

HANDSCANNER

USER MANUAL



DATALOGIC

Standard and Mid Range
HandScanner

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ABOUT THESE OPERATING INSTRUCTIONS

This user manual contains a system overview, technical data about the Hardware and Wearables, detailed step-by-step instructions for using HandScanner system and information about configuration settings and troubleshooting. It is intended for process planners, configurators and maintenance technicians who are using HandScanner system for the first time. It is designed so that HandScanner system can be used safely without prior knowledge. Read carefully before use and keep for future reference.

EXPLANATION OF SYMBOLS

A warning notice is used in these instructions. Always read and observe this warning notice. The warning notice is introduced with the word **CAUTION** and means the following:



CAUTION

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

In addition, other symbols are used with the following meanings:



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 HandScanner system cannot be ensured.



CAUTION

Do not unscrew the Hardware housing! This may otherwise lead to HandScanner system not functioning properly.



CAUTION

Do not replace the battery of the HandScanner! This may otherwise lead to HandScanner not functioning properly.



CAUTION

Do not modify HandScanner system! This may otherwise lead to HandScanner 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 HandScanners 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.

Wearables



CAUTION

Keep Wearables away from moving machine parts and do not use without a HandScanner! 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.

SCOPE OF DELIVERY



CAUTION

Do not use any damaged Hardware or Wearables! Check whether Hardware and Wearables are properly packaged and undamaged.

HandScanner



Standard range



Mid range

Connectivity device



Datalogic Gateway with USB cable

Wearables



Hand Trigger

Charging station



Datalogic Charging Station with power cable (USB-C) and power supply

HANDSCANNER

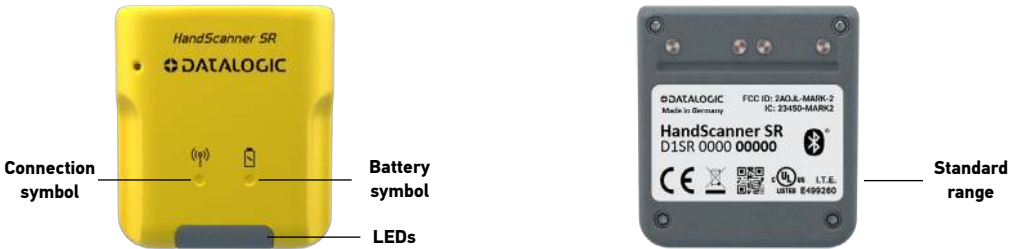
HandScanner Overview

After scanning a barcode, the HandScanner returns feedback signals: haptically by vibrations, acoustically by audio signals and optically by LEDs. The serial number on the rear label indicates whether it is a standard or mid range device.

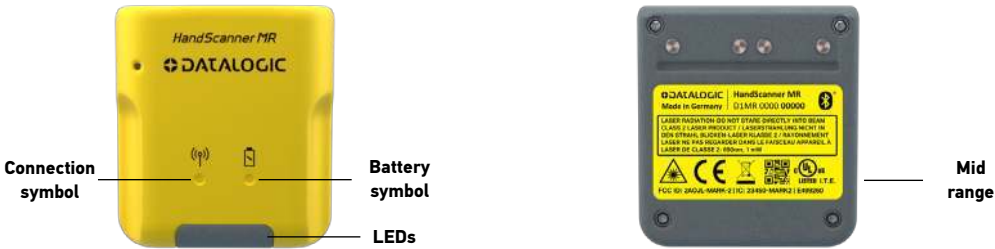
- Standard range serial number: D1SR ...
- Mid range serial number: D1MR ...

Standard range: 4 - 31 in (10 - 80 cm)
Mid range: 12 - 59 in (30 - 150 cm)

HandScanner (standard range)



HandScanner (mid range)



HandScanner Technical Data

Mechanical properties	
Dimensions	50 x 45 x 16 mm (1.96 x 1.77 x 0.63 in)
Weight	40 g (1.41 oz)

Electrical properties	
Battery type	670 mAh, Lithium polymer (rechargeable)
Charge time	2 hours with Datalogic Charging Station
Number of scans	up to 10,000 scans (depending on application and environmental conditions)

Decoding capability	
1D	Auto discriminates all standard 1D codes including GS1 DataBar™ linear codes.
2D	PDF417, MicroPDF417, Data Matrix, QR Code, Micro QR Code, Aztec, MaxiCode
Postal	US PostNet, US Planet, UK Postal, Australia Postal, Japan Postal, Dutch Postal (KIX)

Environmental properties	
Drop resistance	Resists multiple drops from 2 m (6.5 ft) onto concrete
Tumbles	2000 at 0.5 m (1.6 ft)
Impact resistance	IEC60068-2-75, IK06(1J)
Particulate and water sealing	Resistant to dust and water
Temperature	Operating temperature: 0 to 50 °C (32 to 122 °F) Charging temperature: 5 to 40 °C (41 to 104 °F) Storage temperature: -20 to 60 °C (-4 to 140 °F)

LED classification	
Standard range	Excluded risk group LED product according to IEC/EN 62471
Mid range	CDRH Class 2 / IEC 825 Laser Class 2 Device

Safety & Regulatory	
Agency approvals	Compliant to EU and NA applicable standards
Environmental compliance	Compliant to EU RoHS and REACH regulations.

Interfaces	
Interfaces	Bluetooth: HID Profiles Android: HID, App/SDK iOS: HID, iOS SDK USB: Datalogic Gateway, USB HID (keyboard input on host), USB CDC (virtual com port)

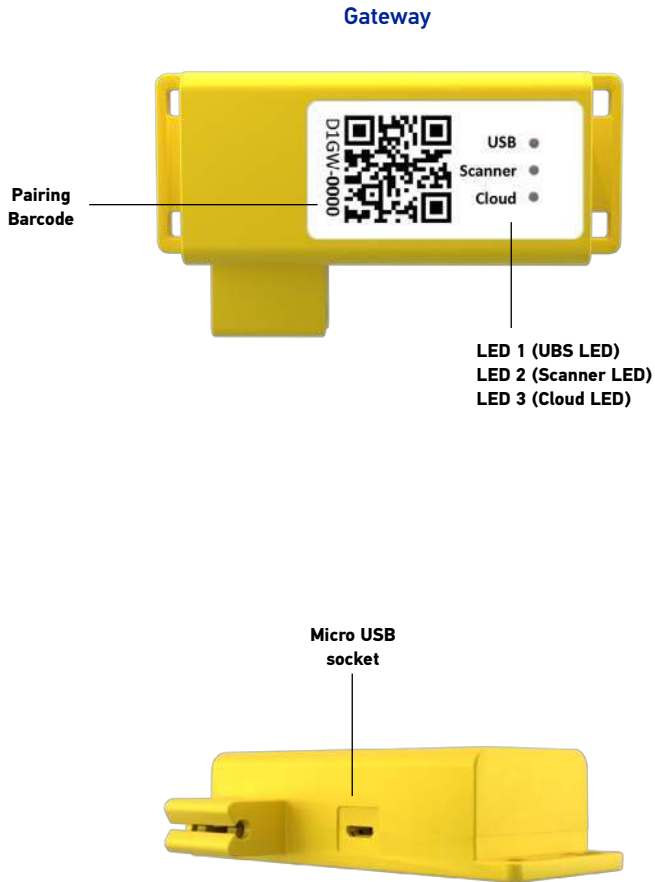


NOTE
Further technical specifications are available at datalogic.com/support.

