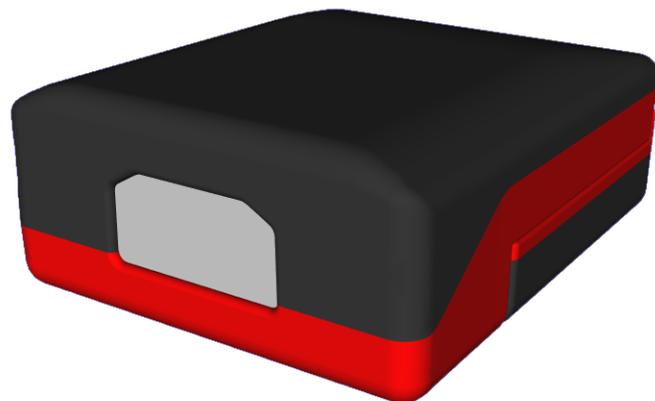


USER GUIDE

# ID HyWEAR compact

Hands-Free UHF RFID & Barcode Scan System



## Note

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## General Information Regarding this Document

### Aim and Target Audience

This document is intended for users (e.g. in logistics and assembly) of the ID HyWEAR compact. It contains step-by-step instructions that explain the basic functions to make working with the ID HyWEAR compact as easy as possible. No prior experience is required.

### Configuration

The instructions given in this user guide are based on the reader settings defined ex works. It is possible to configure own settings, therefore see 10.5 Configuration.

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## 1 Safety Instructions

- ▶ Please read this user guide carefully and follow the given instructions and safety instructions before using the device.
- ▶ The device may only be used for the intended purpose designed by the manufacturer.
- ▶ This user guide should be conveniently kept available at all times for each user.
- ▶ Unauthorized changes and the use of spare parts and additional devices which have not been sold or recommended by the manufacturer may cause fire, electric shocks or injuries. Such unauthorized measures shall exclude any liability by the manufacturer.
- ▶ The liability-prescriptions of the manufacturer in the issue valid at the time of purchase are valid for the device. The manufacturer shall not be held legally responsible for inaccuracies, errors, or omissions in the manual or automatically set parameters for a device or for an incorrect application of a device.
- ▶ Repairs may only be executed by the manufacturer.
- ▶ Installation, operation and maintenance procedures should only be carried out by qualified personnel.
- ▶ Use of the device and its installation must be in accordance with national legal requirements and local electrical codes.
- ▶ When working on devices the valid safety regulations must be observed.
- ▶ Use of controls or adjustments or performance of procedures other than those specified herein may result in exposure to hazardous visible laser light. The laser scanner utilizes a low-power laser diode. Although staring directly at the laser beam momentarily causes no known biological damage, avoid staring into the beam as one would with any very strong light source, such as sunlight. Avoid that the laser beam hits the eye of an observer, even through reflective surfaces like mirrors, etc.



$$P \leq 1 \text{ mW} \quad \lambda = 663 \text{ nm}$$

- ▶ Do not crush, puncture, short circuit or place the LiPo battery in fire or water. To reduce the risk of fire or burns, do not attempt to open, disassemble, or service the battery pack. Do not expose the unit to temperatures above 60 °C (140 °F). Only charge the battery with the battery charger intended by the manufacturer. Do not deep discharge the battery. Do not use damaged batteries.
- ▶ Switch off your wireless device whenever you are instructed to do so by airport or airline staff. Consult airline staff and ask for the device's use in-flight.
- ▶ Wireless devices may affect medical electrical equipment. Therefore they should be switched off wherever you are requested to do so in hospitals or healthcare facilities to prevent interference with sensitive medical equipment.
- ▶ It is recommended by pacemaker manufacturers to maintain a minimum of 15 cm (6") between a handheld wireless device and a pacemaker to avoid potential interference. Therefore persons with pacemakers should not carry the device in a breast pocket. These recommendations are consistent with independent research and recommendations by Wireless Technology Research. If you have any reason to suspect that interference is taking place, turn off your device.
- ▶ Do not take note or use the device while driving. When driving a vehicle, driving is your first responsibility, therefore give full attention to driving.
- ▶ RF signals may affect improperly installed or inadequately shielded electronic systems in motor vehicles. You should consult the manufacturer of any equipment that has been added to your vehicle.
- ▶ Do not place the device in the area over the air bag or in the air bag deployment area. Improperly installed wireless equipment could result in serious injury when the air bag inflates.
- ▶ Observe restrictions on the use of radio devices in fuel depots, chemical plants and areas where the air contains chemicals or particles such as grain, dust or metal powder as well as any other area where you are advised to turn off your vehicle engine.

## 2 Revision History of Documentation

Revision	Date	Description
2	20.09.2019	<ul style="list-style-type: none"><li>Approval for Canada (IC) removed</li></ul>
1	04.09.2019	<ul style="list-style-type: none"><li>FCC and IC approval notice supplemented</li><li>Illustration added to "Intended Use"</li></ul>
0	08.02.2019	Initial version

## 3 Introduction

### 3.1 The ID HyWEAR compact

The ID HyWEAR compact is the combination of a small RFID- and barcode scanner and a comfortable, ergonomic fingerless glove that allows fingers, hand and arm to move freely. The ID HyWEAR compact is easy to use with and without gloves and the exchangeable high-capacity rechargeable battery allows long use. It is equipped with the latest wireless technology (Bluetooth, WiFi 2.4G/5G with roaming function), clearly visible LEDs, buzzer, vibration function and a robust housing.

The ID HyWEAR compact is developed and manufactured in Germany.

### 3.2 Applications

With hands-free use and wireless connection to the host system, the ID HyWEAR compact is ideal for use in baggage handling, warehouse logistics, manufacturing and a variety of other applications. Its small size allows work to be carried out even on narrow parts and machines.

## 4 Scope of Delivery

The scope of delivery includes following components:



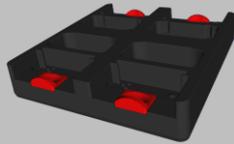
1 x ID HyWEAR compact fingerless glove



1 x ID HyWEAR compact scanner unit (incl. battery)



1 x ID HyWEAR compact spare battery



1 x ID HyWEAR Charging Station



1 x Power supply cable for ID HyWEAR Charging Station



1 x USB-A to USB-C cable



1 x ID HyWEAR compact Quick Start Guide

After unboxing please make sure, that all listed parts have been delivered properly and in good condition.

