



2. Aim scanner on the connectivity device and scan the pairing barcode on the Gateway.

### ✓ RESULT

Scanner lights up twice. You can hear a beeping sound and feel a short vibration. Scanner is connected to the connectivity device.

## 4<sup>TH</sup> STEP: CONNECT SCANNER (BLE)

### CONNECT VIA PROGLOVE INSIGHT MOBILE:

- ➔ For using a ProGlove scanner with ProGlove INSIGHT Mobile via software keyboard, Intent or SDK find more information under [docs.proglove.com](https://docs.proglove.com) > PG INSIGHT Mobile.

### CONNECT VIA BLE HID TO AN END DEVICE

The scanner can be used to establish a connection via Bluetooth Low Energy Human Interface Device (BLE HID) to an end device. Possible operating systems are: Apple iOS, Google Android, Microsoft Windows.

The individual steps for connecting to the respective operating systems for the first time can be found in the following.





## PREREQUISITES:

- ✓ The end device supports at least Bluetooth 4.0 standard
- ✓ No interference or physical obstacles (e.g. metal shelves) interfere with the connection between the scanner and the end device
- ✓ The range between the scanner and the end device is <33 ft (10m)



### TIP 1

Visually label the connected devices (scanner with the end device), e.g. using numbering or a color code. This will allow the user to find the right devices faster.



### TIP 2

Adhere the pairing barcode to the end device. In this way, the user can find it quickly and easily.

On a battery-operated end device, the power-saving mode can lock the end device and scanner simultaneously.

→ Permanently disable the power-saving mode of the end device.

The last 5 digits of the serial number attached to the back side identify the scanner among the available Bluetooth devices.

→ Read the serial number of the scanner.



### RESULT

Example serial number: MARK Basic - 00000.

To make the scanner visible for the end device, the scanner must be put into pairing mode:



1. Press the trigger on the wearable in order to activate the scanner.



2. Aim the scanner at the pairing barcode and scan.



### RESULT

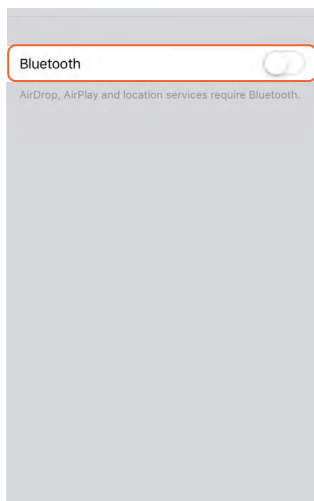
Scanner pulses blue and beeping sounds can be heard. Scanner is searching for an end device in pairing mode.



# PROGLOVE

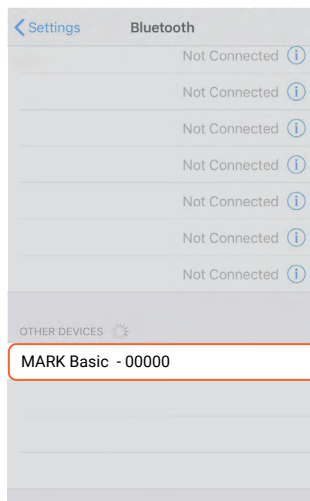
CONNECT WITH APPLE iOS 11 OR HIGHER:

01



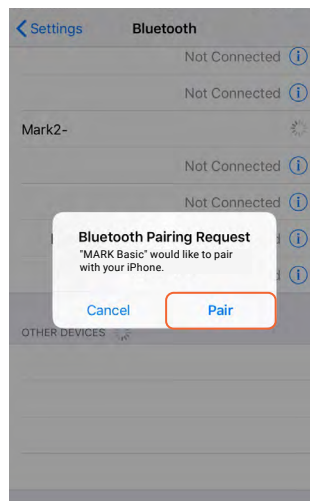
Under “Settings - Bluetooth,” activate the Bluetooth option.

02



Select “MARK Basic - 00000”.

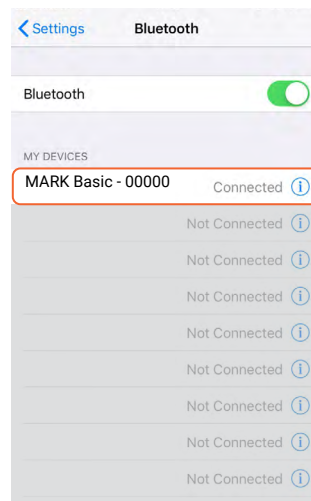
03



Confirm the “Bluetooth Pairing Request”.



RESULT

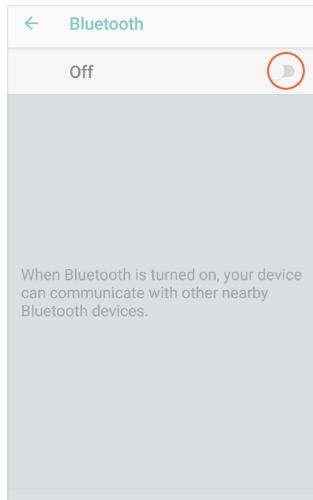


The scanner will flash blue twice and you will hear two beeps. The scanner will be shown as connected under “My devices” and is ready for use.