CONNECTIVITY DEVICE

Gateway Overview

The Gateway receives the scanned barcode data from the HandScanner 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 Configuration Tool <https://www.datalogic.com/handscanner/config> under "Connectivity Configuration - Integration path". Also multipairing is possible. The Gateway can be connected with up to 5 HandScanners simultaneously. See "Connection with USB cable in USB CDC mode" on page 10.



Gateway Technical Data

Mechanical properties	
Dimensions	3.74 x 2.06 x 0.94 in (95 x 52.3 x 23.8 mm)
Weight	1.5 oz (42.5 g)

Electrical properties	
Power supply of Gateway via USB cable	5 VDC (0.5 A) via host computer

Utilities and accessories	
Configuration Tool	https://www.datalogic.com/handscanner/config

Connection options	
USB	USB HID (keyboard input on host)
	USB CDC (virtual com port)

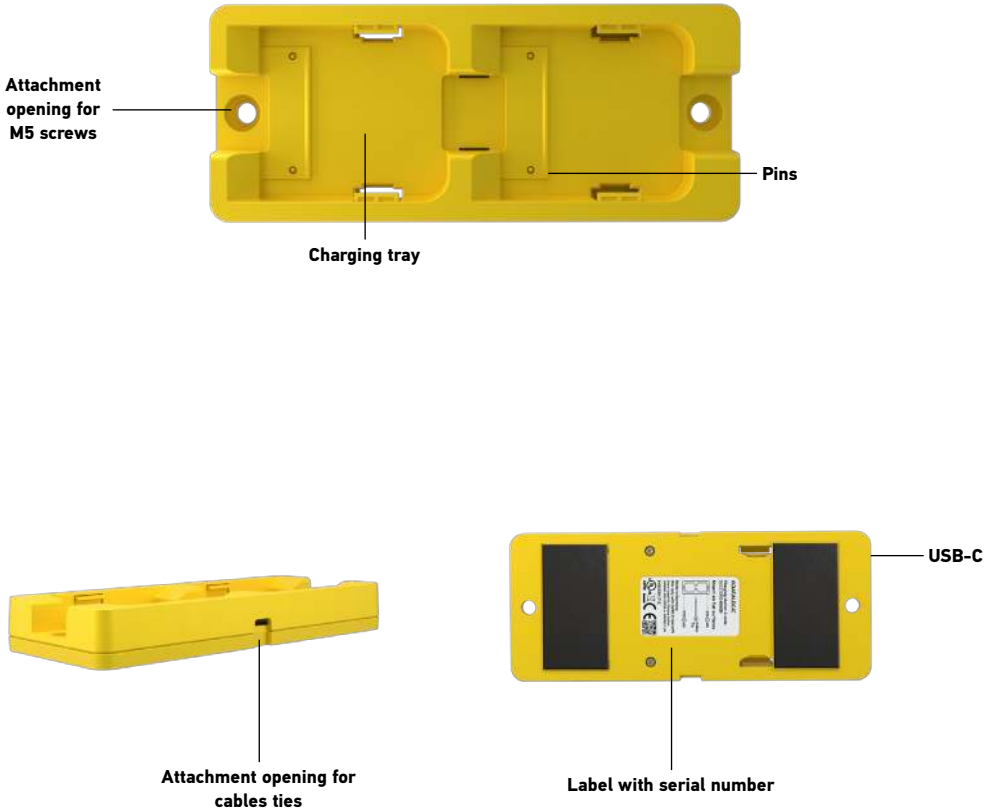
i NOTE
Further technical specifications are available at [datalogic.com/support](https://www.datalogic.com/support).

CHARGING STATION

Charging Station Overview

The Charging Station consists of two charging trays that charge two HandScanners at the same time. The charging status is indicated by the LEDs of the HandScanner. The LEDs pulse red while in charging mode. When the battery is fully charged, the LEDs pulse green constantly. It takes about 2 hours to charge a HandScanner. The Charging Station can be attached to work stations, for example, through the attachment openings (with M5 screws or cable ties).

Charging Station



Charging Station Technical Data

Mechanical properties	
Dimensions	5.5 x 2.2 x 0.75 in (140 x 56 x 19 mm)
Weight	3.88 oz (110 g)

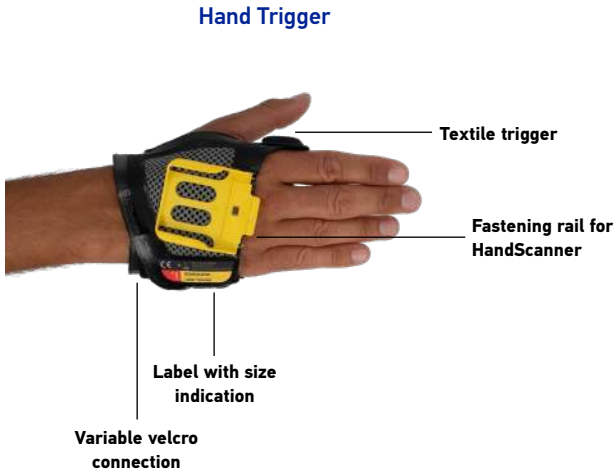
Electrical properties	
Power supply	5 VDC (1.2 A) via power supply PS-MCHS7500
Charging time	2 hours

i NOTE
Further technical specifications are available at datalogic.com/support.

WEARABLE

Hand Trigger Overview

The Textile Trigger is located on the index finger and is attached to the right or left glove, depending on the design. The Hand Trigger can be used in applications where free fingertips are needed or can be worn over other gloves. The Hand Trigger is a consumable which must be changed regularly after use.