## 5 Product Description

### 5.1 Product Illustration

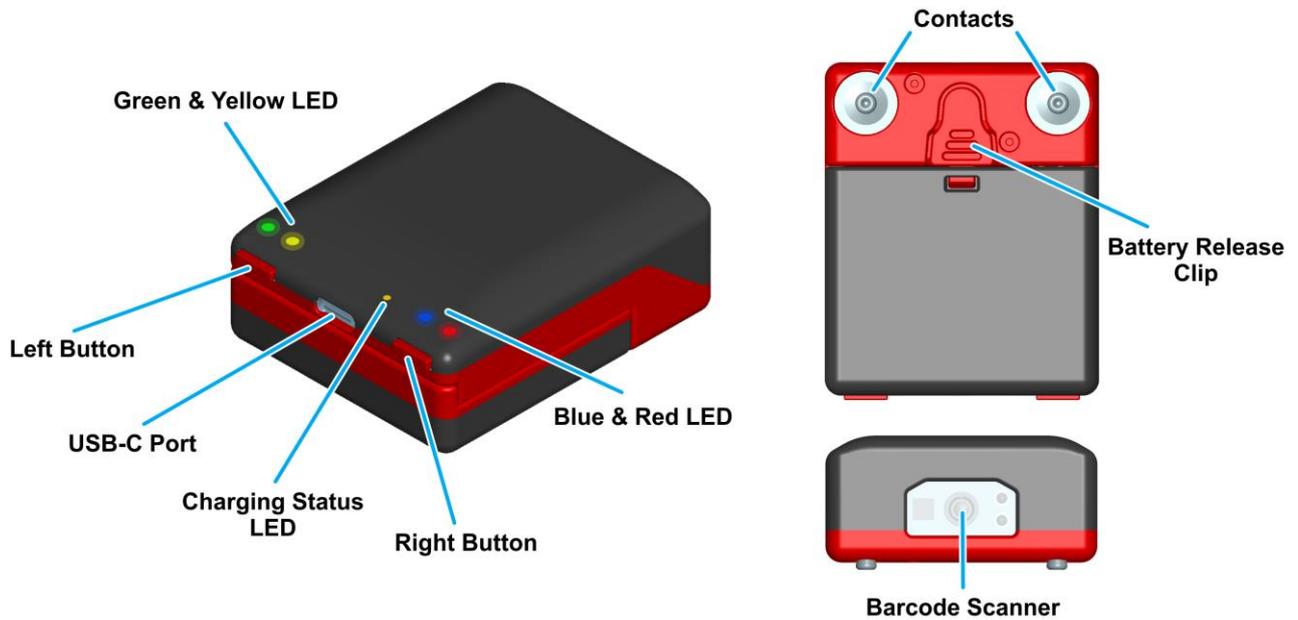


Fig. 1: Product illustration – scanner unit



Fig. 2: Product illustration – fingerless glove

## 5.2 Intended Use

The ID HyWEAR compact is designed to read 1D and 2D barcodes as well as RFID tags in the frequency bands 865 MHz to 868 MHz (EU version) and 902 MHz to 928 MHz (FCC version).



Fig. 3: Intended use of the ID HyWEAR compact

## 5.3 Approvals

### 5.3.1 Europe (CE)

This equipment is intended to be commercialized in all the countries of the European Union and there is no commercialization or operational restrictions in any of the countries.

Hereby, FEIG ELECTRONIC GmbH declares that this Bluetooth, Wi-Fi barcode scanner is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.



Performance Classification according to ETSI EN 301 489: Class 2

### 5.3.2 USA (FCC)

Product name:	ID HyWEAR compact
FCC ID:	PJMHYWCMPCT
Notice for USA	<p>This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions.</p> <p>(1) this device may not cause harmful interference, and</p> <p>(2) this device must accept any interference received, including interference that may cause undesired operation.</p> <p>Unauthorized modifications may void the authority granted under Federal communications Commission Rules permitting the operation of this device.</p> <p>This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.</p> <p>This equipment complies with FCC RF exposure limits set forth for an uncontrolled environment. The equipment must not be co-located or operating in conjunction with any other antenna or transmitter.</p> <p>The wireless device should be used in accordance with the instructions in the User Guide.</p>

**NOTE:**

**Changes or modifications made to this equipment not expressly approved by FEIG ELECTRONIC GmbH may void the FCC authorization to operate this equipment.**

## 6 Technical Data

### Mechanical Data

Housing	Robust ABS
Dimension (W x H x D)	60 mm x 50 mm x 23 mm (2.36" x 1.97" x 0.91")
Weight	70 g
Protection Class	IP 54
Color	black (translucent), red

### Electrical Data

Operating Frequency	
<ul style="list-style-type: none"> <li>EU Version</li> <li>FCC Version</li> </ul>	865 MHz to 868 MHz 902 MHz to 928 MHz
Supported Transponders	EPC Class 1 Gen 2
Barcode	1D: EAN-8, EAN-13, UPC-A, UPC-E Code 128, Code 39, Code 93, Interleaved 2of5, Codabar, Codablock_F 2D: DataMatrix, QR Code, PDF417
Interfaces	
<ul style="list-style-type: none"> <li>WiFi</li> <li>Bluetooth</li> </ul>	2.4 GHz / 5 GHz (IEEE 802.11 a/b/g/n/h), WPA2-PSK, WPA2 Enterprise 5.0, SPP
Battery	1000 mAh Lithium Polymer, 3.7 V
Indicators	High power feedback LEDs (green/red) Status LEDs (blue/yellow) Buzzer Vibration feedback

### Environmental Conditions

Temperature Range	
<ul style="list-style-type: none"> <li>Operation</li> <li>Storage</li> </ul>	0 °C up to 55 °C -25 °C up to 85 °C
Humidity	5 % up to 95 % (non-condensing)
Drop	1.5 m drop to concrete

### Standard Compliance

Radio Approval	
<ul style="list-style-type: none"> <li>Europe</li> <li>USA</li> </ul>	EN 302 208, EN 300 328 FCC 47 CFR Part 15
EMC	EN 301 489
Safety	
<ul style="list-style-type: none"> <li>Low Voltage</li> <li>Human Exposure</li> <li>Laser (Class 2)</li> </ul>	EN 62368 EN 50364 EN 60825
Others	RoHS, WEEE

## 7 Components

### 7.1 Electrical

#### 7.1.1 Battery

The rechargeable battery for the ID HyWEAR compact is a LiPo battery.

