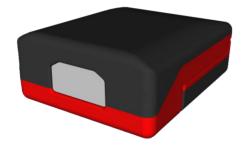


USER GUIDE

ID HyWEAR compact

Hands-Free UHF RFID & Barcode Scan System



Note

© Copyright by

FEIG ELECTRONIC GmbH Lange Strasse 4 D-35781 Weilburg (Germany)

Tel.: +49 6471 3109-0 http://www.feig.de

identification-support@feig.de

With the edition of this document, all previous editions become void. Indications made in this manual may be changed without previous notice.

Copying of this document and giving it to others and the use or communication of the contents thereof are forbidden without express authority. Offenders are liable to the payment of damages. All rights are reserved in the event of the grant of a patent or the registration of a utility model or design.

Composition of the information in this document has been done to the best of our knowledge.

FEIG ELECTRONIC GmbH does not guarantee the correctness and completeness of the details given in this manual and may not be held liable for damages ensuing from incorrect or incomplete information. Since, despite all our efforts, errors may not be completely avoided, we are always grateful for your useful tips.

The instructions given in this manual are based on advantageous boundary conditions.

FEIG ELECTRONIC GmbH does not give any guarantee promise for perfect function in cross environments and does not give any guarantee for the functionality of the complete system which incorporates the subject of this document.

FEIG ELECTRONIC GmbH calls explicit attention that devices which are subject of this document are not designed with components and testing methods for a level of reliability suitable for use in or in connection with surgical implants or as critical components in any life support systems whose failure to perform can reasonably be expected to cause significant injury to human health. To avoid damage, injury or death the user or application designer must take reasonably prudent steps to protect against system failures.

FEIG ELECTRONIC GmbH assumes no responsibility for the use of any information contained in this document and makes no representation that they are free of patent infringement. FEIG ELECTRONIC GmbH does not convey any license under its patent rights nor the rights of others.

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 your own settings.



Contents

1	Safety Instructions	7	
2	Revision History of Documentation	9	
3	Introduction	10	
3.1	The ID HyWEAR compact	10	
3.2	Applications	11	
3.3	HyWEAR Family	11	
3.4	.4 Available SW and configuration tools		
4	Scope of Delivery	12	
5	Accessories	12	
6	Product Description	13	
6.1	Product Illustration	13	
6.2	Intended Use	14	
6.3	Approvals	15	
	6.3.1 Europe (CE)	15	
	6.3.2 USA (FCC)	15	
7	Technical Data	16	
7.1	ID HyWEAR compact – 2D UHF / UHF – Technical Data	16	
7.2	ID HyWEAR compact sR – Technical data	17	
7.3	ID HyWEAR compact xT – Technical Data	18	
	7.3.1 Decode Distances	19	
8	Components		
8.1	Electrical	20	
	8.1.1 Battery	20	
	8.1.2 Scanner Unit	20	



8.2	Mechan	nical	21
	8.2.1	Fingerless Glove	21
	8.2.2	Housing	21
8.3	Optical		22
	8.3.1	Laser	22
9	Assem	bly	23
10	Operat	ing Elements	24
10.1	LEDs		24
10.2	LEDs/ F	- eedback	24
	10.2.1	During operation and scanning	24
	10.2.2	Radio function signaling	25
	10.2.3	Signaling, Configuration via barcode	25
	10.2.4	Signaling, special features and functions	25
10.3	Buzzer		26
10.4	Vibratio	on Feedback	26
10.5	Trigger	Button	27
10.6	Left But	tton	27
10.7	Right B	utton	27
11	Operat	ion	28
11.1	Chargir	ng the Battery	28
	11.1.1	Charging via ID HyWEAR compact Battery Charger 4x	28
	11.1.2	Charging via USB-C	30
11.2	Powerir	ng Up the ID HyWEAR compact	30
11.3	Connec	ting to Host	31
	11.3.1	Establishing a Bluetooth Connection	31
	11.3.2	Establishing a WiFi Connection	32
11.4	Scannir	ng	33
11.5	Configuration3		
11.6	Powerir	ng Down the ID HyWEAR compact	33
11.7	Reset to	o Default	33
	11.7.1	Controller Reset – Unpair Bluetooth connection	33

	11.7.2 Complete Parameter Reset – Factory Reset	33
12	Configuration Parameters	34
13	Troubleshooting	35
14	Maintenance and Cleaning	36
14.1	Cleaning the Lense	36
14.2	Contacts	36
14.3	Fingerless Glove and Battery	36
15	Decommissioning	37
16	Disposal	38
17	Warranty	39

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.