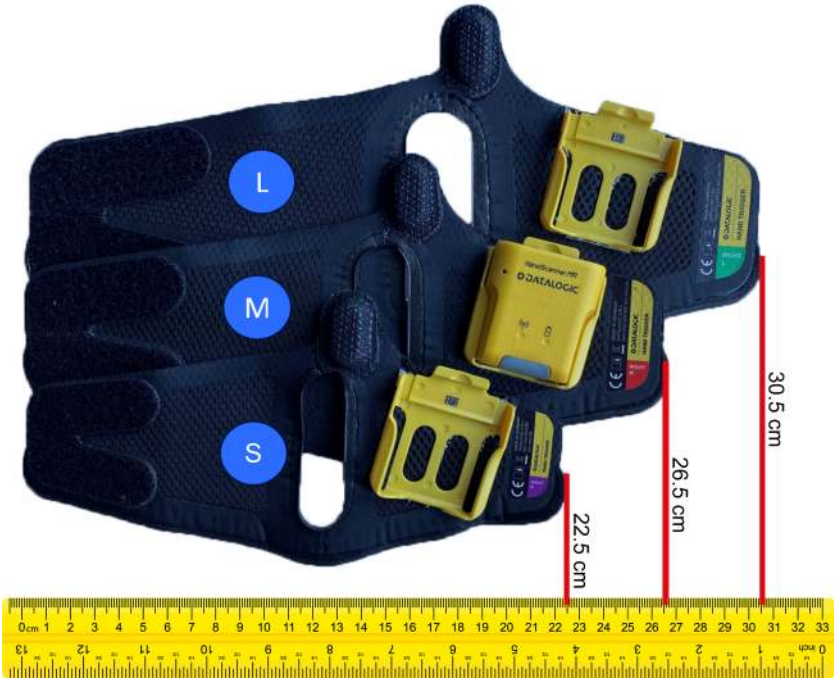
Hand Trigger Properties

General	
Packaging unit	10 pieces per package
Available sizes	S, M, L
Materials	Nylon, Polyester, MDF, EVAC (glue)

Safety & Certification	
Standards	EN388 (2131) EN420
Certification	RoHS CE mark
Environmental	RoHS Directive 2011/65/EU; Amendment 2010/863, REACH SVHC 1907/2006, CE, WEEE

i NOTE
Further technical specifications are available at datalogic.com/support.

Hand Triqger Available Sizes



APPLICATION OF HANDSCANNER SYSTEM

1st Step: Charge HandScanner



CAUTION

Only use HandScanner 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 HandScanner in the Charging Station.



RESULT

HandScanner pulses red and charges in the Charging Station.



NOTE

The LEDs pulse red while in charging mode. When the battery is fully charged, the LEDs pulse green. It takes about 2 hours to charge a HandScanner.

2nd Step: Connect the Gateway



CAUTION

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



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.



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

Connection with USB cable in USB CDC mode

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://www.datalogic.com/handscanner/config> under "Connectivity Configuration > Integration Path" select USB CDC. More detailed information about this can be found in "Configure Devices and Firmware Updates" on page 17

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



RESULT

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

3rd Step: Switch on the HandScanner



1. Position HandScanner on the fastening rail of the wearable. The pins face down.
2. Push HandScanner down. A clear clicking sound confirms the correct fastening.
3. Press the textile trigger on the wearable for about 2 seconds.



RESULT

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



NOTE

HandScanner switches off automatically after 15 minutes without being used.

4th Step: Connect the HandScanner

Connect via Gateway



1. Press the textile trigger on the wearable in order to activate the red crosshairs.



2. Aim HandScanner crosshairs on the Gateway and scan the pairing barcode on the Gateway.



RESULT

HandScanner lights up twice. You can hear a beeping sound and feel a short vibration. HandScanner is connected to the Gateway.

4th Step: Connect the HandScanner (BLE)

Connect via Insight Mobile

You can connect the HandScanner to the Insight Mobile App. Please always download the latest version of Insight Mobile from <https://www.datalogic.com/handscanner/config>, "Downloads" section. Information on how to use the software can be found at <https://www.datalogic.com/handscanner/developer>.

Connect via BLE HID to and end device

The HandScanner 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 HandScanner and the end device
- The range between the HandScanner and the end device is < 33 ft (10m)



TIP 1

Visually label the connected devices (HandScanner 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 HandScanner 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 HandScanner among the available Bluetooth devices.

Read the serial number of the HandScanner.



RESULT

Example serial number: DLHS - 00000.

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



1. Press the textile trigger on the wearable in order to activate the red crosshairs.



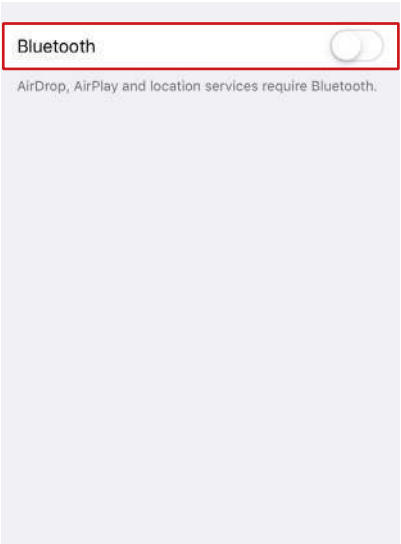
2. Aim the HandScanner crosshairs at the pairing barcode and scan.



RESULT

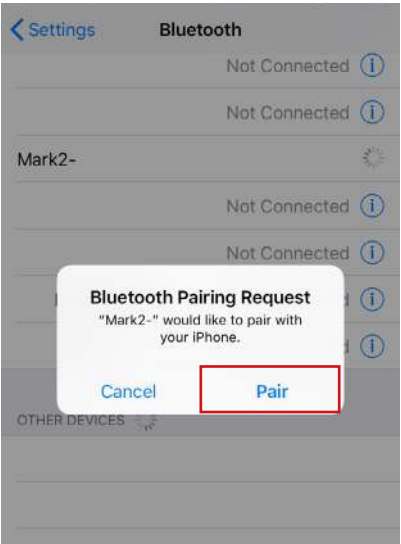
HandScanner pulses blue and beeping sounds can be heard. HandScanner is searching for an end device in pairing mode.