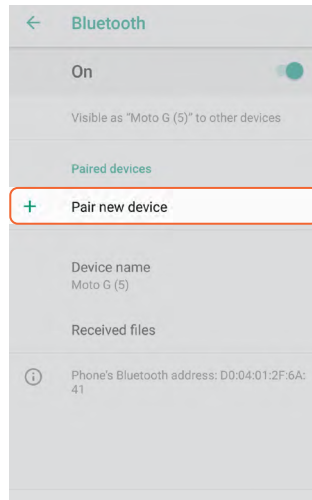
## CONNECT WITH GOOGLE ANDROID 4.4 OR HIGHER:

01



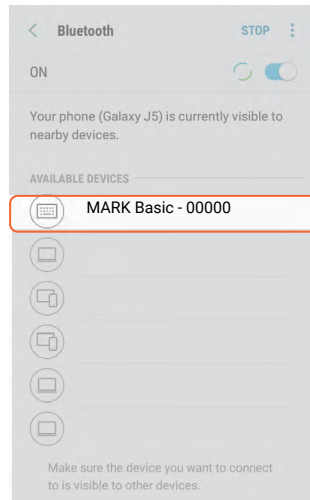
Under “Settings - Connected devices,” switch on the Bluetooth option.

02



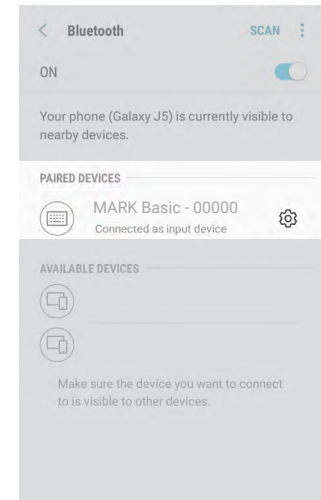
Tap “Bluetooth” and select “Pair new device.”

03



Select ‘MARK Basic - 00000’.

✓ RESULT



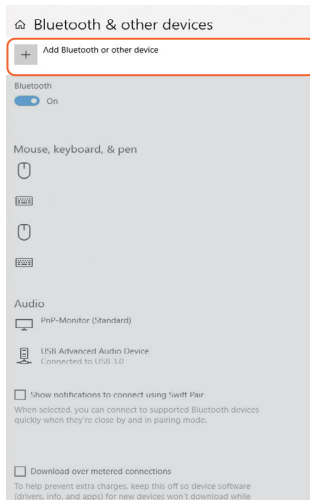
The scanner will flash blue twice and you will hear two beeps. The scanner will be shown as connected under “Paired devices” and is ready for use.



# PROGLOVE

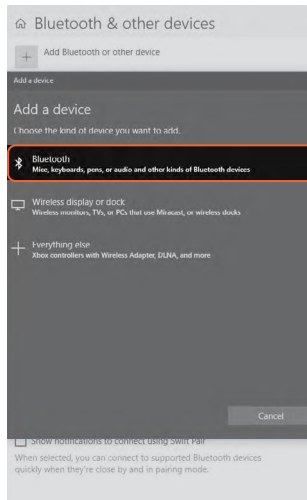
## CONNECT WITH MICROSOFT WINDOWS 10:

01



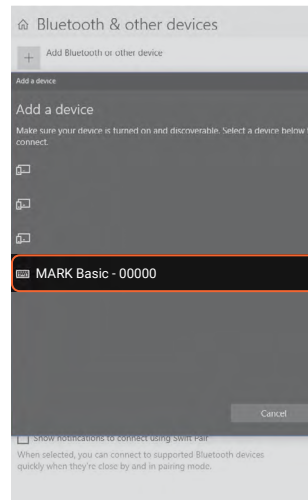
Under “Bluetooth & other devices,” click on “Add Bluetooth and other devices”.

02



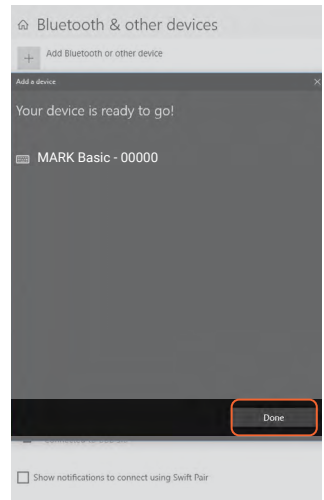
Select the option “Bluetooth: Mouses, keyboards and other types”.

03



Select “MARK Basic - 00000”.