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

- ▶ 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	
3	2021-07-22	HyWEAR-Firmware: V02.01.00	
		Wifi-Firmware: V01.02.87	
		HyWEAR Configurator: V04.00.00	
		Complete change of registers, not compatible to Rel. 1.x	
2	2019-12-16	HyWEAR-Firmware: V01.00.00	
		Wifi-Firmware: V01.02.87	
		HyWEAR Configurator: V03.00.00	
		CFG1 parameter added: LED-SIGNALIZATION	
		CFG4 parameter added: BT-HID-AUTO-RECONNECT	
		CFG4 parameter added: BT-HID-KEYSTROKE-DELAY	
		CFG11: TRIGGER-FUNCTION description changed to TRIGGER-OPTION	
		CFG11 parameter added: TRIGGER-FUNCTION	
		CFG13 parameter added: USER-DEFINED-STRINGS	
1	2019-09-04	FCC and IC approval notice supplemented	
		Illustration added to "Intended Use"	
0	2019-02-08	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.

The described behavior of the HyWEAR in this document is based on FW Rel 2.X. Prior HyWEAR releases might have different behavior.



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.

3.3 HyWEAR Family

Depending on the use cases or applications different HyWEAR versions are available. The table below gives an overview of the main differences. Details can be found in the corresponding Software manuals.

HyWEAR	Barcode	RFID	Bluetooth	WiFi
HyWEAR compact sR	yes	no	yes	no
HyWEAR compact UHF	no	yes	yes	yes
HyWEAR compact 2D-UHF	yes	yes	yes	yes
HyWEAR compact xT	yes, extended range	no	yes	yes

In addition the HyWEAR compact UHF and HyWEAR compact 2D-UHF are available as an FCC version supporting 902 MHz to 928 MHz and as an EU version supporting 865 MHz to 868 MHz.

3.4 Available SW and configuration tools

To configure the HyWEAR compact the HyWEAR Config tool can be used.

Furthermore the HyWEAR can be configured by reading a configuration barcode.

Especially for Bluetooth SPP or WiFi an SDK (SDK Gen3) is available and corresponding Sample Apps for Android.

For details please contact the FEIG Identification Support.

4 Scope of Delivery

The scope of delivery includes following components:



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



1 x ID HyWEAR compact Quick Start Guide



1 x USB-A to USB-C cable

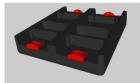
After unboxing please make sure, that all listed parts have been delivered properly and in good condition.

Note: All displayed pictures might be changed without notice.

5 Accessories



1 x ID HyWEAR compact fingerless glove



1 x ID HyWEAR compact Battery Charger 4x



1 x ID HyWEAR compact spare battery



ID HyWEAR compact power supply for battery charger 4x

6 Product Description

6.1 Product Illustration

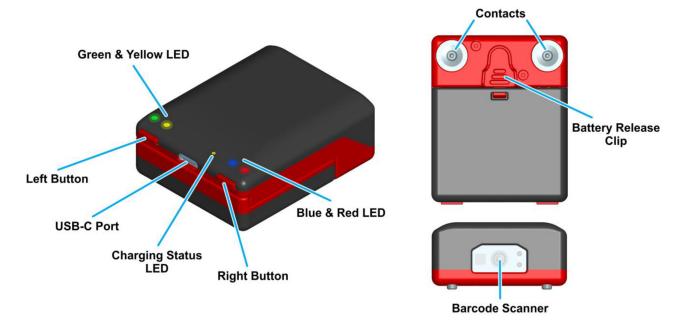


Fig. 1: Product illustration – scanner unit



Fig. 2: Product illustration – fingerless glove

6.2 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

6.3 Approvals

6.3.1 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 the radio equipment type ID HyWEAR compact is in compliance with the Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address:

https://www.feig.de/en/service/eu-declarations-of-conformity/



6.3.2 USA (FCC)

Product name:	ID HyWEAR compact
FCC ID:	PJMHYWCMPCT
Notice for USA	This device complies with Part 15 of the FCC Rules.
	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.
	Unauthorized modifications may void the authority granted under Federal communications Commission Rules permitting the operation of this device.
	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.
	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.
	The wireless device should be used in accordance with the instructions in the User Guide.

