

# PROGLOVE

USER MANUAL



Technical document



# PROGLOVE USER MANUAL

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# 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.

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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.

# SAFETY INSTRUCTIONS

---

## HARDWARE

- ⚠ **CAUTION**  
Keep all cables and wires away from high voltage sources! This may otherwise lead to damage or faults due to overvoltage, line noise, electrostatic discharge or other irregularities.
- ⚠ **CAUTION**  
Do not use damaged cables! 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 not functioning properly.
- ⚠ **CAUTION**  
Do not modify ProGlove system! This may otherwise lead to ProGlove system not functioning properly.

## 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 correct size! Otherwise this may cause pain or pressure points on your hand.





# SCOPE OF DELIVERY



## CAUTION

Do not use any damaged Hardware or Wearables!

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

### SCANNER



LEO

### WEARABLES



Index Trigger



Hand Strap



Reel

### CHARGING STATIONS



Charging Station S / 10-Slot Charging Station with power cable (USB-C) and power supply



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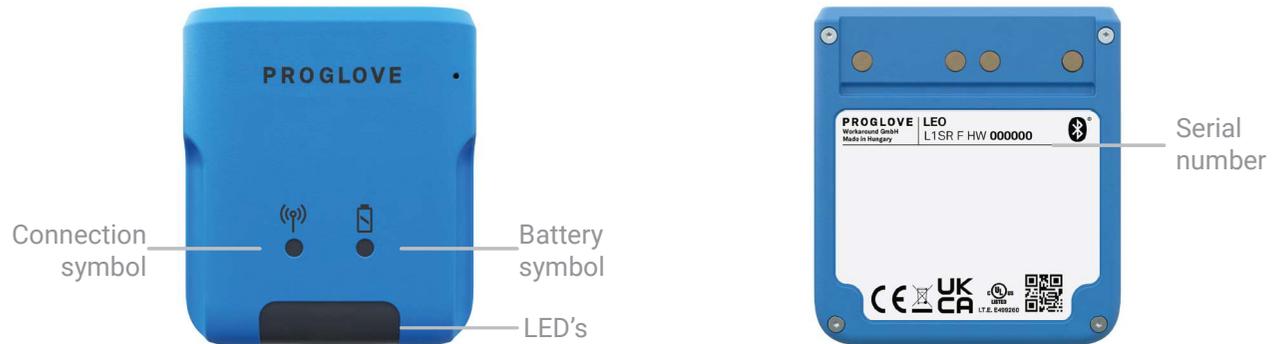
# SCANNER

## OVERVIEW

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

Standard range:  
4 - 28 in (10 - 70 cm)

## LEO





## TECHNICAL DATA - LEO

### MECHANICAL PROPERTIES:

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

Weight: ..... 1.23 oz (35g)

### ELECTRICAL PROPERTIES:

Battery type: ..... Lithium polymer (rechargeable)

Charge duration: ..... 1 hours

Number of scans: ..... up to 4000 scans (depending on application and environmental conditions)



### 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, RSS, Composite, TLC-39, MaxiCode et al.

### BARCODE TYPES - POSTAL:

US PostNet, US Planet, UK Postal, Australia Postal, Japan Postal, Dutch Postal (KIX) et al.

### LED CLASSIFICATION:

Standard Range: Excluded risk group LED product according to IEC/EN 62471

### **i** NOTE

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



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## CONNECTIVITY DEVICE

### OVERVIEW GATEWAY

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.





## TECHNICAL DATA GATEWAY

### MECHANICAL PROPERTIES:

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

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

### ELECTRICAL PROPERTIES:

Power supply of Access Point via USB cable: ..... 5 VDC (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

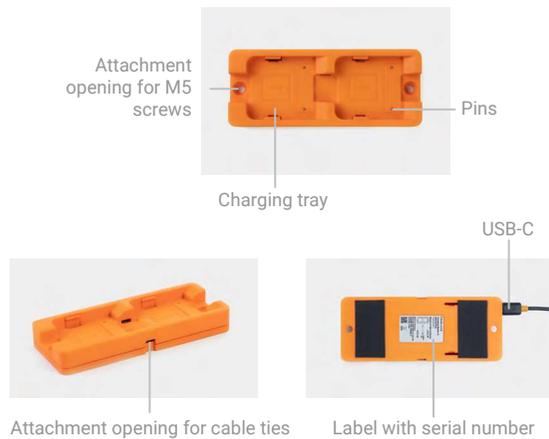
Further technical specifications are available on [docs.proglove.de](https://docs.proglove.de).