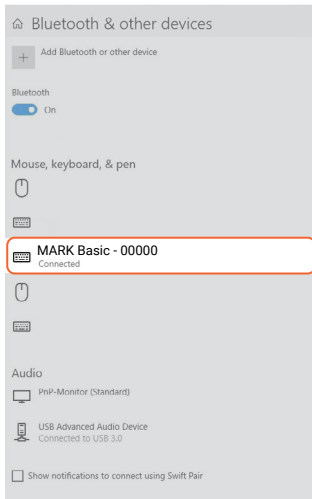
04



Click “Done”.



## ✓ RESULT



The scanner will flash blue twice and you will hear two beeps. The scanner will be shown as connected under "Bluetooth & other devices," and is ready for use.

## 5<sup>TH</sup> STEP: SCAN

### ! CAUTION

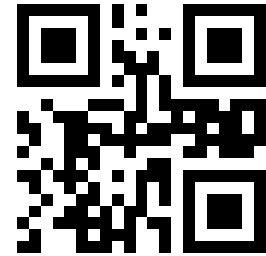
The scanner is an omnidirectional scanner. Scanner can scan barcodes from different angles. The scanning range is between 10 - 250 cm | 4 - 98 in depending on application case and barcode size.



1. Press the trigger on the glove in order to activate the scanner.



2. Aim scanner at the barcode and scan.



EXAMPLE BARCODE

## ✓ RESULT

Scanner lights up green. You can hear a beeping sound and feel a short vibration. Scanner has scanned the example barcode and transmitted it to the end device.



# PROGLOVE

## 6<sup>TH</sup> STEP: DISCONNECT SCANNER

DISCONNECT SCANNER FROM THE CONNECTIVITY DEVICE



→ Use the scanner to scan the pairing code of a different Gateway.



### RESULT

Scanner is disconnected from the Gateway and is connected to a new Gateway.



→ Place the scanner in the Charging Station.



### RESULT

The scanner is disconnected from Gateway and can be connected to a new one.

DISCONNECT THE CONNECTION CABLE FROM THE GATEWAY:



→ Unplug connection cable from the Micro USB port.



### RESULT

The LED of the Gateway no longer lights up green. The connection cable is disconnected from the Gateway.



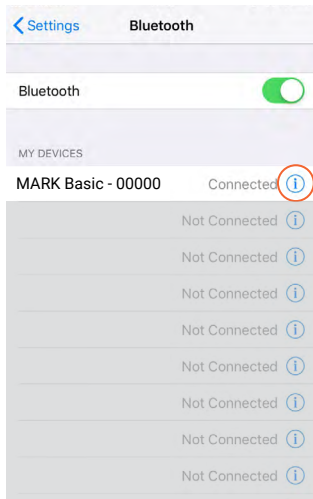
## 6<sup>TH</sup> STEP: DISCONNECT SCANNER (BLE HID)


DISCONNECT FROM APPLE IOS:

### **i** NOTE

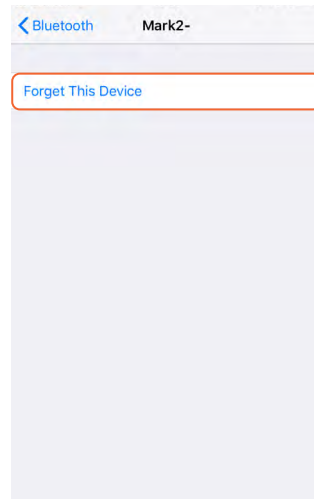
Only disconnect scanner if this is to be newly connected to another end device.

01



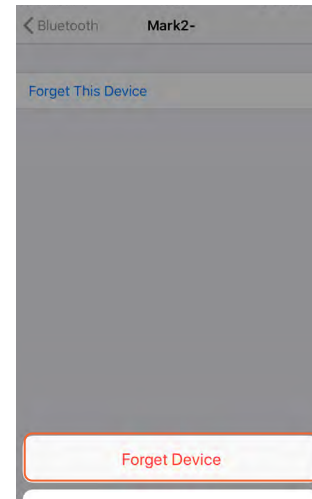
Under: "Settings - Bluetooth," tap  on the symbol.

02



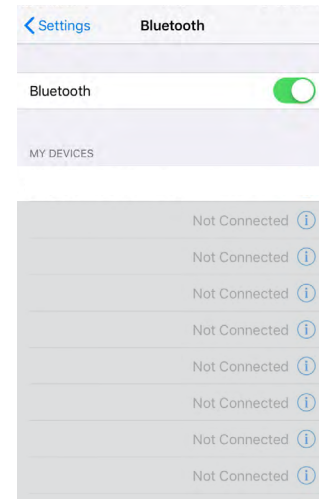
Tap on "Forget this device."

03



Confirm "Forget Device."