**⚠ WARNING:**

**To reduce the risk of fire, explosion and burns:**

- **Do not crush, puncture, short circuit the battery or place it in fire or water!**
- **Do not attempt to open, disassemble or service the battery!**
- **Only charge the battery with the ID HyWEAR Charging Station!**
- **Do not deep discharge the battery!**
- **Do not use damaged batteries!**
- **Do not expose the battery to temperatures above 60 °C (140 °F)!**
- **Do not charge the battery below 0 °C (32 °F)!**

#### 7.1.2 Scanner Unit

The electronics of the scanner unit are protected by the housing and must not be disassembled.

### 7.2 Mechanical

#### 7.2.1 Fingerless Glove

The fingerless glove is made of textile and therefore is durable but still comfortable to wear. The fingerless glove can be adjusted using the Velcro strips on the wrist and index finger. The scanner unit is slid into the provided pocket and fixed by means of a Velcro strip. Ensure that the contacts are connected properly.

#### 7.2.2 Housing

The housing is made of robust ABS and is IP54 classified.

### 7.3 Optical

#### 7.3.1 Laser

The installed laser for reading 1D and 2D barcodes is a class 2 laser. The laser has a power of  $\leq 1$  mW. The wavelength is 663 nm.

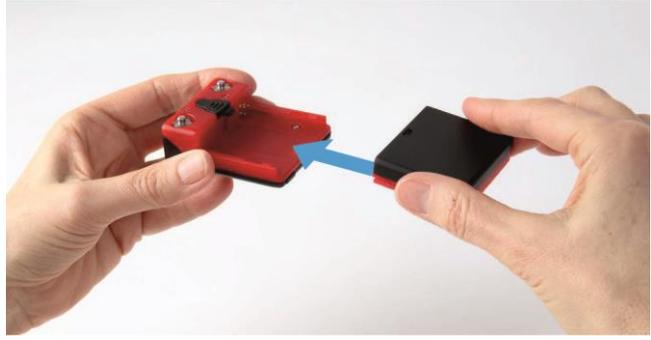
**⚠ WARNING:**

**To prevent damage through laser light:**

- **Do not attempt to open, disassemble or service the laser or the housing!**
- **Do not stare directly into the laser beam!**
- **Avoid that the laser hits the eye of an observer, even through reflective surfaces like mirrors, etc.**

## 8 Assembly

1. Slide the battery into the fixture on the underside of the scanner unit until it is fixed by the clip.



2. Slide the scanner unit into the designated pocket on the top of the fingerless glove and connect the electronics using the two snaps. Ensure that the scanner unit is firmly attached to the glove.



3. Close the lug with the Velcro strip to secure the scanner unit in place.



## 9 Operating Elements

### 9.1 LEDs

The ID HyWEAR compact is equipped with five LEDs (see chapter 5.1 Product Illustration on page 12.). The charging status LED indicates if the ID HyWEAR compact is charged via a USB connection.

#### No USB Connection (Default)

LED	green	yellow	red	blue
Action	0,5 s <i>tag/barcode read</i>	on until tag/barcode is read or timeout <i>scanning</i>	0,5 s <i>no tag/barcode read</i>	1 Hz <i>connection establishment</i>
			4 Hz for 4 s <i>timeout server</i>	every 3 s for 0,2 s <i>connection OK</i>

### 9.2 Buzzer

By default, the buzzer is deactivated. You can configure the buzzer via “HyWEAR Config Tool”.

For an overview of the configuration possibilities, see chapter 11 Configuration Parameters on page 24.

### 9.3 Vibration Feedback

By default, the vibration feedback is deactivated. You can configure the vibration feedback via “HyWEAR Config Tool”.

For an overview of the configuration possibilities, see chapter 11 Configuration Parameters on page 24.

### 9.4 Trigger Button

Pushing the trigger button on the fingerless glove activates the scanner for a limited, configurable time (SCAN-TIME; default 3 s).

### 9.5 Left Button

By default, the left button has no function. You can configure the button via “HyWEAR Config Tool”. For an overview of the configuration possibilities, see chapter 11 Configuration Parameters on page 24.

### 9.6 Right Button

By default, the right button has no function. You can configure the button via “HyWEAR Config Tool”. For an overview of the configuration possibilities, see chapter 11 Configuration Parameters on page 24.

## 10 Operation

The instructions given in this user guide are based on the settings defined ex works. It is possible to configure own settings, therefore see chapter 10.5 Configuration on page 23.

### 10.1 Charging the Battery

Before initial operation, the battery should be fully charged. This can be done either via the supplied USB-C cable or via the ID HyWEAR Charging Station. As long as the battery is charging via USB-C, the charging status LED lights up yellow. If the ID HyWEAR compact is charged when switched off, the blue LED starts flashing simultaneously to signal the connection establishment. If the battery is fully charged, the charging status LED goes out. If the battery is completely discharged, the yellow LED flashes every 3 seconds for 0.2 seconds.

**NOTE:**

***The battery temperature must not exceed 45 °C (113 °F). Therefore, charge batteries only in the temperature range from 0 °C to 40 °C (32 °F to 104 °F).***

#### 10.1.1 Charging via ID HyWEAR Charging Station

The high quality ID HyWEAR Charging Station is part of the accessories of the ID HyWEAR compact and is supplied with it. Up to four batteries can be charged simultaneously. The charging status is indicated by a status LED. The blue LED indicates that the ID HyWEAR Charging Station is supplied with power. Thanks to the latest technology, overcharging of the batteries is impossible. Due to the rubberized underside of the charging station, it can also be placed on smooth surfaces without slipping. It is also possible to mount the charging station on a wall.