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

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

### ELECTRICAL PROPERTIES:

Power supply: ..... 5 VDC (1.2 A) via power supply  
EU: SYS1561-1105  
NA: SAW-06D-050-1200GB



**i NOTE**  
Further technical specifications are available on [docs.proglove.de](https://docs.proglove.de).



# 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 appart horizontally and vertically.

## TECHNICAL DATA

### MECHANICAL PROPERTIES:

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

Weight: ..... 26.4 oz (750g)

### ELECTRICAL PROPERTIES:

Power supply: ..... 24 VDC (1.67A) via power supply  
INT: GE40I 24-P1J  
Use the provided power supply only.  
Using any other type of AC power supply is prohibited.





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## 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: ..... 3 or 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.de](https://docs.proglove.de).



## 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.de](https://docs.proglove.de).



## 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 27 in (70 cm) 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 mark



**i NOTE**  
Further technical specifications are available on [docs.proglove.de](https://docs.proglove.de).



# APPLICATION OF PROGLOVE SYSTEM

## 1<sup>ST</sup> 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.

## 2<sup>ND</sup> 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.

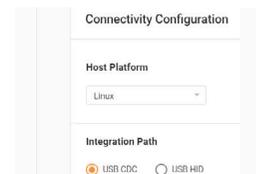
### i NOTE

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:



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."](#)



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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.

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.



## 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.de](https://docs.proglove.de)> 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.



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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: LEO - 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.



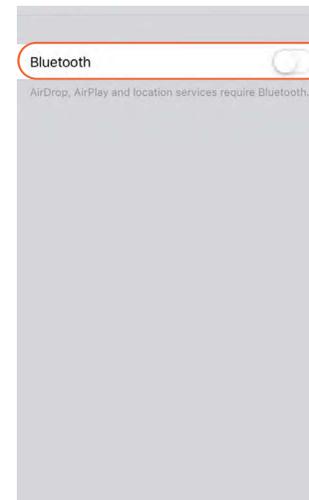
2. Aim the scanner at the pairing barcode and scan.

✓ **RESULT**

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

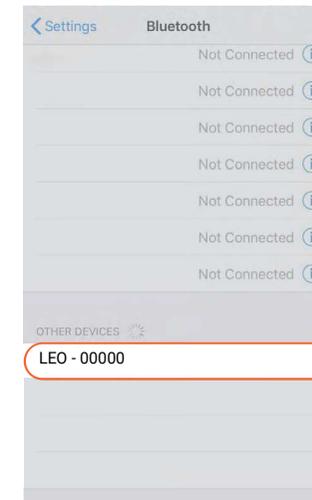
## CONNECT WITH APPLE iOS 11 OR HIGHER:

01



Under "Settings - Bluetooth," activate the Bluetooth option.

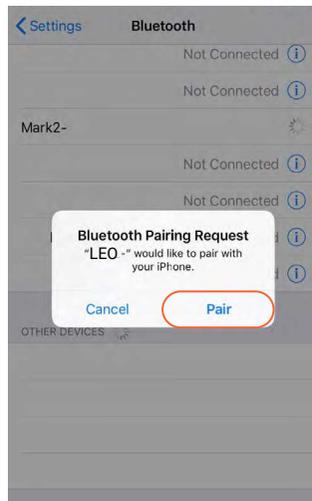
02



Select "LEO - 00000".

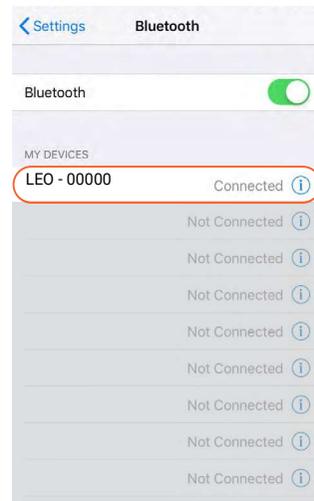


03



Confirm the "Bluetooth Pairing Request".