 **RESULT**



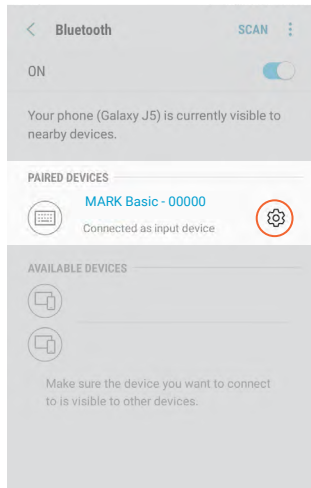
The scanner will flash red three times and you will hear three beeps. Scanner will no longer be shown as connected under "My devices."



# PROGLOVE

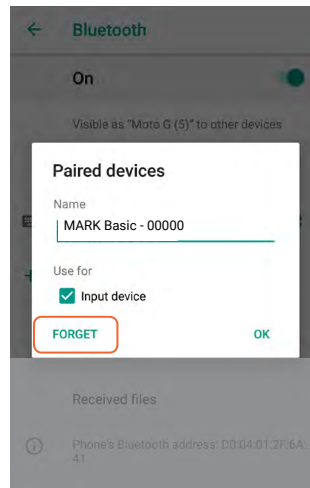
## DISCONNECTING FROM GOOGLE ANDROID:

01



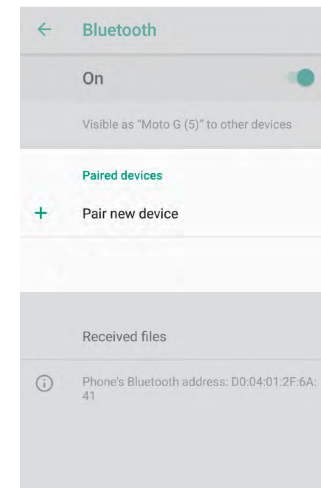
In the Bluetooth option under “Paired devices,” tap on the gear wheel symbol of “MARK Basic - 00000.”

02



Select “Forget.”

✓ RESULT

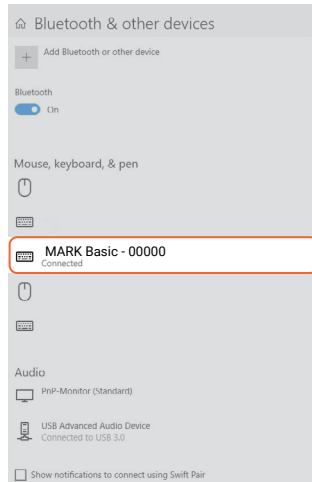


The scanner will flash red three times and you will hear three beeps. Scanner will no longer be shown as connected under “Paired devices.”



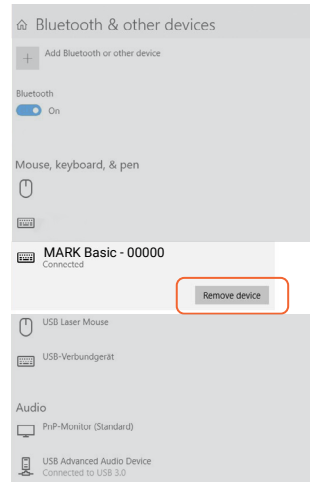
## DISCONNECTING FROM MICROSOFT WINDOWS:

01



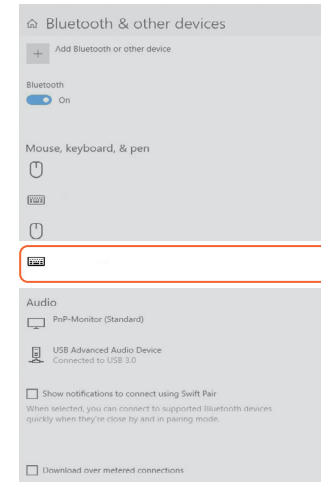
Under “Bluetooth & other devices”, select “MARK Basic - 00000.”

02



Click “Remove device.”

✓ RESULT



The scanner will flash red three times and you will hear three beeps. Scanner will no longer be shown as connected under “Bluetooth & other devices.”



# PROGLOVE

## 7<sup>TH</sup> STEP: RELEASE SCANNER FROM WEARABLES

### ! CAUTION

Do not rub over the pins of the wearable with the scanner!

→ This may otherwise lead to bent pins.

More information about removing scanner from wearable can be found in our [documentation](#).



1. Use your fingers to press between the scanner and the fastening rail of the wearable.



2. Pull the scanner up on a slight angle and push it forward.



# CONFIGURING DEVICES AND FIRMWARE UPDATES

The configuration tool under <https://insight.proglove.com/> can be used to individually set the ProGlove System to improve scanning processes and to update the firmware.

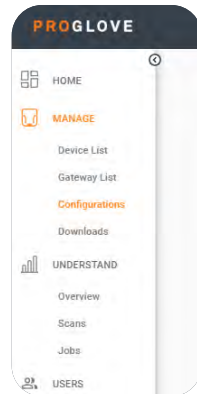
- To **update the firmware** proceed with **step 7**.
- To **create a new configuration** proceed with **step 1**.