01



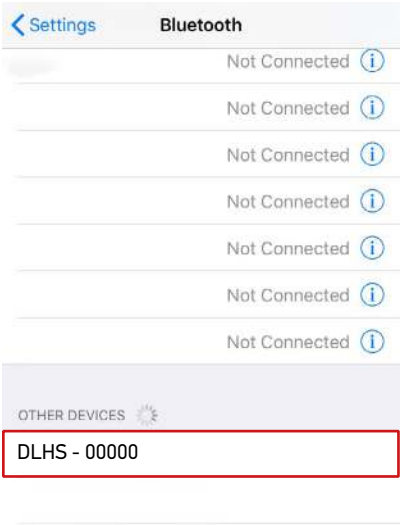
Under “Settings - Bluetooth,” activate the Bluetooth option.

03

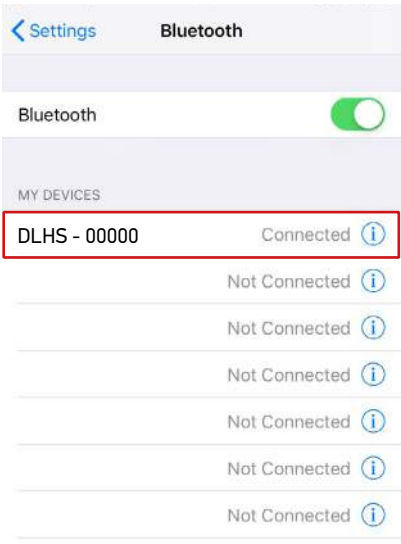


Confirm the “Bluetooth Pairing Request”.

02

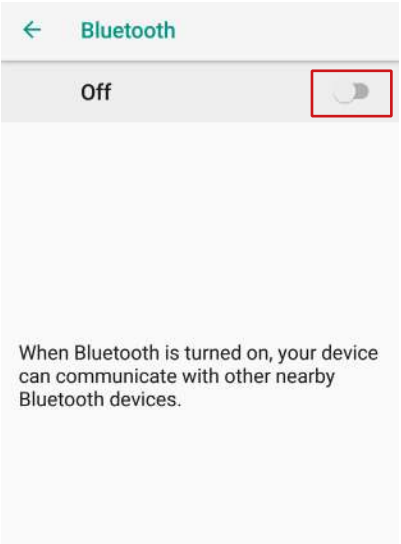


Select “DLHS - 00000”.



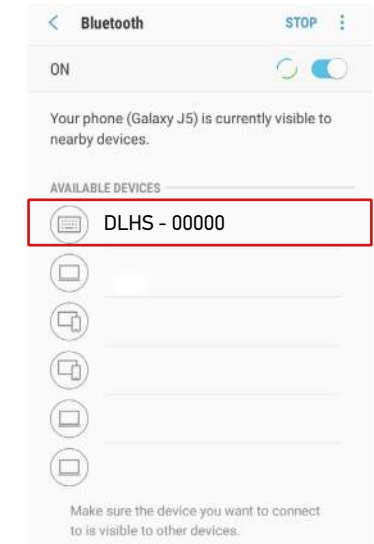
The HandScanner will flash blue twice and you will hear two beeps. The HandScanner will be shown as connected under “My devices” and is ready for use.

01



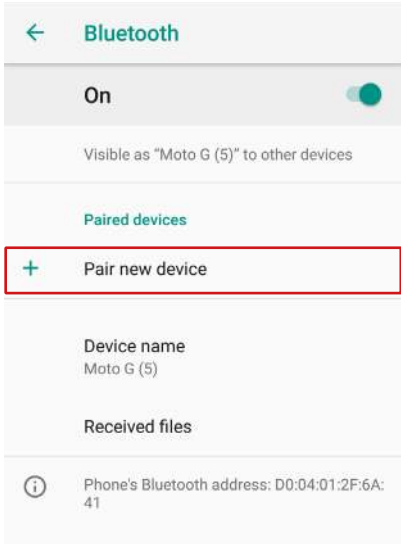
Under “Settings - Connected devices,” switch on the Bluetooth option.

03

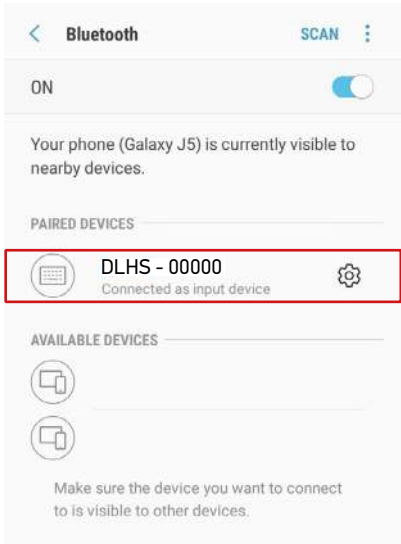


Select “DLHS - 00000”.

02

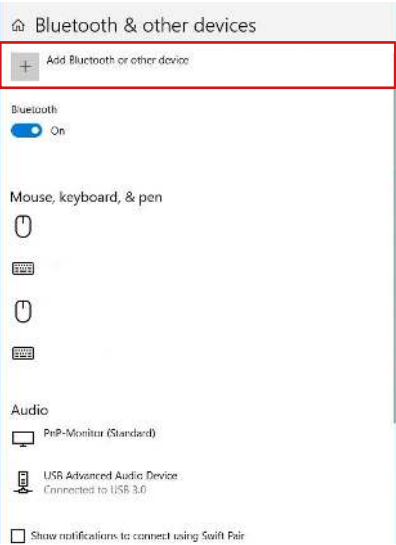


Tap “Bluetooth” and select “Pair new device”.



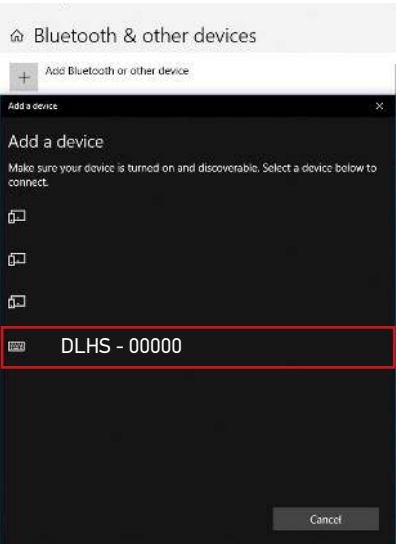
The HandScanner will flash blue twice and you will hear two beeps. The HandScanner will be shown as connected under “Paired devices” and is ready for use.