i NOTE:

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



7 Technical Data

7.1 ID HyWEAR compact – 2D UHF / UHF – 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	
EU Version	865 MHz to 868 MHz
FCC Version	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	
• WiFi	2.4 GHz / 5 GHz (IEEE 802.11 a/b/g/n/h),WPA/ WPA2-PSK, WPA2 Enterprise (802.1X), Roaming function
Bluetooth	5.0, SPP and HID
Battery	1100 mAh Lithium Polymer, 3.7 V
Indicators	LEDs (red/ green/ blue/ yellow) Buzzer Vibration feedback
Environmental Conditions	
Temperature Range	
Operation	-20 °C up to 55 °C
• Storage	-25 °C up to 85 °C
Humidity	5 % up to 95 % (non-condensing)
Drop	1.5 m drop to concrete
Drop resistance	500 rollovers from a height of 50 cm
Standard Compliance	
Radio Approval	
• Europe	EN 302 208, EN 300 328 (EU)
• USA	FCC 47 CFR Part 15 (USA)
EMC	EN 301 489
Safety	
Low Voltage	EN 62368-1
Human Exposure	EN 50364
Laser (Class 2)	EN 60825
Others	RoHS, WEEE



7.2 ID HyWEAR compact sR – 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	
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	
Bluetooth	5.0, SPP and HID
Battery	1100 mAh Lithium Polymer, 3.7 V
Indicators	LEDs (red/ green/ blue/ yellow)
	Buzzer
	Vibration feedback
Environmental Conditions	
Temperature Range	20 °C to 55 °C
Temperature Range Operation	-20 °C up to 55 °C
Temperature Range Operation Storage	-25 °C up to 85 °C
Temperature Range Operation Storage Humidity	-25 °C up to 85 °C 5 % up to 95 % (non-condensing)
Temperature Range Operation Storage Humidity Drop	-25 °C up to 85 °C 5 % up to 95 % (non-condensing) 1.5 m drop to concrete
Temperature Range Operation Storage Humidity Drop Drop resistance	-25 °C up to 85 °C 5 % up to 95 % (non-condensing)
Temperature Range Operation Storage Humidity Drop Drop resistance Standard Compliance	-25 °C up to 85 °C 5 % up to 95 % (non-condensing) 1.5 m drop to concrete
Temperature Range Operation Storage Humidity Drop Drop resistance Standard Compliance Radio Approval	-25 °C up to 85 °C 5 % up to 95 % (non-condensing) 1.5 m drop to concrete 500 rollovers from a height of 50 cm
Temperature Range Operation Storage Humidity Drop Drop resistance Standard Compliance Radio Approval Europe	-25 °C up to 85 °C 5 % up to 95 % (non-condensing) 1.5 m drop to concrete 500 rollovers from a height of 50 cm EN 302 208, EN 300 328 (EU)
Temperature Range Operation Storage Humidity Drop Drop resistance Standard Compliance Radio Approval Europe USA	-25 °C up to 85 °C 5 % up to 95 % (non-condensing) 1.5 m drop to concrete 500 rollovers from a height of 50 cm EN 302 208, EN 300 328 (EU) FCC 47 CFR Part 15 (USA)
Temperature Range Operation Storage Humidity Drop Drop resistance Standard Compliance Radio Approval Europe USA EMC	-25 °C up to 85 °C 5 % up to 95 % (non-condensing) 1.5 m drop to concrete 500 rollovers from a height of 50 cm EN 302 208, EN 300 328 (EU)
Temperature Range Operation Storage Humidity Drop Drop resistance Standard Compliance Radio Approval Europe USA EMC Safety	-25 °C up to 85 °C 5 % up to 95 % (non-condensing) 1.5 m drop to concrete 500 rollovers from a height of 50 cm EN 302 208, EN 300 328 (EU) FCC 47 CFR Part 15 (USA) EN 301 489
Temperature Range Operation Storage Humidity Drop Drop resistance Standard Compliance Radio Approval Europe USA EMC Safety Low Voltage	-25 °C up to 85 °C 5 % up to 95 % (non-condensing) 1.5 m drop to concrete 500 rollovers from a height of 50 cm EN 302 208, EN 300 328 (EU) FCC 47 CFR Part 15 (USA) EN 301 489 EN 62368-1
Temperature Range Operation Storage Humidity Drop Drop resistance Standard Compliance Radio Approval Europe USA EMC Safety Low Voltage Human Exposure	-25 °C up to 85 °C 5 % up to 95 % (non-condensing) 1.5 m drop to concrete 500 rollovers from a height of 50 cm EN 302 208, EN 300 328 (EU) FCC 47 CFR Part 15 (USA) EN 301 489 EN 62368-1 EN 50364
Temperature Range Operation Storage Humidity Drop Drop resistance Standard Compliance Radio Approval Europe USA EMC Safety Low Voltage	-25 °C up to 85 °C 5 % up to 95 % (non-condensing) 1.5 m drop to concrete 500 rollovers from a height of 50 cm EN 302 208, EN 300 328 (EU) FCC 47 CFR Part 15 (USA) EN 301 489 EN 62368-1