# PROGLOVE

## 1<sup>ST</sup> STEP: OPEN CONFIGURATIONS

1. Go to Configurations in the INSIGHT navigation.



2. Select a saved configuration or create a new one.

Configurations			
CONFIG FILE NAME	LAST MODIFIED UTC+2	CREATED UTC+2	
<input type="checkbox"/> Test_Config1	7/1/2025, 1:17 PM	7/1/2025, 1:17 PM	
<input type="checkbox"/> Test_Config2	7/1/2025, 1:11 PM	7/1/2025, 1:11 PM	
<b>DOWNLOAD CONFIGURATION</b>		<b>CREATE NEW CONFIGURATION</b>	

➔ To install a saved configuration proceed with **step 7**.

## 2<sup>ND</sup> STEP: CREATE A NEW CONFIGURATION

➔ Choose which connectivity option is used and need to be configured.

Choose the device you want to connect to ProGlove Insight

☒ Gateway One

☐ PG Connect App

**NEXT**

CANCEL

## 3<sup>RD</sup> STEP: CONNECTIVITY CONFIGURATION

It is possible to configure the connectivity settings according to the end device.

**Gateway Multipairing:** It is also possible to adjust the maximum number of scanners that can connect to the Gateway (up to 5 devices).

➔ Choose the preferred settings.



## 4<sup>TH</sup> STEP: DEVICE SETTINGS

The Device Settings can be used to optimize the scanner for certain use cases.

The **Engine Settings** allow to improve the readability of barcodes:

- activate Fuzzy 1D processing for hard to read 1D barcodes
- activate Display mode for barcodes on screens or foils
- activate Picklist mode to enable a more accurate aiming with the scanning field

The **Feedback profiles** allow to customize the scanners feedback.

The **Sleep Mode** determines the duration of inactivity after which the scanner turns off.

### Device Settings

#### Engine Settings

- ☐ Fuzzy 1D processing
- ☐ Display Mode
- ☐ Picklist Mode

#### Feedback Profiles

Normal

☒ Enable Haptic Feedback

#### Sleep Mode

5  
Minutes

## 5<sup>TH</sup> STEP: SYMBOLOGY SETTINGS

The Symbology Settings can be used to switch the barcode types (including inverse barcodes) on or off and to set barcode lengths, edge tolerances as well as check digits.

- Switch off unused barcode types.
- Switch on inverse barcode types if needed.

## 6<sup>TH</sup> STEP: WORKFLOW RULES

The Workflow Rules can be used to manipulate the barcode data. These can be used to change barcode data through rules with conditions and actions. These are then in an IF-THEN relationship with each other, which means that:

- IF** a condition is true, **THEN** an action is executed.
- An action is also carried out without a condition.

### APPLICATION EXAMPLE:

Insert the prefix “Pro” for the following barcode:



Glove

Condition: Barcode matches “Glove”

Action: Add Prefix “Pro”

Outcome: “ProGlove”



# PROGLOVE

→ Create the condition “Barcode Matches: *Gloves*” and the action “Add Prefix *Pro.*”

## 1. set condition (if)

Edit Condition

Barcode Contains Barcode Matches Length

☐ Negate this condition

Barcode matches this Regular expression

Glove

SAVE CONDITION

## 2. set action (then)

Edit Action

Search Action

Output Add Prefix Add S

Insert this String as a prefix of the barcode

Pro

ADD ENTER ADD TAB

SAVE ACTION

## 7<sup>TH</sup> STEP: CONFIGURE DEVICES AND FIRMWARE UPDATE

For the **configuration** of the device:

→ Click on Save. Assign a name and download the configuration file.

For a **firmware update**:

→ Download the latest firmware version at <https://insight.proglove.com/devices/downloads> or get it from your ProGlove contact person. Follow the next steps.

**To configure PG INSIGHT Mobile:**

→ Copy the downloaded configuration file in the following folder on your mobile device: `(/sdcard)/Android/data/de.proglove.connect/files``



## RESULT

The configuration file will be deployed automatically on the mobile phone.



## TO CONFIGURE THE GATEWAY / FIRMWARE UPDATE:



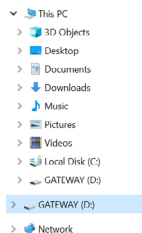
1. Connect the Gateway with the computer. The Gateway boots up. This takes about 2 min and is finished when the USB LED shows constant green light.



2. Scan the Pairing Barcode on the Gateway.



3. Scan this barcode to enable the Gateway as a mass storage device on the computer.



4. Copy the downloaded configuration file or the firmware file into the mass storage device Gateway.



5. Scan this barcode to disable the Gateway as a mass storage device on the computer.



### CAUTION

Do not disconnect the Gateway from the computer during the upload!



### RESULT

The upload of the configuration takes about 5 seconds/the upload of the firmware takes about 2 minutes and is finished when the USB LED shows constant green light. The Gateway is now configured/updated and can be connected to the scanner.