To charge the battery:

1. Press the clip on the lower side of the ID HyWEAR compact to release the battery.
2. Carefully slide the battery out of the guide rail.
3. Place the battery in the charging slot with the contacts facing down.
4. Ensure the battery is placed properly.
5. Ensure the ID HyWEAR Charging Station is plugged in. To connect the power plug to the ID HyWEAR Charging Station, it is necessary to bend the cable slightly (do not kink!).
6. To remove the battery, pull the battery release clip.

Complete charging takes approx. 2 hours. Use only the charging station provided by FEIG ELECTRONIC.

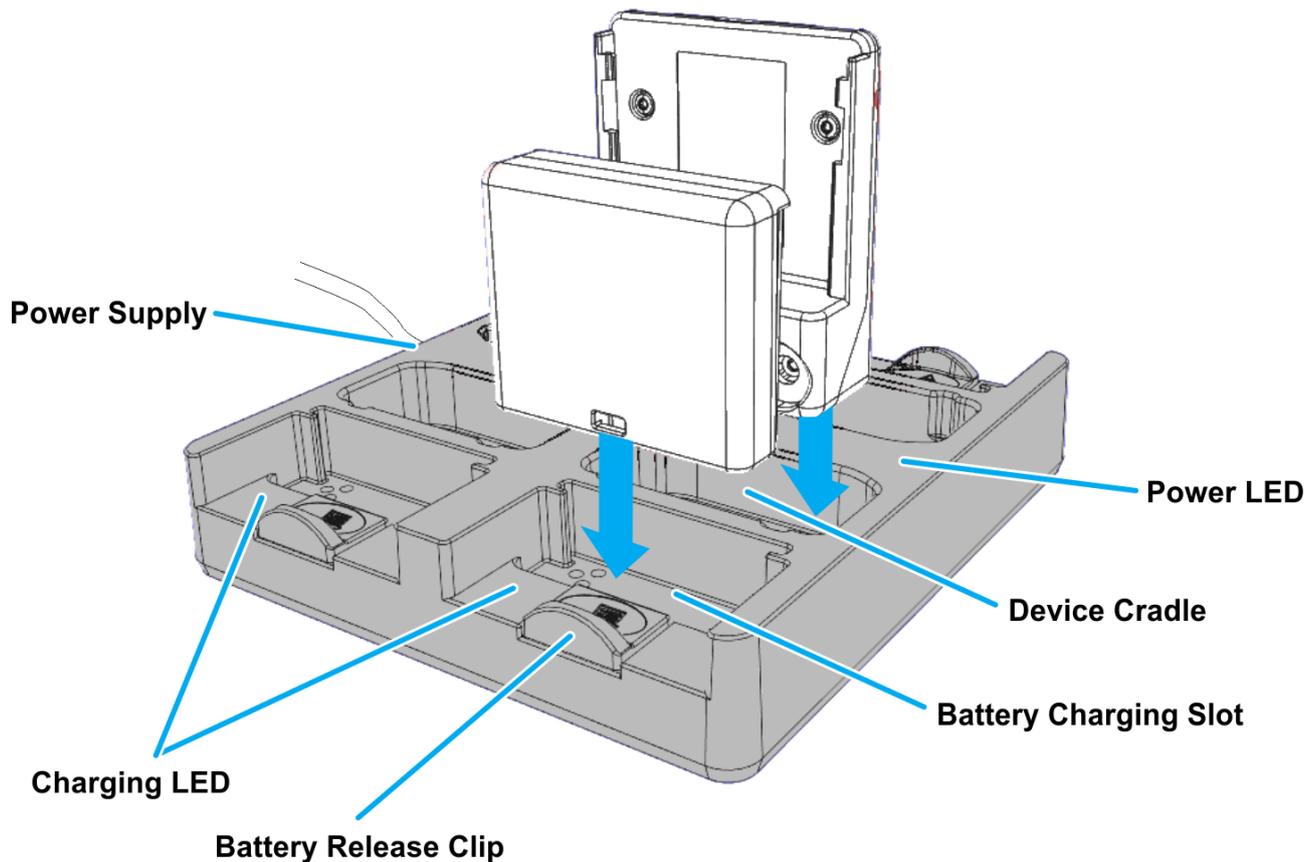


Fig. 4: Charging via ID HyWEAR Charging Station

The ID HyWEAR Charging Station has a power LED and a charging LED for each slot that indicates the charging state of the inserted battery. For the different statuses of the LED, see the table below.

State	Description
Power LED off	The charging station is not supplied with power.
Power LED blue	The charging station is supplied with power.
Charging LED off	No battery inserted in the battery charging slot.
Charging LED red	The inserted battery is charging.
Charging LED green	The inserted battery is fully charged.

Table 1: LED states

### 10.1.2 Charging via USB-C

To charge the ID HyWEAR compact via USB-C, connect it to a PC or laptop using the supplied USB-C cable. With a suitable adapter, you can also charge the device via a power outlet using the USB-C cable.

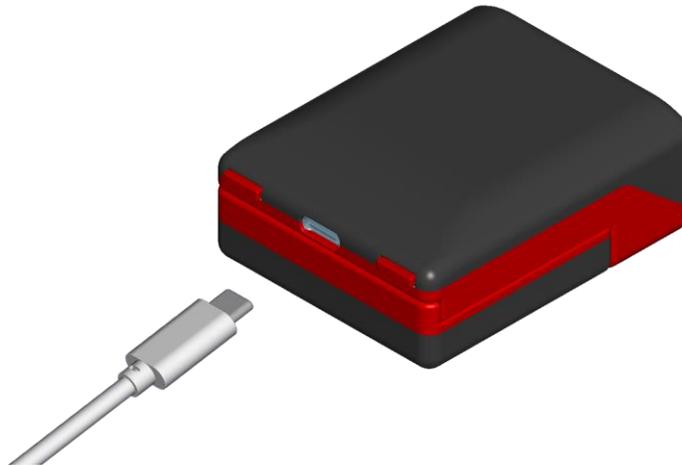


Fig. 5: Charging via USB-C

## 10.2 Powering Up the ID HyWEAR compact

To power up the ID HyWEAR compact, press and hold one of the three buttons for 2 seconds. As soon as you switch on the ID HyWEAR compact, the blue status LED starts flashing, indicating the attempt to establish a connection.