7.3 ID HyWEAR compact xT – 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	
•	
Barcode	1D: EAN-8, EAN-13, UPC-A, UPC-E Code 128, Code 39, Code 93, Interleaved 2of5 (others on request) 2D: DataMatrix, QR Code, PDF417, Aztec, Dotcode (others on request)
Interfaces	
• WiFi	2.4 GHz / 5 GHz (IEEE 802.11 a/b/g/n/h),WPA/ WPA2-PSK, WPA2 Enterprise (802.1X), Roaming function
Bluetooth	5.0, SPP and HID
Battery	1100 mAh Lithium Polymer, 3.7 V
Indicators	LEDs (red/ green/ blue/ yellow) Buzzer Vibration feedback
Environmental Conditions	
Temperature Range	
Operation	-20 °C up to 55 °C
Storage	-25 °C up to 85 °C
Humidity	5 % up to 95 % (non-condensing)
Drop	1.5 m drop to concrete
Drop resistance	500 rollovers from a height of 50 cm
Standard Compliance	
Radio Approval	
• Europe	EN 302 208, EN 300 328 (EU)
• USA	FCC 47 CFR Part 15 (USA)
EMC	EN 301 489
Safety	
Low Voltage	EN 62368-1
Human Exposure	EN 50364
• Laser (Class 2)	EN 60825
Others	RoHS, WEEE



7.3.1 Decode Distances

Symbology / X- Dimension	Near field- / Far field range (typical)
Code 39 - 3 mil	7.6 cm / 14.7 cm (2.99 in / 5.79 in)
PDF 417 - 6,7 mil	6.3 cm / 25.7 cm (2.48 in / 10.12 in)
DataMatrix - 10 mil	5.8 cm / 27.8 cm (2.28 in / 10.94 in)
QR - 20 mil	2.8 cm / 44.5 cm (1.10 in / 17.52 in)
UPC A - 100%	4.1 cm / 63.2 cm (1.61 in / 24.88 in)
Code 128 - 15 mil	6.1 cm / 70.6 cm (2.40 in / 27.80 in)
Code 39 - 20 mil	4.1 cm / 91.7 cm (1.61 in / 36.10 in)



8 Components

8.1 Electrical

8.1.1 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 compact Battery Charger 4x!
- 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)!

8.1.2 Scanner Unit

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

8.2 Mechanical

8.2.1 Fingerless Glove

The fingerless glove is made of textile and therefore it is very 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.

8.2.2 Housing

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



8.3 Optical

8.3.1 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.

FEIG

9 Assembly

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



 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.



10 Operating Elements

10.1 LEDs

The ID HyWEAR compact is equipped with five LEDs (see chapter 6.1 Product Illustration on page 13.). The charging LED indicates if the ID HyWEAR compact is charged via a USB connection.

10.2 LEDs/ Feedback

The LED signalization and the other feedbacks like vibration and buzzer depends on the operation status of the HyWEAR. The feedbacks are configurable.