### **i** NOTE













The configuration will be applied to the scanner and the Gateway directly. Scanners, that get connected to the Gateway later will receive the same configuration!



## PROGLOVE

# SIGNAL TABLE












### GENERAL SCANNER:

Description	LED 	Connection symbol 	Battery symbol 	Audio signal 	Vibration 
Barcode data could be transferred	Short green flashing 			Short positive beep	Short vibration
Barcode data could not be transferred	Red flashing 3 times briefly 			Long negative beep	Long vibration
Battery charge under 10%			Slow red flashing 		
Battery charge under 7%			Red flashing 3 times briefly 		
Switch on scanner with battery charge under 5%			Red flashing 3 times briefly 		
Battery charge under 95% in Charging Station			Pulsing Red 		
Battery charge over 95% in Charging Station			Constantly green 		












SCANNER CONNECTION VIA BLE:

Description	 LED	 Connection symbol	 Battery symbol	 Audio signal	 Vibration
Scanner searches for an end device	Pulsing Blue 	Pulsing Blue 		Continuously rising beep	
Scanner is connected to an end device	Blue flashing 2 times briefly 	Blue flashing 2 times briefly 		Short rising positive beep	Short vibration
Scanner cannot connect with the end device	Red flashing 3 times briefly 			Negative beep briefly 3 times	Long vibration
Scanner is disconnected from an end device	Red flashing 3 times briefly 			Negative beep briefly 3 times	Long vibration



















# PROGLOVE

## GATEWAY

Description	 LED 1 (USB - LED)	 LED 2 (SCANNER - LED)	 LED 3 (Cloud - LED)
Gateway boots up* *the boot up takes around 2 min.	Left to right run through all LEDs alternating Blue / Green until start 		
Gateway is connected to the end device via USB	Constantly green 		
Gateway is not connected to the end device via USB	No feedback		
Gateway searches for a scanner		Pulsing Blue 	
Gateway is connected to the scanner via BLE		Constantly green 	



Description	 LED 1 (USB LED)	 LED 2 (Scanner - LED)	 LED 3 (Cloud - LED)
Firmware Update: Gateway is in download mode	Constantly yellow 	Constantly yellow 	Constantly yellow 
Firmware Update: Scanner is flashing / Gateway deploys	Constantly purple 	Constantly purple 	Constantly purple 
Firmware Update: Gateway is flashing	left to right run trough all LEDs alternating purple until done 		
Firmware Update: successfull	Long green flashing 	Long green flashing 	Long green flashing 
Gateway is connected to a scanner and is searching for more scanner		Constantly green 	
Gateway can not connect to another scanner		Constantly red 	
Gateway can not connect to another scanner but another scanner tries to connect		Red flashing 3 times briefly 	



# PROGLOVE

## STORAGE AND CLEANING

### STORAGE

#### STORAGE LOCATION:

Store hardware wearables in a dry and dirt-free environment. In case of transport, ProGlove System must be transported shockproof in its original packaging.

#### TEMPERATURE:

Store hardware wearables in an environment between 0°C ( 32°F ) and 50°C (122°F).

### CLEANING

#### ! CAUTION:

Do not attempt to charge damp/wet hardware. All components must be dry before charging.

### WEARABLES:



#### CAUTION:

Protect wearables from moisture! This may otherwise lead to the wearables not functioning properly.

→ Do not wash wearables.

### HARDWARE:



#### CAUTION:

Protect hardware from moisture! This may otherwise lead to ProGlove System not functioning properly.



#### CAUTION:

Do not clean hardware with chemical agents! Otherwise, the material can be damaged.

→ Use isopropyl alcohol or cleaning agents approved for electronics and use it to wipe all surfaces of the hardware with a soft cloth.

→ Regularly clean the scanner glass with cotton swabs.



# SOLUTION TO THE PROBLEM

## SCANNER

### PROBLEM

### CAUSE

### SOLUTION

Scanner is not responding.

Battery is not charged.

→ Charge scanner in the Charging Station for at least 20 min.

Wearable is defective.

→ Change wearable.

Scanner is not vibrating or does not beep after successful data transfer.

Feedback signals are disabled.

→ Check whether the feedback signals in the configuration tool are enabled under “Feedback Profiles.”

The battery symbol of scanner flashes red.

The battery charge is low.

→ Charge scanner in the Charging Station for at least 20 min.



# PROGLOVE

## SCANNER

### PROBLEM

Scanner illumination on but no barcodes are scanned.

### CAUSE

The barcode label cannot be read.

The barcode type cannot be read.

The barcode length cannot be read.

Scanner glass is dirty.

### SOLUTION

→ Create new barcode label.

→ Check whether the barcode type in the configuration tool is enabled under "Symbology settings".

→ Check whether the barcode length in the configuration tool is enabled under "Symbology settings".

→ Clean the scanner glass with a cotton swab.

Only ONE section w/question/  
problem see above

The barcode label is difficult to read.