01



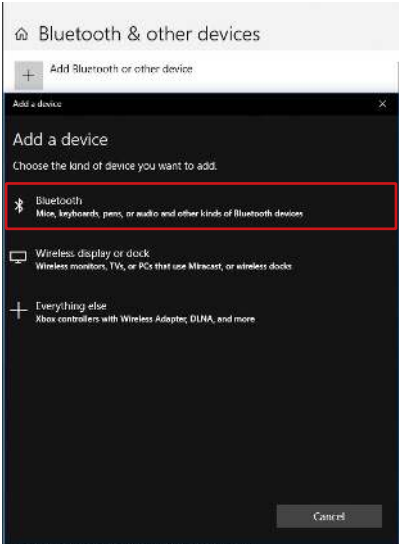
Under “Bluetooth & other devices,” click on “Add Bluetooth and other devices”.

03



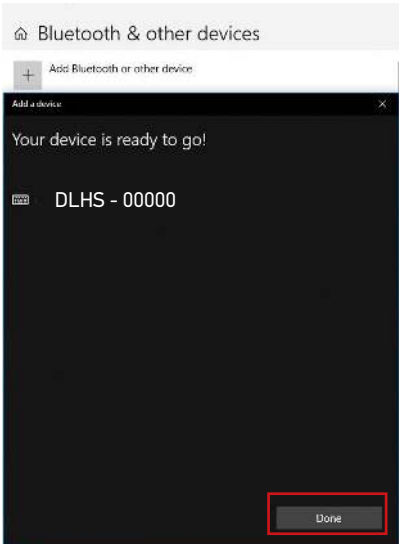
Select “DLHS - 00000”.

02

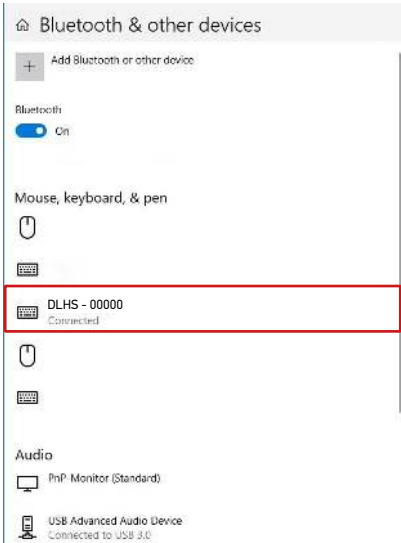


Select the option “Bluetooth: Mouses, keyboards and other types”.

04



Click “Done”.

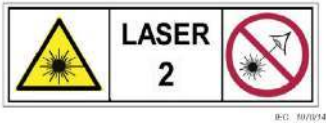


The HandScanner will flash blue twice and you will hear two beeps. The HandScanner will be shown as connected under “Bluetooth & other devices,” and is ready for use.

5th Step: Scan



CAUTION
For mid range scanning range: do not look directly into the crosshairs! Otherwise this can lead to temporary blinding effects.



The HandScanner is an omnidirectional scanner. HandScanner can thus scan barcodes from different angles. For a standard range device (serial number: D1SR...), the scanning range is between 4 - 31 in (10-80 cm) per application case and barcode size. For a mid range device (serial number: D1MR...), the scanning range is 12 - 52 in (30-150 cm) per application case and barcode size.

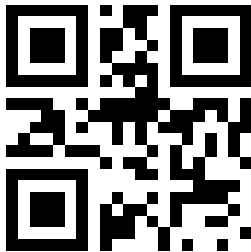


1. Press the textile trigger on the wearable in order to activate the red crosshairs.



2. Aim HandScanner crosshairs on the barcode and scan.

Example Barcode



Content: "Datalogic"



RESULT

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

6th Step: Disconnect HandScanner

Disconnect HandScanner from the Gateway



Place HandScanner in the Charging Station.



RESULT

HandScanner is disconnected from the Gateway and can be connected to a new one.

Disconnect the Connection Cable from the Gateway



Disconnect the connection cable out of the Micro USB socket.



NOTE

This will cause ALL paired devices to disconnect from the Gateway.



RESULT

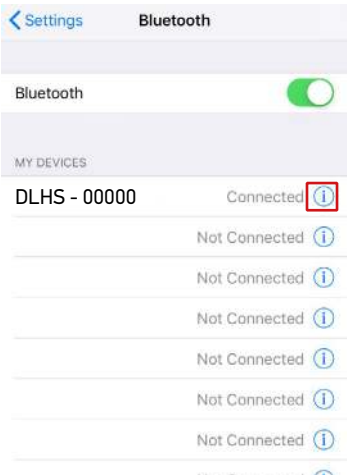
The LED of the Gateway no longer lights up green. The connection cable is disconnected from the Gateway.

6th Step: Disconnect HandScanner (BLE HID)

i NOTE
Only disconnect HandScanner if this is to be newly connected to another end device.

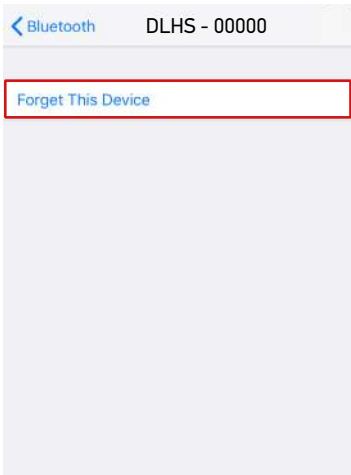
Disconnect from Apple iOS

01



Under “Settings - Bluetooth,” tap on the information symbol.

02



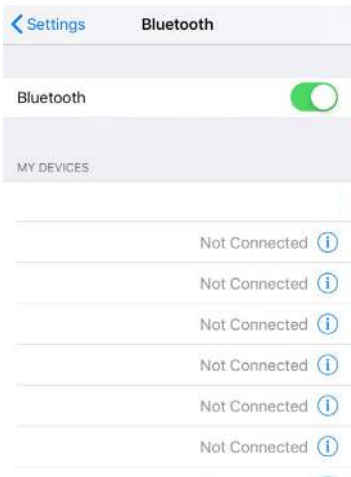
Tap on “Forget This Device”.

03



Confirm “Forget Device”.