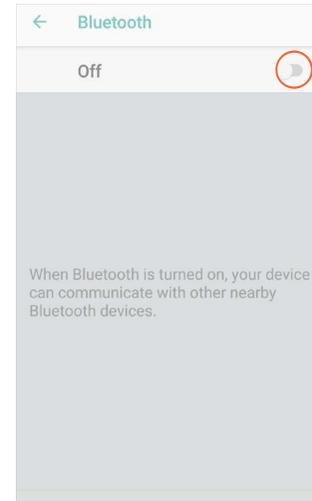
✓ RESULT



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.

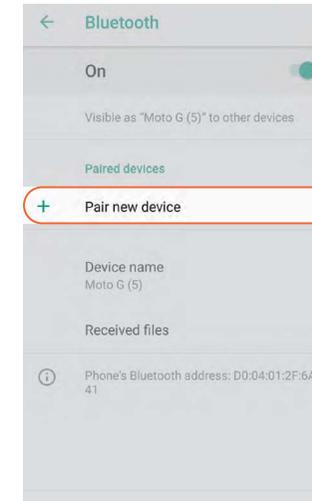
CONNECT WITH GOOGLE ANDROID 4.4 OR HIGHER:

01



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

02



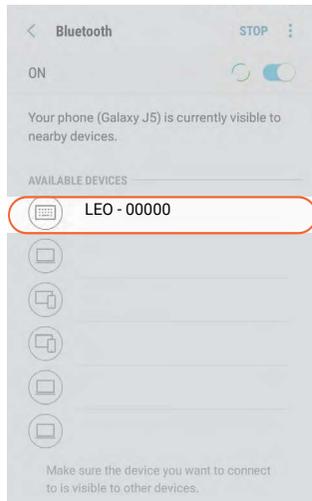
Tap "Bluetooth" and select "Pair new device."



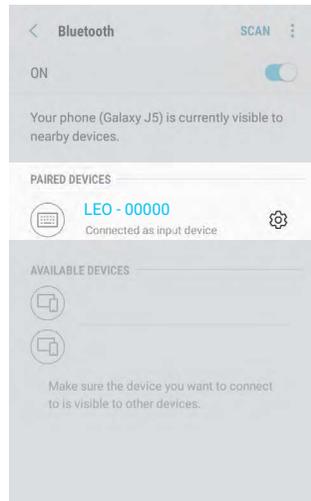
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03

✓ RESULT



Select 'LEO - 00000'.

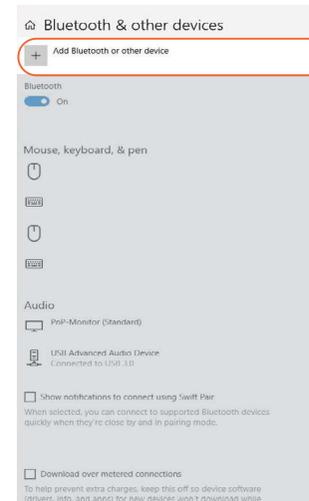


The scanner will flash blue twice and you will hear two beeps. The scanner will be shown as connected under "Paired devices" and is ready for use.

## CONNECT WITH MICROSOFT WINDOWS 10:

01

02



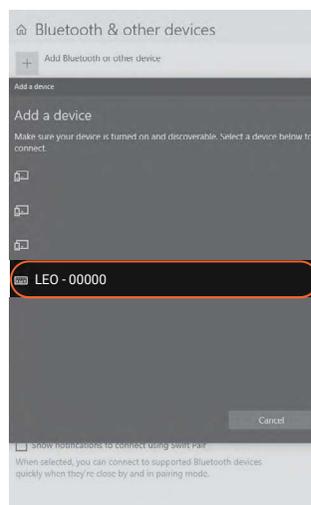
Under "Bluetooth & other devices," click on "Add Bluetooth and other devices".