For a better understanding the signal feedback is divided into different parts:

- Normal operation, scanning
- Radio indications
- · Configuration via barcode
- Special functions

The following tables are applicable in case the HyWEAR is not connected via USB

10.2.1 During operation and scanning

Condition	LED	Other Feedback, Remarks
HyWEAR is switched on and is not connected to a host	Blue LED is blinking every second	-
HyWEAR is switched on and is connected to a host	Blue LED is blinking every 3 s for 0,2 s	-
Scanning (e.g. press trigger button)	Yellow LED is on during the scan process	-
Tag or barcode is read	Green LED is on for 0.5 seconds	-
Tag or barcode could not be read	Red LED is on for 0.5 seconds	Detection time (configurable)
Not response from the host	Red LED is blinking with 4Hz for 4 seconds	Only in BT SPP (FEIG frame) or WiFi operation mode, response time configurable
Battery low indication	Yellow LED blinking every 3 seconds for 0.2 seconds	Battery capacity about 15-20%
Battery very low indication	Yellow LED blinking every 1.5 seconds for 0.2 seconds	Battery capacity less than 10%



10.2.2 Radio function signaling

The radio connection can be Bluetooth or WiFi

Condition	LED	Other Feedback, Remarks
Radio connection successful	Green LED on for 1 second	Buzzer on for one second
Radio communication disconnected	Red LED blinking with 4 Hz for 2 seconds	Buzzer on for 2 seconds frequency 4 Hz, vibration
Pairing by reading pairing barcode	Blue LED is blinking with 8 Hz	Buzzer 1 Hz
Pairing via Barcode successful	Green LED on for 1.5 seconds Blue LED on for 1.5 seconds	Buzzer for 1.5 seconds with 2 Hz
Pairing via Barcode not successful	Red LED on for 1.5 seconds Blue LED on for 1.5 seconds	Buzzer on for 1.5 seconds

10.2.3 Signaling, Configuration via barcode

Condition	LED	Other Feedback, Remarks
Configuration/ Reset via barcode successful	Green LED on for 2 seconds	Buzzer on for 300 ms
Configuration via barcode failed	Red LED on for 2 seconds	Buzzer on for 2 seconds with a frequency of 2 Hz

10.2.4 Signaling, special features and functions

Condition	LED	Other Feedback, Remarks
Locked mode activated by Host	Green LED blinking with one Hz	
Batch Mode, Table overflow	Red LED blinking with 8 Hz for 3 seconds	Buzzer for 3 seconds with 8 Hz
Batch Mode, Upload data, triggered via barcode	Green LED blinking with 2 Hz for 2 seconds	Buzzer for 2 seconds with 2 Hz
Internal failure	Red LED on	

10.3 Buzzer

By default the buzzer is activated. It will generate a sound when a RFID tag or a barcode is read. You can configure the buzzer via "HyWEAR Config Tool".

Details about the different settings and functions for the buzzer can be found in the corresponding system manual of the reader and/ or HyWEAR Config Tool.

10.4 Vibration Feedback

The vibration feedback is deactivated by default. You can configure the vibration feedback via "HyWEAR Config Tool".

Details about the different settings and functions for the vibration feedback can be found in the corresponding system manual of the reader and/ or HyWEAR Config Tool.



10.5 Trigger Button

By default pushing the trigger button starts the scan process. Releasing the trigger button stops the scan process.

Details about the different settings and functions for the trigger button can be found in the corresponding system manual and/ or HyWEAR Config Tool.

10.6 Left Button

By default, the left button has the same functionality as the trigger button. By pressing this button for more than 5 seconds the HyWEAR is powered down.

You can configure the button via "HyWEAR Config Tool". Details about the different settings and functions for the left button can be found in the corresponding system manual of the reader and/ or HyWEAR Config Tool.

10.7 Right Button

By default the right button function has no special functionality: By pressing the button for more than 5 seconds the HyWEAR is powered down. You can configure the button via "HyWEAR Config Tool".

Details about the different settings and functions for the right button can be found in the corresponding system manual of the reader and/ or HyWEAR Config Tool.

11 Operation

The instructions given in this user guide are based on the settings defined ex works. It is possible to configure own settings.

11.1 Charging the Battery

Before the initial operation, the battery should be fully charged. This can be done either via the supplied USB-C cable or via the ID HyWEAR compact Battery Charger 4x. 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.

i 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).