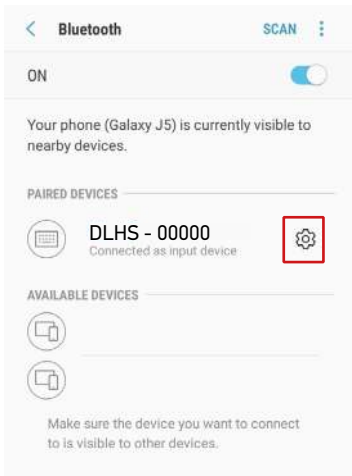
RESULT



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

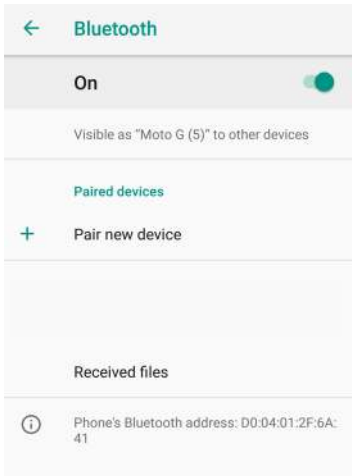
Disconnect from Google Android

01



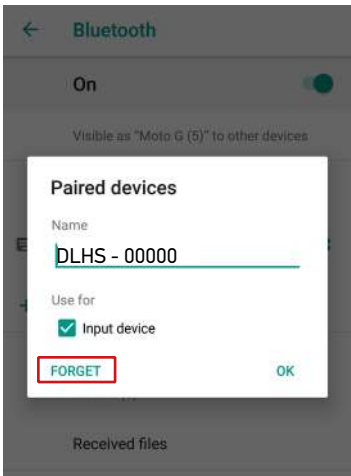
In the Bluetooth option under “Paired devices,” tap on the gear wheel symbol of “DLHS - 00000.”

RESULT



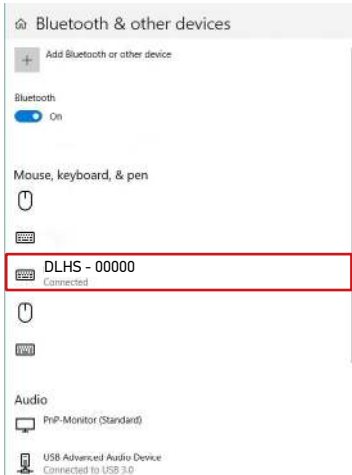
The HandScanner will flash red three times and you will hear three beeps. HandScanner will no longer be shown as connected under “Paired devices.”

02

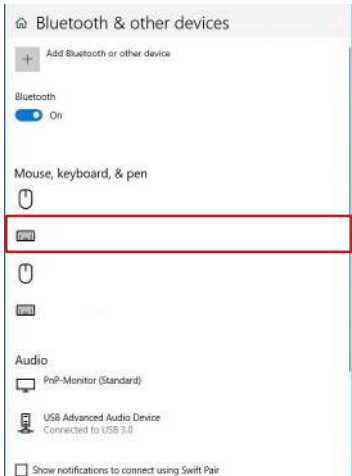


Select “Forget”.

01

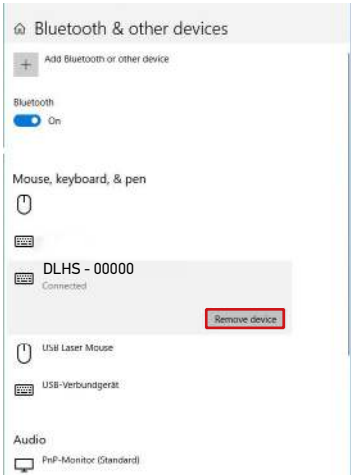


Under “Bluetooth & other devices,” select “DLHS - 00000.”



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

02



Click “Remove device.”

7th Step: Release HandScanner from Wearable



CAUTION
Do not rub over the pins of the wearable with the HandScanner!
This may otherwise lead to bended pins.



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



2. Press HandScanner up slightly and push it forward.

CONFIGURATION TOOL REGISTRATION AND LOGIN

The first time you access the Configuration Tool (<https://www.datalogic.com/handscanner/config>), you will be requested to register in order to obtain the following credentials:

- Customer ID: an identifier shared by all the users inside your organization
- Email: your personal email
- Password: your password

NOTE

The registration needs to be validated before your first access. Follow this procedure to request your credentials:

1. Go to <https://www.datalogic.com/handscanner/config> and click the “Register now” button.



2. Fill in the Registration form with the required information, then click the “Register an Account” button.



3. Your request will be verified and your credentials will be transmitted to the specified email address. The verification process may take up to two days.
4. Follow the instructions in the confirmation email to access the Configuration Tool.
5. For subsequent access to the Configuration Tool, go to <https://www.datalogic.com/handscanner/config> and fill in the “Sign in” form to continue:

Customer ID *

123456

Email *

email@company.com

Password *

Forgot Password

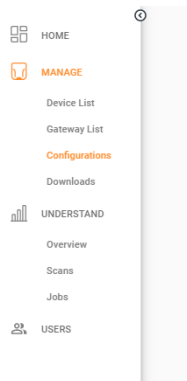
LOGIN

CONFIGURE DEVICES AND FIRMWARE UPDATES

The configuration tool under <https://www.datalogic.com/handscanner/config> can be used to individually set the Hand-Scanner system and improve scanning processes.

- To update the firmware proceed with "7th Step: Configure Devices and Gateway Firmware Update" on page 18.
- To create a new configuration proceed with "1st Step: Opening Configurations" on page 17.

1st Step: Opening Configurations



1. Go to Configurations in the Insight navigation.

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

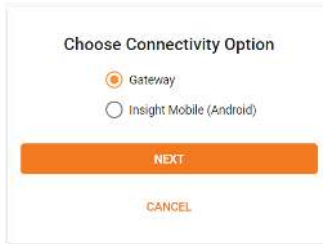
Configurations		
CONFIG FILE NAME	LAST MODIFIED UTC+2	CREATED UTC+2
☐ Hg_gateway_2a_hart_international_2_2_1_Check_Opt_Verification	7/1/20, 1:17 PM	7/1/20, 1:17 PM
☐ default	7/1/20, 1:11 PM	7/1/20, 1:11 PM
DOWNLOAD CONFIGURATION		CREATE NEW CONFIGURATION

NOTE

To install a saved configuration, proceed with "7th Step: Configure Devices and Gateway Firmware Update" on page 18.

2nd Step: Create a New Configuration

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



3rd Step: Connectivity Configuration

Here it is possible to configure the connectivity settings according to the end device selected previously. For example, if you selected “Gateway” you can choose HID or CDC mode. It is also possible to adjust the maximum number of HandScanners that can connect to the Gateway (multipairing - up to 5 devices). If you selected “Insight Mobile”, you can choose the type of Integration Path (Software Keyboard, Intent, SDK).

Choose the preferred settings.

Information on the different connectivity options can be found at <https://www.datalogic.com/handscanner/developer>.