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

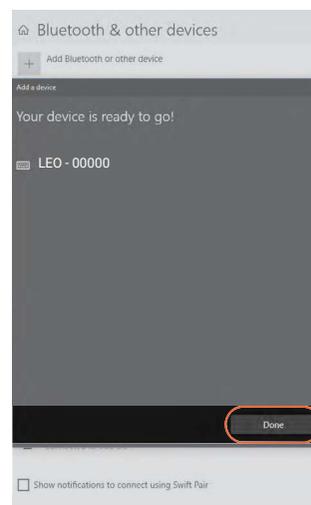


03



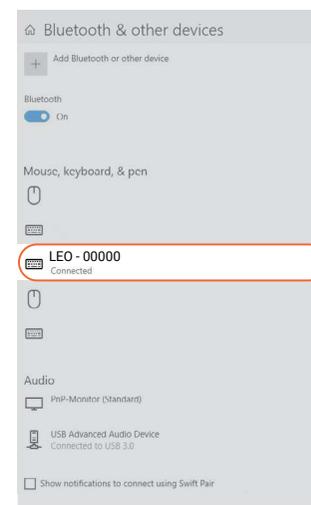
Select "LEO - 00000".

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.



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

### ! CAUTION

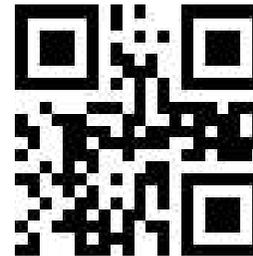
The scanner is an omnidirectional scanner. Scanner can scan barcodes from different angles. The scanning range is between 4 - 28 in (10-70 cm) depending on application case and barcode size.



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.



## 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.

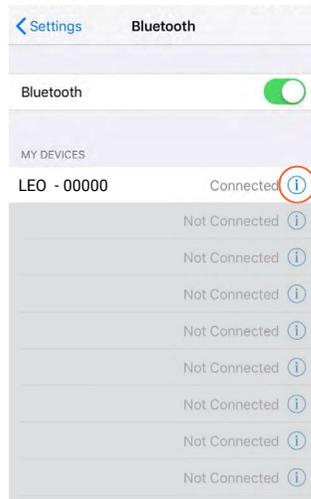


## 6<sup>TH</sup> STEP: DISCONNECT SCANNER (BLE HID)

### DISCONNECT FROM APPLE iOS:

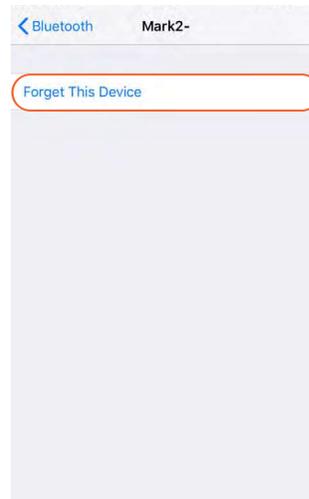
**i** **NOTE:** Only disconnect scanner if this is to be newly connected to another end device.

01



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

02



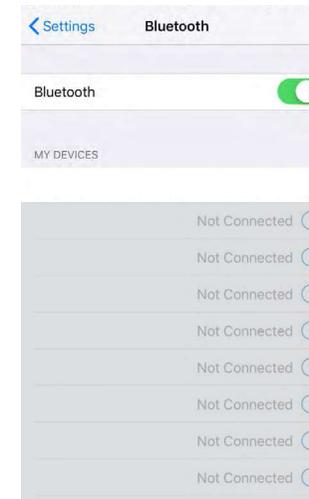
Tap on "Forget this device."

03



Confirm "Forget Device."

**✓** **RESULT**

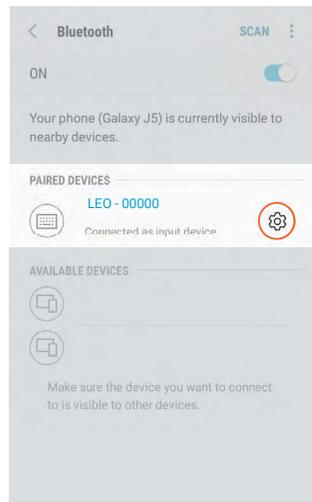


The scanner will flash red three times and you will hear three beeps. Scanner will no longer be shown as connected under "My devices."