## 10.3 Connecting to Host

The flashing blue LED after power-up means that the ID HyWEAR compact is seeking a connection. As long as no connection to the host has been established, scanning is not possible.

### 10.3.1 Establishing a WiFi Connection

To connect the ID HyWEAR compact to a host via WiFi an access point is needed. Make sure that both devices, ID HyWEAR compact and the WiFi access point, have the same settings. For more information refer to see chapter 11.5 WiFi Settings on page 30.

The following figure explains how to connect the ID HyWEAR compact via WiFi.



Fig. 6: Establishing a WiFi connection

For detailed information, please refer to the Application Note in the FEIG download area, using the following link and login data:

<https://www.feig.de/en/login>

Username: hywear-compact

Password: hywear



### 10.3.2 Establishing a Bluetooth Connection

Before attempting to connect the ID HyWEAR compact to a host, e.g. a tablet or smartphone, via Bluetooth make sure that both devices have the same settings. For more information refer to see chapter 11.4 Bluetooth Settings on page 29.

The following figure illustrates how to connect the ID HyWEAR compact via Bluetooth.



Fig. 7: Establishing a Bluetooth connection

For detailed information, please refer to the Application Note in the FEIG download area, using the following link and login data:

<https://www.feig.de/en/login>

Username: hywear-compact

Password: hywear



## 10.4 Scanning

To scan a barcode or an RFID tag, aim at the target and press the trigger button. You can configure the scan engine via “HyWEAR Config Tool”.

After pressing the trigger button, the ID HyWEAR compact tries to read a barcode or an RFID tag for 3 seconds. During this time, the yellow LED is lighting up constantly. If the scan was successful, the green LED lights up. In case of an unsuccessful scan, the red LED lights up.

## 10.5 Configuration

To configure the ID HyWEAR compact the software “HyWEAR Config Tool” is required, which can be obtained from the FEIG ELECTRONIC download area. Please use the login data, which you can find in the manual. For the different configuration parameters, see chapter 11 Configuration Parameters on page 24.

## 10.6 Powering Down the ID HyWEAR compact

The ID HyWEAR compact automatically powers down after the parameter AUTO-POWER-OFF (default setting: 600 s) has been lapsed and no button was pressed or if a connection could not be made within 60 s.

To manually power down the device, press either the left or the right button for 5 seconds and wait until all 4 LEDs light up, then release the button. The LEDs go out after 4 seconds and you hear a beep, indicating that the ID HyWEAR compact powers down.

## 10.7 Reset to Default

### 10.7.1 Controller Reset

To perform a controller reset, press and hold the left button and the right button for 5 seconds. Fast repeated flashing of the 4 LEDs and a beep at the end signal the start of the controller reset.

### 10.7.2 Complete Parameter Reset

To perform a complete parameter reset, press and hold the trigger button, left button and right button for 5 seconds within the first 30 seconds after powering up the ID HyWEAR compact. The start of the complete parameter reset is signaled by the flashing of the 4 LEDs in the sequence blue-red-yellow-green (twice) and a beep at the end.

#### **NOTE:**

***After a complete parameter reset all user configured parameters will be lost.***

## 11 Configuration Parameters

Via the configuration parameters, various settings can be made, e.g. assigning a device ID, selecting different scan settings or options for the connection to the host. To configure the ID HyWEAR compact the software "HyWEAR Config Tool" is required, which can be obtained from the FEIG ELECTRONIC download area. Please use the login data, which you can find in the manual.

### 11.1 Device Settings

#### 11.1.1 Device ID

Logical Name Device.Identifier.ScannerID			
Description Unique ID that can be assigned by the user. The ID can have a maximum length of 29 bytes and may only consist of printable ASCII characters: !"#%&'()*+,-./0123456789:;<=>? @ABCDEFGHIJKLMNPOQRSTUVWXYZ[\\]^_ `abcdefghijklmnopqrstuvwxyz{ }~			
Possible Values	Default Value	Unit	Reset Required
		-	None

#### 11.1.2 Auto-Power-Off

Logical Name PowerManagement.AutoPowerOff			
Description Defines the timespan after which the reader automatically switches off. The timespan is always re-triggered when the trigger button is pressed and a new scan process is started. In Continuous Read Mode the timespan is re-triggered every time a tag or barcode is read. If the parameter is set to "65535", the reader will stay on.			
Possible Values	Default Value	Unit	Reset Required
1...65535	600	S	Hard

#### 11.1.3 Response Timeout

Logical Name OperatingMode.ScanMode.Transmission.Timeout			
Description Defines the timeout for a response from the host.			
Possible Values	Default Value	Unit	Reset Required
1...255	3	S	Hard

## 11.2 RFID Settings

### 11.2.1 Regulation

Logical Name			
AirInterface.Region.UHF.Regulation			
Description Defines the region specific behavior according to the RF regulations. For a detailed description of the individual countries' affiliation to the regions and their frequency bands. The region is set up ex factory. Changing the region from EU to FCC and vice versa is only possible with an activation code. If region = EU, only EU frequencies can be set. If region = FCC, only FCC frequencies can be set.			
Possible Values	Default Value	Unit	Reset Required
0x04: FCC: America 0x14: FCC: China 0x24: FCC: Australia/New Zealand 0x34: FCC: Brazil 0x44: FCC: Israel 0x54: FCC: Japan 0x64: FCC: Malaysia 0x06: EU: Europe 0x16: EU: Asia/Arabia 0x26: EU: Russia 0x36: EU: Africa 0x46: EU: India 0x56: EU: Morocco	0x06 (EU) 0x04 (FCC)	-	Hard

### 11.2.2 RF Power

Logical Name			
AirInterface.Antenna.UHF.No1.OutputPower			
Description Defines the RF output power.			
Possible Values	Default Value	Unit	Reset Required
0x00: Low 0x01: Middle 0x02: High	0x02	-	Hard