4th Step: Device Settings

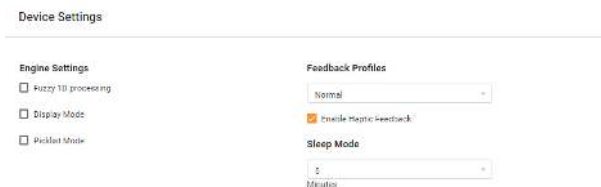
The Device Settings can be used to optimize the HandScanner for certain use cases.

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 HandScanners feedback.

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



5th 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.

6th 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 “Datalogic” for the following barcode:



Condition: Barcode matches “Glove”

Action: Add prefix “Datalogic”

Outcome: “DatalogicGlove”

Create the condition “Barcode Matches: Gloves” and the action “Add Prefix Datalogic.”

1. Set condition (IF)



2. Set action (THEN)



7th Step: Configure Devices and Gateway Firmware Update

For the **configuration** of the device:

- Click on **Save**. Assign a name and download the configuration file. Then follow the procedure below to apply the configuration with Insight Mobile or the Gateway.

For a **firmware update**:

- To upgrade the HandScanner firmware, download the latest version of Insight Mobile App from <https://www.datalogic.com/handscanner/config>, “Download” section. The App will upgrade the firmware of the paired HandScanner if an update is available.
- To upgrade the Gateway, download the latest Gateway firmware version at <https://www.datalogic.com/handscanner/config>, “Downloads” section. Then follow the procedure below for the Gateway.

To configure 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:



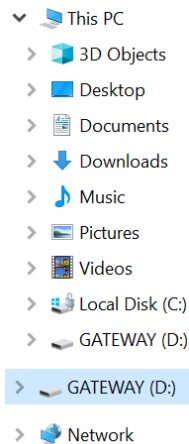
1. Connect the Gateway with the computer. The Gateway boots up. This takes about 2 min and is finished when the USB LED shows constant green light.



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. Eject the Gateway mass storage from your File Explorer (e.g. on Windows, right-click on the Gateway and click on *Eject*).



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 a HandScanner.



NOTE

The configuration will be applied to the HandScanner and the Gateway directly. HandScanners that get connected to the Gateway later will receive the same configuration!

SIGNAL TABLES

General HandScanner

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 HandScanner with battery charge under 5%			Red flashing 3 times briefly		
Battery charge under 95%			Pulsating red		
Battery charge over 95%			Constantly green		

HandScanner Connection via BLE

Description	LED 	Connection symbol 	Battery symbol 	Audio signal 	Vibration 
HandScanner searches for an end device	Blue pulsating	Blue pulsating		Continuously rising beep	
HandScanner is connected to an end device	Blue flashing 2 times briefly	Blue flashing 2 times briefly		Short rising positive beep	Short vibration
HandScanner cannot connect to the end device	Red flashing 3 times briefly			Negative beep briefly 3 times	Long vibration
HandScanner is disconnected from the 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 ¹	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 HandScanner		Pulsing blue	
Gateway is connected to the HandScanner via BLE		Constantly green	
Firmware Update: Gateway is in download mode	Constantly yellow	Constantly yellow	Constantly yellow
Firmware Update: Hand-Scanner is flashing / Gateway deploys	Constantly purple	Constantly purple	Constantly purple
Firmware Update: Gateway is flashing	left to right run through all LEDs alternating purple until done		
Firmware Update: successful	Long green flashing	Long green flashing	Long green flashing
Gateway is connected to a HandScanner and is searching for more HandScanners		Constantly green	
Gateway cannot connect to another HandScanner		Constantly red	
Gateway cannot connect to another HandScanner but another HandScanner is trying to connect		Red flashing 3 times briefly	

¹ It take approx. 2 minutes to boot up.

COMPATIBILITY WITH DATALOGIC MOBILE TERMINALS

	Model	Bluetooth HID	USB Gateway HID mode	USB Gateway CDC mode	Insight Mobile App	Insight Mobile SDK
	Falcon X3+	Not compatible	Not applicable		Not compatible	
	Skorpio X4 / Falcon X4 (Android)	OK	Not applicable		Not compatible	
	Skorpio X4 / Falcon X4 (Windows Embedded Compact 7)	Not compatible	Not applicable		Not compatible	
	Joya Touch	Not compatible	Not applicable		Not compatible	
	Joya Touch A6	OK	Not applicable		OK	OK
	Memor X3	Not compatible	Not applicable		Not compatible	
	Memor 1	OK	Not applicable		OK	OK
	Memor 10	OK	Not applicable		OK	OK
	Memor 20	OK	Not applicable		OK	OK
	Rhino II (Android)	OK	OK	OK	Not compatible	
	Rhino II (Windows Embedded Compact 7)	Not compatible	OK	Not compatible	Not compatible	
	Rhino II (Windows Embedded 7)	Not compatible	OK	OK *	Not compatible	
	Rhino II (Windows 10 IoT)	OK with Bluetooth 4.0 adapter	OK	OK	Not compatible	
	Taskbook	OK	OK with docking station		Not compatible	

* Additional software driver is required for CDC mode on Windows Embedded 7. To download it, go to www.datalogic.com and from the home page click on the search icon, type in the name of the product, then go to the Software & Utilities section.

Legend

	Fully compatible
	Compatible with some limitations
	Not compatible

STORAGE AND CLEANING

Storage

Storage location:

Store the Hardware as well as Wearables in a dry and dirt-free environment. In case of transport, HandScanner system must be transported shockproof in its original packaging.

Temperature:

Store the Hardware as well as 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.

Datalogic wearables are not machine-washable. These wearables are meant to be replaced periodically due to normal wear and tear. This is because gloves and wraps contain sensitive electronics in and around the scan trigger. With care, it is possible to clean your wearables with minimal risk to their functionality.

We recommend using a spray cleaner with 70% isopropyl alcohol or cleaning products designed for use on fabrics. The scanner clip should be cleaned with only 70% isopropyl alcohol as other chemicals may impact the structure of the clip over time resulting in the scanner coming loose from the clip when in use. Allow wearables to dry completely before continuing use.

Product functionality or appearance may be impacted due to the strength of the chemicals, application methods, contact time, or use of the glove after application. We do not recommend using harsh chemical cleaners and avoid submerging the glove or wrap in liquid or saturating or applying pressure to the area around the trigger.

Because not everyone will follow exactly the same steps with the same cloths and cleaning agents that we tested in our lab, Datalogic disclaims all warranties and does not assume any liability with respect to the recommendations expressed here to keep your barcode scanning system clean.