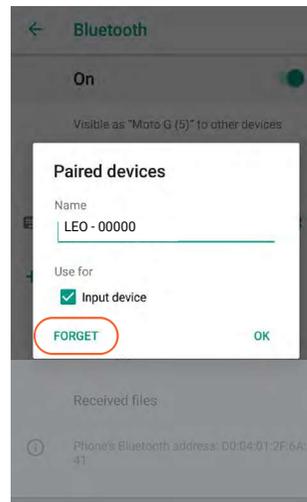
## DISCONNECTING FROM GOOGLE ANDROID:

01



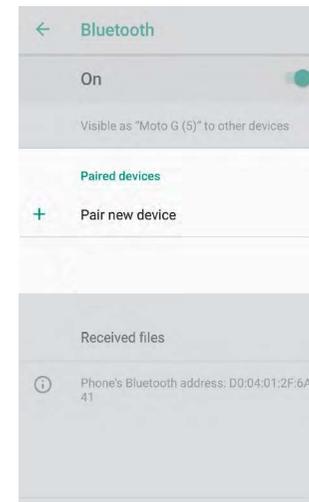
In the Bluetooth option under "Paired devices," tap on the gear wheel symbol of "LEO - 00000."

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."

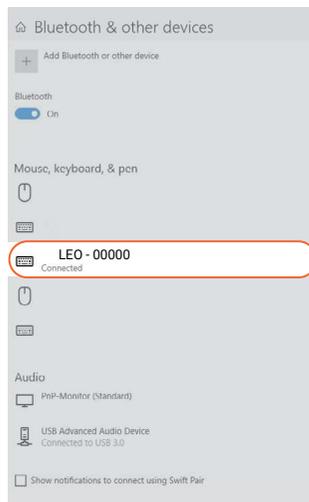


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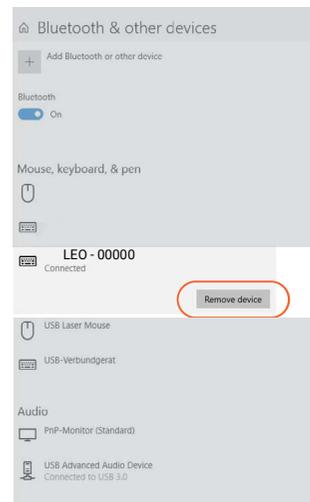
## DISCONNECTING FROM MICROSOFT WINDOWS:

01



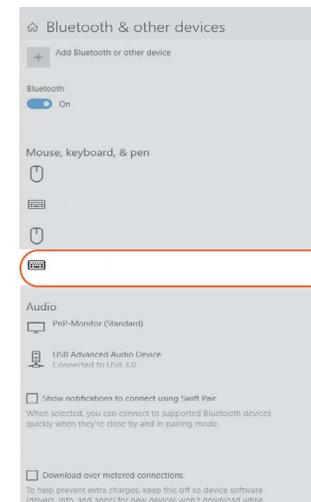
Under "Bluetooth & other devices," select "LEO - 00000."

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."



## 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 under [proglove.com/support](https://proglove.com/support).



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.

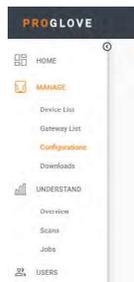


## CONFIGURING DEVICES AND FIRMWARE UPDATES

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**.

### 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.

CONFIG FILE NAME	LAST MODIFIED UTC+2	CREATED UTC+2	
<input type="checkbox"/> Test_Config1	01/05 1:17 PM	01/05 1:17 PM	
<input type="checkbox"/> Test_Config2	01/05 1:11 PM	01/05 1:11 PM	

[DOWNLOAD CONFIGURATION](#) [CREATE NEW CONFIGURATION](#)

→ 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.