→ To enhance the scanning performance, make the following settings in the configuration tool under "Symbology settings".  
Fuzzy 1D processing: ON

Scanning distance is not optimally used.

→ Position scanner closer or further away from the barcode label and scan.



## BLE - DATA TRANSFER

### PROBLEM

### CAUSE

### SOLUTION

Barcode data is not transferred.

Scanner is not connected to the end device.

1. Scan the pairing barcode.
2. Lights up blue twice briefly while scanner is connecting and after a successful connection.

Scanner lights up green after the data transfer, but no barcode data is shown on the end device.

Scanner is out of range of the end device. (Maximum range is < 33 ft.(10m))

- Bring scanner closer to the end device and scan the pairing barcode.

Scanner flashes red 3 times, 3 negative beeps are heard and a long vibration is felt.

Scanner cannot connect with the end device.

1. Check whether the range between scanner and end device is < 33 ft. (10m) If not, get closer.
2. Disconnect the connection between the end device and scanner and reconnect "Step 6: Disconnect scanner" and "Step 4: Connect scanner"
3. Scan the pairing barcode again.
4. Scan barcode again.



# PROGLOVE

## GATEWAY - DATA TRANSFER

### PROBLEM

Barcode data is not transferred.

### CAUSE

Scanner is not connected to the Gateway.

Scanner is out of range of the Gateway. (Maximum range is 100 - 130 ft. (30 - 40m))

Gateway is defective.

Scanner is defective.

### SOLUTION

1. Scan the pairing barcode on the Gateway.  
2. Lights up blue twice briefly while scanner is connecting and after a successful connection.

→ Bring scanner closer to the Gateway.

Gateway must be replaced.  
→ More detailed information can be found at [docs.proglove.com/en/gateway](https://docs.proglove.com/en/gateway).

Scanner must be replaced.  
→ More detailed information can be found at [docs.proglove.com](https://docs.proglove.com).





## CHARGING STATION

### PROBLEM

Scanner does not charge in Charging Station.

### CAUSE

Scanner is not correctly inserted in Charging Station.

Charging Station is not connected to power source.

Scanner is defective.

Charging Station is defective.

### SOLUTION

➔ Insert scanner in the Charging Station again.

➔ Connect Charging Station to power source.

Scanner must be replaced.

➔ More detailed information can be found at [docs.proglove.com](https://docs.proglove.com)

The Charging Station must be replaced.  
➔ More detailed information can be found at [docs.proglove.com/en/charging-stations](https://docs.proglove.com/en/charging-stations).



#### TIP 1

Problem could not be solved?

➔ Insert scanner into the wearable.

Press the trigger on the wearable for about 15 seconds and restart scanner.



#### TIP 2

Problem could not be solved?

➔ Scan with scanner the Factory Default Barcodes:



SCANNER



GATEWAY

Factory Default Barcode will reset all configurations!



## DISPOSAL

MARK Basic system corresponds to the directive 2012/19/EU of the EUROPEAN PARLIAMENT AND COUNCIL of 4 July 2012 regarding waste electrical and electronic equipment (WEEE). That is why LEO system cannot be disposed of through household waste. If you have questions about a return or environmentally-friendly disposal, please contact ProGlove support.

Carry out the following steps to decommission ProGlove system:

1. Release Scanner from Wearables
2. Disconnect the connection cable from the Access Point / Gateway
3. Disconnect the mains plug from the Charging Station S
4. Properly dispose of Hardware and Wearables as old electronic and electric devices

## DIRECTIVES & CERTIFICATION

### **Declaration of Conformity (CE)**

#### **Wearable Barcode Scanners**

Workaround GmbH, hereby declares that the ProGlove Wearable Barcode Scanners (LEO) are in compliance with the following directives:

- 2014/53/EU Radio Equipment
- 2015/863/EU RoHS

#### **Connectivity Devices**

Workaround GmbH, hereby declares that the ProGlove Connectivity Devices (Gateway 1) are in compliance with the following directives:

- 2014/53/EU Radio Equipment
- 2015/863/EU RoHS

#### **Charging Stations**

Workaround GmbH, hereby declares that the ProGlove Charging Stations (Charging Station S, 10-Slot Charging Station) are in compliance with the following directives:

- 2014/30/EU EMC
- 2014/35/EU LVD
- 2015/863/EU RoHS

#### **European contact:**

Workaround GmbH  
Rupert-Mayer-Str. 44  
81379 Munich, Germany

The full text of the EU declaration of conformity is available at the following internet address: [docs.proglove.com](https://docs.proglove.com)



### REGULATORY INFORMATION

This device is approved under Workaround GmbH (Pro-Glove). This guide applies to MARK, Hardware Connectivity, Accessories, Wearables. All ProGlove devices are designed to be compliant with the rules and regulations in the locations they are sold and will be labeled as required.