### 11.2.3 RSSI Filter

Logical Name			
AirInterface.Antenna.UHF.No1.RSSIFilter			
Description Defines the RSSI (Received Signal Strength Indicator) filter level. A higher value increases the sensitivity. The lower the RSSI filter value, the more weak transponder signals are rejected. Typical values: 30 to 70 dBm.			
Possible Values	Default Value	Unit	Reset Required
0...255	0 (= disabled)	-dBm	None

## 11.2.4 TR-Response-Time

Logical Name <b>AirInterface.TimeLimit</b>			
Description Defines the maximum duration for the transponder command. It starts after the reader has received a new command. At the latest after the TR-RESPONSE-TIME has elapsed the reader will send an answer protocol. In this case, current commands between reader and transponder are aborted. If the time is too short the status "0x83 RF Communication Error" will appear.			
Possible Values 1...65535	Default Value 10	Unit * 100 ms	Reset Required None

## 11.3 Scan Settings

### 11.3.1 Scan-Time RFID

Logical Name AirInterface.ScanTime			
Description Defines the timespan the reader scans for an RFID tag.			
Possible Values 1...65535	Default Value 5	Unit * 10 ms	Reset Required Soft

### 11.3.2 Scan-Time Barcode

Logical Name Barcode.ScanTime			
Description Defines the timespan the reader scans for a barcode.			
Possible Values 1...255	Default Value 30	Unit * 100 ms	Reset Required Soft

### 11.3.3 Scan Engine

Logical Name OperatingMode.ScanMode.DataSource.Engine			
Description Defines the engine from which data is to be read. If two engines are selected, the second engine is used only when the first engine timed out. The default value depends on the version of the reader.			
Possible Values 0x0001: RFID first, Barcode second 0x00FF: RFID only 0x01FF: Barcode only	Default Value 0x0001	Unit -	Reset Required Hard

### 11.3.4 Scan Interface

Logical Name OperatingMode.ScanMode.Interface			
Description Defines the interface, which is used to send the scanned data to the host. The demo mode is for demonstration purposes only. It allows scanning without an active Bluetooth or WiFi connection. The status of a scan is indicated by the outputs (vibrator/buzzer/LED).			
Possible Values 0x00: Demo 0x01: Bluetooth SPP 0x02: Bluetooth HID 0x11:WiFi	Default Value 0x02	Unit -	Reset Required Hard

## 11.3.5 IDD

Logical Name OperatingMode.ScanMode.DataSelector.IDD			
Description This configuration flag defines if RFID or barcode data will be part of the scan event data. The max. length for barcode is limited to 200 bytes by the buffer.			
Possible Values b0: IDD disabled b1: IDD enabled	Default Value b1	Unit -	Reset Required Soft

## 11.3.6 Input Events

Logical Name OperatingMode.ScanMode.DataSelector.InputEvents			
Description This configuration flag defines if input states (button and trigger states) will be part of the scan event data.			
Possible Values b0: Input states disabled b1: Input states enabled	Default Value b0	Unit -	Reset Required Soft

## 11.3.7 Scanner ID

Logical Name OperatingMode.ScanMode.DataSelector.ScannerID			
Description This configuration flag defines if the Scanner ID will be part of the scan event data.			
Possible Values b0: Scanner ID disabled b1: Scanner ID enabled	Default Value b0	Unit -	Reset Required Soft

## 11.4 Bluetooth Settings

### 11.4.1 Bluetooth Destination Address

Logical Name HostInterface.Bluetooth.DestinationAddress			
Description Defines the Bluetooth destination address to which the connection is to be established. The Bluetooth destination address may only consist of the following hexadecimal characters: 0-9, A-F Example: 12:34:56:78:9A:BC			
Possible Values	Default Value	Unit	Reset Required
		-	Hard

### 11.4.2 Bluetooth PIN

Logical Name HostInterface.Bluetooth.PIN			
Description Defines the Bluetooth PIN for pairing. The PIN can have a length of up to 15 characters and may only consist of printable ASCII characters: !"#\$%&'()*+,-./0123456789:;<=>? @ABCDEFGHIJKLMNPOQRSTUVWXYZ[\]^_ `abcdefghijklmnopqrstuvwxyz{ }~			
Possible Values	Default Value	Unit	Reset Required
	1234	-	Hard

### 11.4.3 Bluetooth Device Name

Logical Name HostInterface.Bluetooth.DeviceName			
Description Defines the name of the Bluetooth device. The name can have a maximum length of 31 bytes and may only consist of printable ASCII characters: !"#\$%&'()*+,-./0123456789:;<=>? @ABCDEFGHIJKLMNPOQRSTUVWXYZ[\]^_ `abcdefghijklmnopqrstuvwxyz{ }~ The DID is the unique device identifier as decimal digit.			
Possible Values	Default Value	Unit	Reset Required
	HyWEAR_+SNR	-	Hard

## 11.5 WiFi Settings

### 11.5.1 Frequency Band

Logical Name HostInterface.WLAN.FrequencyBand			
Description Defines the frequency band used.			
Possible Values 0x00: 2.4 GHz 0x01: 5 GHz 0x02: 2.4 and 5 GHz (Dual Band)	Default Value 0x00	Unit -	Reset Required Hard

### 11.5.2 DHCP

Logical Name HostInterface.WLAN.IPv4.Enable_DHCP			
Description Enables or disables DHCP for WiFi connection. If DHCP is disabled, a static IP address is used.			
Possible Values b0: Disabled b1: Enabled	Default Value b1	Unit -	Reset Required Hard

### 11.5.3 IP Address

Logical Name HostInterface.WLAN.IPv4.IPAddress			
Description Defines the IP address for WiFi connection.			
Possible Values	Default Value 0.0.0.0	Unit -	Reset Required Hard

### 11.5.4 Port Number

Logical Name HostInterface.WLAN.IPv4.PortNumber			
Description Defines the port number for WiFi connection.			
Possible Values 0...65553	Default Value 10002	Unit -	Reset Required Hard

### 11.5.5 Subnet Mask

Logical Name HostInterface.WLAN.IPv4.SubnetMask			
Description Defines the subnet mask for WiFi connection.			
Possible Values	Default Value 255.255.255.0	Unit -	Reset Required Hard