### 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:

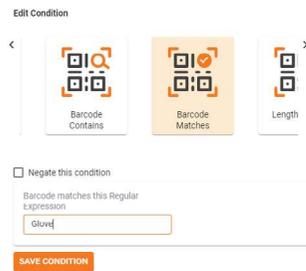
Insert the prefix "Pro" for the following barcode:



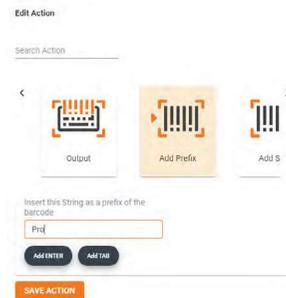
Condition: Barcode matches "Glove"  
Action: Add Prefix "Pro"  
Outcome: "ProGlove"

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

1. set condition (if)



2. set action (then)



## 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!



## 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%			Pulsing Red 		
Battery charge over 95%			Constantly green 		

**SCANNER CONNECTION VIA BLE:**

Description	 <b>LED</b>	 <b>Connection symbol</b>	 <b>Battery symbol</b>	 <b>Audio signal</b>	 <b>Vibration</b>
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



## 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	 <b>LED 1 (USB LED)</b>	 <b>LED 2 (Scanner - LED)</b>	 <b>LED 3 (Cloud - LED)</b>
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 	



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## 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 -4°F (-20°C) and 140°F (+60°C).

### CLEANING

#### 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.



## SCANNER

### PROBLEM

What lights up? 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.

What lights up?

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

Scanner glass is dirty.

→ Clean the scanner glass with a cotton swab.

Scanning distance is not optimally used.

→ Position scanner closer or further away from the barcode label and scan.  
4-28 in (10 - 70 cm)



## BLE - DATA TRANSFER

PROBLEM	CAUSE	SOLUTION
Barcode data is not transferred.	Scanner is not connected to the end device.	<ol style="list-style-type: none"><li>1. Scan the pairing barcode.</li><li>2. Lights up blue twice briefly while scanner is connecting and after a successful connection.</li></ol>
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.	<ol style="list-style-type: none"><li>1. Check whether the range between scanner and end device is &lt; 33 ft. (10m) If not, get closer.</li><li>2. Disconnect the connection between the end device and scanner and reconnect "Step 6: Disconnect scanner" and "Step 4: Connect scanner"</li><li>3. Scan the pairing barcode again.</li><li>4. Scan barcode again.</li></ol>



## GATEWAY - DATA TRANSFER

PROBLEM	CAUSE	SOLUTION
Barcode data is not transferred.	Scanner is not connected to the Gateway.	1. Scan the pairing barcode on the Gateway. 2. Lights up blue twice briefly while scanner is connecting and after a successful connection.
	Scanner is out of range of the Gateway. (Maximum range is 100 - 130 ft. (30 - 40m))	→ Bring scanner closer to the Gateway.
	Gateway is defective.	Gateway must be replaced. → More detailed information can be found at <a href="http://proglove.com/support">proglove.com/support</a> .
	Scanner is defective.	Scanner must be replaced. → More detailed information can be found at <a href="http://proglove.com/support">proglove.com/support</a> .



## 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 [proglove.com/support](http://proglove.com/support).

The Charging Station must be replaced.  
→ More detailed information can be found at [proglove.com/support](http://proglove.com/support).



### 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



ProGlove system corresponds to the directive 2002/96/EC of the EUROPEAN PARLAMENT AND COUNCIL of 27 January 2003 regarding old electronic and electric devices (WEEE). That is why ProGlovesystem cannot be disposed of through the household waste. If you have questions about a return or an environmentally-friendly disposal, please contact ProGlove support ([contact data under chapter "Support and Service"](#)).

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

### EUROPEAN DIRECTIVES:

2014/53/EU Radio Equipment Directive (RED)

2011/65/EU RESTRICTION OF HAZARDOUS SUBSTANCES (ROHS)

### DECLARATION OF CONFORMITY:

Workaround GmbH (ProGlove) hereby declares that the devices are in compliance with all applicable Directives. For the full text of the CE Declaration of Conformity please contact the ProGlove Support (ProGlove Support contact data see p. 53).

### FCC/IC CERTIFICATION COMPLIANCE:

ProGlove System

The ProGlove System, comprised of: MARK 2 MR, MARK 2 SR, MARK Basic, MARK Display, LEO, Charging Station S, Access Point, 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 LEO:

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 LEO:

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:



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- (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. 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 LEO:

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.

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

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## 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:

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

### 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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