### BRAZIL RADIO EQUIPMENT WARNING

Este equipamento não tem direito à proteção contra interferência prejudicial e não pode causar interferência em sistemas devidamente autorizados.

### MEXICO RADIO EQUIPMENT WARNING

La operación de este equipo está sujeta a las siguientes dos condiciones:

- Es posible que este equipo o dispositivo no cause interferencia perjudicial y
- Este equipo o dispositivo debe aceptar cualquier interferencia, incluyendo la que pueda causar su operación no deseada.



### CAUTION:

Any changes or modifications made to this equipment not expressly approved by Workaround GmbH may void the authorization to operate this equipment.

### SINGAPORE REGULATION INFORMATION

**Complies with  
IMDA Standards  
DA100846**

### DISCLAIMER

ProGlove has taken reasonable measures to provide information in this manual that is complete and accurate, however, ProGlove reserves the right to change any specification or the user manual at any time without prior notice. ProGlove and the ProGlove logo are registered trademarks of Workaround GmbH in many countries, including the U.S. and the E.U. MARK and LEO is a trademark of ProGlove GmbH and/or its affiliates, registered in many countries including the U.S. and the E.U. All other brand and product names may be trademarks of their respective owners.

The Customer hereby agrees that it has carefully read and understood any and all terms and conditions, safety precautions, and measures set forth in this Document, furthermore, the Customer agrees to bear full responsibility for these risks and responsibility for any accidents, injury to persons, or property damage that may occur, Customer further agrees to waive claiming any liability against Workaround GmbH.



# PROGLOVE

## FCC/IC CERTIFICATION COMPLIANCE:

### ProGlove System

The ProGlove System, comprised of: MARK 3, MARK 2 MR, MARK 2 SR, MARK Basic, MARK Basic, MARK Display, LEO, Charging Station S, 10 Slot Charging Station Gateway, Wearables, peripherals and accessories, complies with the following FCC/IC product categories:

- FCC Part 15 Subpart C 247 (intentional radiators = RF transceiver)
- FCC Part 15 Subpart C 249 (intentional radiators = RF transceiver)
- FCC Part 15 Subpart B 107/109 (unintentional radiator)
- ISED Canada RSS-Gen Category I (radio apparatus)
- ISED Canada RSS-247
- ISED Canada RSS-102
- ISED Canada RSS-210

The ProGlove LEO 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.

### FCC/IC Certification Compliance

Under the regulations of the FCC and the IC the user has to be aware of the following when using the ProGlove MARK Basic:

1. This equipment complies with FCC/IC radiation exposure limits set forth for an uncontrolled environment and meets the FCC radio frequency (RF) Exposure Guidelines and RSS-102 of the IC radio frequency (RF) Exposure rules.

This equipment has very low levels of RF energy that are deemed to comply without testing of specific absorption rate (SAR).



Cet équipement est conforme aux limites d'exposition aux rayonnements énoncées pour un environnement non contrôlé et respecte les règles d'exposition aux fréquences radioélectriques (RF) des lignes directrices de la FCC et les règles d'exposition aux fréquences radioélectriques (RF) CNR-102 de l'IC. Cet équipement émet une énergie RF très faible qui est considérée comme conforme sans évaluation du débit d'absorption spécifique (DAS).

2. This ProGlove System has been tested and meets the FCC/IC RF exposure rules when used with ProGlove's accessories supplied or designated for this product. Use of other accessories may not ensure compliance with FCC/IC RF exposure rules.

Le système ProGlove a été testé et est conforme aux règles d'exposition aux fréquences radioélectriques (RF) de l'IC ainsi que de la FCC lorsqu'il est utilisé avec les accessoires ProGlove fournis ou conçus pour ce produit. L'usage d'autres accessoires ne garantit pas nécessairement la conformité aux règles d'exposition aux RF de l'IC ou de la FCC.

### **FCC Specific Certification Compliance**

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

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.



## PROGLOVE

4. 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.

### IC Specific Certification Compliance

Under the regulations of the IC the user has to be aware of the following when using the ProGlove MARK Basic:

1. This device complies with Industry Canada's licence-exempt RSSs. Operation is subject to the following two conditions:

- (1) This device may not cause interference; and
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

1. Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

- 1) l'appareil ne doit pas produire de brouillage;
- 2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.



# SUPPORT

## TECHNICAL SUPPORT CONTACT DATA

If you have questions about integrating or using the ProGlove devices, our customer support department will be happy to help you. They will process your request as soon as possible. You can reach them at:

### SUPPORT WEBSITE:


 [docs.proglove.com](https://docs.proglove.com)


### E-MAIL ADDRESS:


 [support@proglove.de](mailto:support@proglove.de)

 [support@proglove.com](mailto:support@proglove.com)

### TELEPHONE NUMBER:

 +49 (89) 12085158

 +1 (217) 721-0740 (USA)

 Monday – Friday, 9:00 am to 5:00 pm

# PROGLOVE

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[support@proglove.com](mailto:support@proglove.com)