### 11.5.6 Gateway Address

Logical Name HostInterface.WLAN.IPv4.GatewayAddress			
Description Defines the gateway address for WiFi connection.			
Possible Values	Default Value 0.0.0.0	Unit -	Reset Required Hard

### 11.5.7 DNS1

Logical Name HostInterface.WLAN.IPv4.DNS1			
Description Defines the IP address of the 1st name server.			
Possible Values	Default Value 0.0.0.0	Unit -	Reset Required Hard

### 11.5.8 DNS2

Logical Name HostInterface.WLAN.IPv4.DNS2			
Description Defines the IP address of the 2nd name server.			
Possible Values	Default Value 0.0.0.0	Unit -	Reset Required Hard

### 11.5.9 SSID

Logical Name HostInterface.WLAN.Security.ServiceSetIdentifier.SSID			
Description Defines the name of the network. The name can have a maximum length of 32 bytes and may only consist of printable ASCII characters: !"#\$%&'()*+,-./0123456789:;<=>? @ABCDEFGHIJKLMNPQRSTUVWXYZ[\]^_ `abcdefghijklmnopqrstuvwxyz{ }~			
Possible Values	Default Value	Unit -	Reset Required Hard

## 11.5.10 WPA2 Key

Logical Name HostInterface.WLAN.Security.WPA2.Key			
Description Defines the pre-shared key for WPA2. The key can have a maximum length of 61 bytes and may only consist of printable ASCII characters: !"#\$%&'()*+,-./0123456789:;<=>? @ABCDEFGHIJKLMNPOQRSTUVWXYZ[\]^_ `abcdefghijklmnopqrstuvwxyz{ }~			
Possible Values	Default Value	Unit	Reset Required
		-	Hard

## 11.5.11 EAP Method

Logical Name HostInterface.WLAN.Security.EAP.Method			
Description Defines the outer EAP (Extensible Authentication Protocol) method, meaning the process of creating a secure channel. If EAP is enabled, the parameter WIFI-WPA2 is irrelevant.			
Possible Values	Default Value	Unit	Reset Required
0x00: EAP disabled 0x01: TLS 0x02: TTLS 0x03: FAST 0x04: PEAP	0x00 (EAP disabled)	-	Hard

## 11.5.12 EAP Inner Method

Logical Name HostInterface.WLAN.Security.EAP.InnerMethod			
Description Defines the inner EAP (Extensible Authentication Protocol) method, meaning the actual authentication process.			
Possible Values	Default Value	Unit	Reset Required
0x00: MSCHAP 0x01: MSCHAPV2	0x01 (MSCHAPV2)	-	Hard

## 11.5.13 EAP User ID

Logical Name HostInterface.WLAN.Security.EAP.UserID			
Description Defines the user ID for EAP (Extensible Authentication Protocol). The user ID can have a maximum length of 16 bytes and may only consist of printable ASCII characters: !"#\$%&'()*+,-./0123456789:;<=>? @ABCDEFGHIJKLMNPOQRSTUVWXYZ[\]^_ `abcdefghijklmnopqrstuvwxyz{ }~			
Possible Values	Default Value	Unit	Reset Required
		-	Hard

## 11.5.14 EAP Password

Logical Name HostInterface.WLAN.Security.EAP.UserPassword			
Description Defines the user password for EAP (Extensible Authentication Protocol). The password can have a maximum length of 16 bytes and may only consist of printable ASCII characters: !"#\$%&'()*+,-./0123456789:;<=>? @ABCDEFGHIJKLMNPOQRSTUVWXYZ[\]^_ `abcdefghijklmnopqrstuvwxyz{ }~			
Possible Values	Default Value	Unit	Reset Required
		-	Hard

## 11.5.15 EAP Opportunistic Key Caching (OKC)

Logical Name HostInterface.WLAN.Security.EAP.Enable_OKC			
Description Enables or disables opportunistic key caching (OKC), which decreases the time needed for authentication.			
Possible Values	Default Value	Unit	Reset Required
b0: Disabled b1: Enabled	b0	-	Hard

## 11.5.16 Host Connection Mode

Logical Name OperatingMode.ScanMode.Transmission.Destination.Mode			
Description Defines the mode for the connection to the host.			
Possible Values	Default Value	Unit	Reset Required
0x00: Connect by IP address 0x01: Connect by hostname	0x00	-	Hard

## 11.5.17 Host IP Address

Logical Name OperatingMode.ScanMode.Transmission.Destination.IPv4.IPAddress			
Description Defines the destination address of the host by IP address.			
Possible Values	Default Value	Unit	Reset Required
	0.0.0.0	-	Hard

## 11.5.18 Hostname

Logical Name OperatingMode.ScanMode.Transmission.Destination.IPv4.Hostname			
Description Defines the destination address of the host by name. The hostname can have a maximum length of 52 bytes and may only consist of the following printable ASCII characters: -0123456789 ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz			
Possible Values	Default Value	Unit	Reset Required
		-	Hard

## 11.5.19 Host Port Number

Logical Name OperatingMode.ScanMode.Transmission.Destination.PortNumber			
Description Defines the destination port of the host.			
Possible Values	Default Value	Unit	Reset Required
0...65535	0	-	Hard

## 11.6 Indicator Settings

## 11.6.1 Buzzer Signalization

Logical Name DigitalIO.Signaler.Buzzer.ActivationSources			
Description Defines the actions which trigger the buzzer. Multiple selections are possible.			
Possible Values	Default Value	Unit	Reset Required
Bit 0: Tag/Barcode is read Bit 1: Trigger is pressed Bit 2: Response timeout in server communication	0x01 (Tag/Barcode is read)	-	None

## 11.6.2 Vibration Feedback Signalization

Logical Name DigitalIO.Signaler.Vibrator.ActivationSources			
Description Defines the actions which trigger the vibrator. Multiple selections are possible.			
Possible Values	Default Value	Unit	Reset Required
Bit 0: Tag/Barcode is read Bit 1: Trigger is pressed Bit 2: Response timeout in server communication	0x02 (Trigger is pressed)	-	None