Hardware:



CAUTION

Protect Hardware from moisture!

This may otherwise lead to HandScanner 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 HandScanner glass with cotton swabs.

TROUBLESHOOTING

HandScanner

Problem	Cause	Solution
HandScanner is not responding	Battery is not charged	Charge HandScanner in the Charging Station for at least 20 minutes
	Wearable is defective	Change wearable
HandScanner 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 HandScanner flashes red	The battery charge is low	Charge HandScanner in the Charging Station for at least 20 minutes
The crosshairs light up, but no barcodes are scanned	The barcode label cannot be read	Create new barcode label
	The barcode type cannot be read	Check whether the barcode type in the configuration tool is enabled under "Symbology settings"
	The barcode length cannot be read	Check whether the barcode length in the configuration tool is enabled under "Symbology settings"
	HandScanner glass is dirty	Clean the HandScanner glass with a cotton swab
The crosshairs light up, but the barcodes are hard to scan	The barcode label is difficult to read	To enhance the scanning performance, in the configuration tool under "Symbology settings", set Fuzzy 1D processing to ON
	HandScanner glass is dirty	Clean the HandScanner glass with a cotton swab
	Scanning distance is not optimally used	Position HandScanner closer or further away from the barcode label and scan. • For standard range: 3.9 - 31.5 in (10 - 80 cm) • For mid range: 11.8 - 59 in (30 - 150 cm)
After pairing with Android device, the on-screen keyboard is not visible anymore	The virtual keyboard option is not enabled	Open Android Settings > System > Languages and Input > Physical Keyboard > Enable "Show virtual keyboard"
HandScanner cannot be paired to the Insight Mobile application. No error messages are shown.	HandScanner may have already been paired to the terminal in BLE HID mode.	Follow the steps under "6th Step: Disconnect HandScanner (BLE HID)" on page 15 to disconnect, then try to pair again using the Insight Mobile application.

BLE - Data Transfer

Problem	Cause	Solution
Barcode data is not transferred	HandScanner is not connected to the end device	1. Scan the pairing barcode 2. Lights up blue twice briefly while HandScanner is connecting and after a successful connection
HandScanner lights up green after the data transfer, but no barcode data is shown on the end device	HandScanner is out of range of the end device • Max. range is < 33 ft (10 m)	Bring HandScanner closer to the end device and scan the pairing barcode
HandScanner flashes red 3 times, 3 negative beeps are heard and long vibration is felt	HandScanner cannot connect with the end device	1. Check whether the range between HandScanner and end device is < 33 ft (10 m). If not, get closer 2. Disconnect the HandScanner from the end device and reconnect (see "6th Step: Disconnect HandScanner" and "4th Step: Connect the HandScanner") 3. Scan the pairing barcode again 4. Scan barcode again

Gateway

Problem	Cause	Solution
The Gateway is not recognized on Windows systems when enabling CDC mode	The CDC Driver for Windows may be missing	Install the CDC Driver on Windows PC. To download it, go to www.datalogic.com and from the home page click on the search icon, type in the name of the product, then go to the Software & Utilities section.
The Gateway is not recognized on Windows systems when enabling Mass Storage	The Composite Driver for Windows may be missing	From Windows Start Menu, open Device Manager , locate the USB device with warning icon, right-click Update Driver > Automatic Search . The PC must have Internet access.

Gateway - Data Transfer

Problem	Cause	Solution
Barcode data is not transferred	HandScanner is not connected to the Gateway	1. Scan the pairing barcode on the Gateway 2. Lights up blue twice briefly while HandScanner is connecting and after a successful connection
	HandScanner is out of range of the Gateway • Max. range is 100 - 130 ft (20 - 40 m)	Bring HandScanner closer to the Gateway
	Gateway is defective	Gateway must be replaced
	HandScanner is defective	HandScanner must be replaced

Charging Station

Problem	Cause	Solution
HandScanner does not charge in Charging Station	HandScanner is not correctly inserted in the Charging Station	Insert HandScanner in the Charging Station again
	Charging Station is not connected to power source	Connect Charging Station to power source
	HandScanner is defective	HandScanner must be replaced
	Charging Station is defective	The Charging Station must be replaced
LEDs of HandScanner do not light up immediately when HandScanner is placed in the Charging Station	HandScanner charges in the Charging Station, but the feedback signals are delayed by about 30 seconds	Wait until the LEDs of HandScanner signal the charging



TIP 1

Problem could not be solved? Insert HandScanner into the wearable. Press the trigger on the wearable for about 15 seconds and restart Handcanner.



TIP 2

Problem could not be solved? Scan with HandScanner the Factory Default Barcodes:



HandScanner



Gateway

Factory Default Barcode will reset all configurations!

DISPOSAL



For information about the disposal of Waste Electrical and Electronic Equipment (WEEE), please refer to the website at www.datalogic.com.

Carry out the following steps to decommission HandScanner system:

1. Release HandScanner from Wearables
2. Disconnect the connection cable from the Access Point / Gateway
3. Disconnect the mains plug from the Charging Station
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)
2015/863/EU

Declaration of Conformity

Datalogic S.r.l. 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 Datalogic Support ([datalogic.com/support](mailto:support@datalogic.com)).

FCC/IC Certification Compliance

The Datalogic HandScanner System comprised of: HandScanner MR, HandScanner SR, Datalogic Charging Station, Datalogic 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)
- ISCED Canada RSS-Gen Category I (radio apparatus)
- ISCED Canada RSS-247
- ISCED Canada RSS-102
- ISCED Canada RSS-210

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

Under the regulations of the FCC and the IC the user has to be aware of the following when using the Datalogic HandScanner:

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 HandScanner system has been tested and meets the FCC/IC RF exposure rules when used with Datalogic accessories supplied or designated for this product. Use of other accessories may not ensure compliance with FCC/IC RF exposure rules.

Le système Datalogic 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 Datalogic 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 Datalogic HandScanner:

1. FCC CAUTION

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

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

3. Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

4. 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 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 Datalogic HandScanner:

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.*

LASER CLASS 2 (mid range):

Complies with 21CFR1040.10 and 1040.11 except for deviations pursuant to Laser Notice No. 56, dated June 24, 2007. Laser safety according to EN60825-1:2014 and IEC 60825-1 (Ed. 3.0).

The laser warning label is located on the bottom of HandScanner (mid range)



APPENDIX - CONFIGURATION BARCODES

Pairing Barcode



Gateway Mass Storage ON



Gateway Mass Storage OFF



Scanner Factory Reset



Gateway Factory Reset