11.1.1 Charging via ID HyWEAR compact Battery Charger 4x

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 compact Battery Charger 4x is plugged in. To connect the power plug to the ID HyWEAR compact Battery Charger 4x, 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.



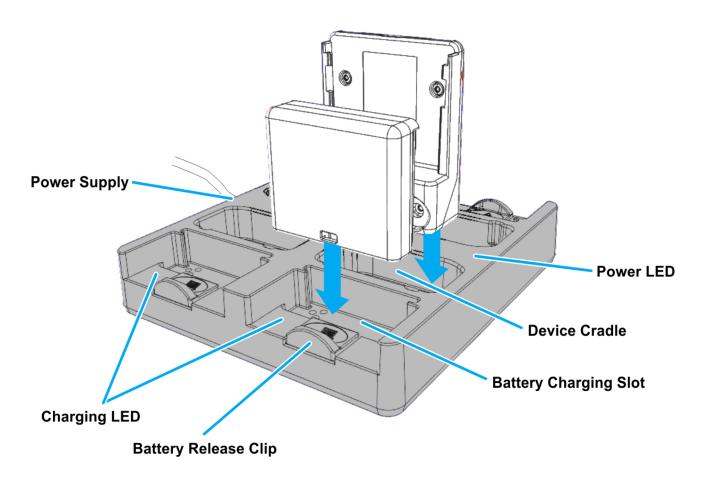


Fig. 4: Charging via ID HyWEAR compact Battery Charger 4x

The ID HyWEAR compact Battery Charger 4x 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

11.1.2 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

11.2 Powering Up the ID HyWEAR compact

To power up the ID HyWEAR compact, press and hold one of the three buttons for 5 seconds. As soon as you switch on the ID HyWEAR compact, the blue status LED starts flashing, indicating the attempt to establish a connection.



11.3 Connecting to Host

The flashing blue LED after power-up means that the ID HyWEAR compact is seeking a connection.

11.3.1 Establishing a Bluetooth Connection

By default the HyWEAR is in Bluetooth HID mode.

To pair and connect with a Host, switch on Bluetooth on the Host and open the corresponding Bluetooth window. Select HyWEAR and confirm pairing. After a successful connection the HyWEAR switches on the green LED and buzzer for one second. Now the blue LED is blinking every 3 seconds indicating that the HyWEAR is on and a connection with a Host is established.

For automatic pairing and connection to an Android based system the Android App "HyWEARconnect" is available on the FEIG download area.

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



Fig. 6: Establishing a Bluetooth connection

For detailed information especially Bluetooth SPP connecction, 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



11.3.2 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.

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



Fig. 7: 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



11.4 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 as long as the button is pressed. 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.

11.5 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, please check the system manual.

11.6 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.

11.7 Reset to Default

11.7.1 Controller Reset – Unpair Bluetooth connection

To perform a controller reset and to unpair the HyWEAR Bluetooth connection, 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 signals the start of the controller reset. In addition this controller reset unpairs the Bluetooth connection.

11.7.2 Complete Parameter Reset – Factory 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 inserting the battery. 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.

This reset does not reset all barcode settings. To set the barcode settings to default please contact the FEIG support team.

i NOTE:

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



12 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.

In addition all the configuration parameters can be set by reading a special configuration barcode. ¹

FEIG

Page 34 of 39

¹ For HyWEAR with barcode engine

13 Troubleshooting

Problem	Solution
I cannot connect the device via USB.	Ensure that the connection cable is plugged in properly.
	Ensure that the correct driver for the USB controller is installed.
The red LED flashes after successful reading of a barcode or an RFID tag.	The connection between the device and the host has timed out. Check the connection.
The red LED lights up after trying to read a barcode or an RFID tag.	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.
I cannot connect the device via WiFi.	Ensure that the host supports WiFi.
	Check WiFi settings.

14 Maintenance and Cleaning

14.1 Cleaning the Lense

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

14.2 Contacts

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

14.3 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.



15 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 °C and 85 °C.



16 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.

When disposing of the product, observe the relevant national legal regulations.



17 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 cause 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.

1 (888) 238-1155 Inside USA • 1 (205) 383-2244 Outside USA info@atlasRFIDstore.com • www.atlasRFIDstore.com