## 11.7 Button Settings

### 11.7.1 Unlock Trigger Button

Logical Name DigitalIO.Button.Trigger.Enable_UnlockTrigger			
Description Defines if the scan function can be unlocked by pressing the trigger button. After unlocking, a new scan can be started. NOTE: The scan function can be locked by the host after a scan event.			
Possible Values b0: Trigger button cannot unlock the scan function b1: Trigger button can unlock the scan function	Default Value b0	Unit -	Reset Required None

### 11.7.2 Left Button Power-Off

Logical Name DigitalIO.Button.Left.Enable_PowerOff			
Description The device will be switched off when the left button is pressed for at least 5 seconds.			
Possible Values b0: Switch-off function disabled b1: Switch-off function enabled	Default Value b1	Unit -	Reset Required None

### 11.7.3 Right Button Power-Off

Logical Name DigitalIO.Button.Right.Enable_PowerOff			
Description The device will be switched off when the right button is pressed for at least 5 seconds.			
Possible Values b0: Switch-off function disabled b1: Switch-off function enabled	Default Value b1	Unit -	Reset Required None

### 11.7.4 Left Button Function

Logical Name DigitalIO.Button.Left.Function			
Description Defines the function assignment for the left button. 0x00: The button has no function. 0x01: Unlocks the scan function 0x04: Starts a new scan. In Continuous Read Mode it also stops a scan. 0x20: Toggles the trigger mode between Single Read Mode and Continuous Read Mode.			
Possible Values 0x00: No function 0x01: Unlock scan function 0x04: Start/Stop scan 0x20: Switch trigger mode	Default Value 0x04	Unit -	Reset Required None

## 11.7.5 Right Button Function

Logical Name			
DigitalIO.Button.Right.Function			
Description			
<p>Defines the function assignment for the right button.</p> <p>0x00: The button has no function.</p> <p>0x01: Unlocks the scan function</p> <p>0x04: Starts a new scan. In Continuous Read Mode it also stops a scan.</p> <p>0x20: Toggles the trigger mode between Single Read Mode and Continuous Read Mode.</p>			
Possible Values	Default Value	Unit	Reset Required
0x00: No function 0x01: Unlock scan function 0x04: Start/Stop scan 0x20: Switch trigger mode	0x00	-	None

## 12 Troubleshooting

Problem	Solution
I cannot connect the device via USB.	<ul style="list-style-type: none"><li>• Ensure that the connection cable is plugged in properly.</li><li>• Ensure that the correct driver for the USB controller is installed.</li></ul>
The red LED flashes after successful reading of a barcode or an RFID tag.	<ul style="list-style-type: none"><li>• The connection between the device and the host has timed out. Check the connection.</li></ul>
The red LED lights up after trying to read a barcode or an RFID tag.	<ul style="list-style-type: none"><li>• The SCAN-TIME, the time the device is searching for a barcode or RFID tag, has expired without a barcode or RFID tag having been read. Press the trigger button and aim at a barcode or an RFID tag.</li></ul>
I cannot connect the device via WiFi.	<ul style="list-style-type: none"><li>• Ensure that the host supports WiFi.</li><li>• Check WiFi settings.</li></ul>

## 13 Maintenance and Cleaning

### 13.1 Cleaning the Lense

To clean the lense use a clean and dry cleaning cloth. Do not use chemical cleaners, lyes or similar.

### 13.2 Contacts

To clean the contacts use a clean and dry cleaning cloth. Do not use chemical cleaners, lyes or similar.

### 13.3 Fingerless Glove and Battery

The fingerless glove and the battery are consumables and therefore wear parts. To clean the battery use clean and dry cleaning cloth. Do not use chemical cleaners, lyes or similar. Do not reuse a damaged battery!

The fingerless glove is hand washable.

## 14 Decommissioning

For prolonged decommissioning, disconnect the scanner unit from the fingerless glove and slide the scanner unit out of the pocket. Then remove the battery. Make sure to store the device dry and clean. The storage temperature should be between  $-25\text{ }^{\circ}\text{C}$  and  $85\text{ }^{\circ}\text{C}$ .

## 15 Disposal



Never dispose of LiPo batteries in household waste! LiPo batteries can be disposed of at special collection points. Before disposal, make sure that the LiPo battery is completely discharged.

How to dispose of the electronics and the fingerless glove?



## 16 Warranty

FEIG ELECTRONIC warrants that the product will be free of defects in material and workmanship for 12 months from the date of shipment when used as intended. Battery and fingerless glove are not covered. FEIG ELECTRONIC will, at its option, either repair or replace the defective products. Such repair or replacement shall be buyer's sole remedy in the event of manufacturer's breach of his limited warranty. Repaired or replaced parts or products may include new, reconditioned or remanufactured parts and equipment at manufacturer's option. All costs associated with shipment to FEIG ELECTRONIC for warranty service, including but not limited to freight, duties, insurance and custom fees, are buyer's responsibility. FEIG ELECTRONIC will pay the freight costs (duties, insurance, customs and any other fees) associated with the return shipment to the buyer. The method of shipment will be at the manufacturer's discretion. Repair or replacement of any parts or equipment does not extend the period of warranty provided for herein.

THIS LIMITED WARRANTY IS THE MANUFACTURER'S ONLY WARRANTY. FEIG ELECTRONIC DOES NOT GIVE WARRANTIES OF MERCHANTABILITY OR WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE.

To take advantage of this warranty, the buyer should contact the seller not the manufacturer. The warranty set forth herein does not cover and FEIG ELECTRONIC will have no obligations hereunder if any non-conformance is caused in whole or in part by accident, transportation, neglect, misuse, alteration, modification, or enhancement of the product or incorporation, interfacing, attachment of any feature, program, or device to the product by a person or entity other than the manufacturer, failure to provide a suitable installation environment, use of the product for other than the specific purpose for which the product is designed or any use of the product not in accordance with the User Guide or other misuse or abuse of the product. The warranty does not cover problems linked to batteries.

In case the product was bought directly from FEIG ELECTRONIC the buyer should refer to [www.panmobil.com/rma](http://www.panmobil.com/rma).

### Shipment Address:

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