

USER GUIDE

ID ECCO:Optimo

Compact and Robust RFID-/Barcode Scanner



Note

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Contents

1	Safety Instructions	4
2	Scope of Delivery	6
3	Product Description	7
4	Technical Data	9
5	Operation	10
5.1	Charging the Battery	10
5.2	Device Reset	10
5.3	Configuration	10
5.4	Scanning	11
5.4.1	1D Laser	11
6	Transmitting Barcode Data to a Host	12
7	Troubleshooting	14
8	Maintenance and Cleaning	15
9	Disposal	16
10	Approvals	17
10.1	Europe (CE).....	17
11	Warranty	18

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.



- ▶ 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 Scope of Delivery

The scope of delivery includes following components:



1 x ID ECCO:Optimo



1 x USB Charging Cable



1 x ID ECCO:Optimo User Guide

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

3 Product Description

The ID ECCO:Optimo captures and stores barcodes data for a variety of uses and transmits those to a host via USB connection or Bluetooth. The ECCO:Optimo can be integrated into existing systems without additional effort such as driver installation or software changes.

This document provides a basic instruction for using the ID ECCO:Optimo device.

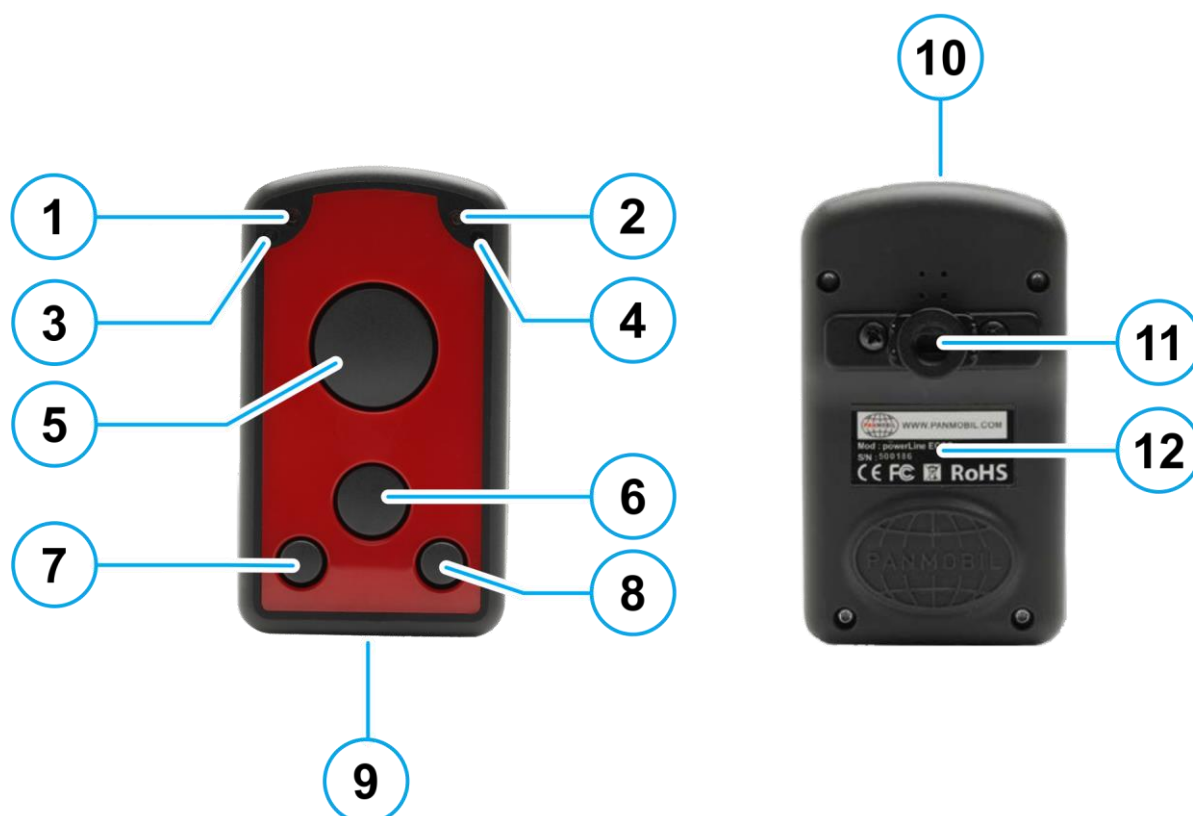


Fig. 1: ID ECCO:Optimo device overview

Label	Description	Function
1	Green LED	Lights up green when ID ECCO:Optimo is turned ON. When the battery level is low, it flashes every 2 sec.
2	Yellow LED	Lights up yellow while barcode reader is on. Is off if a read was successful.
3	Red LED	Lights up red if connected to a battery charger (USB or power adapter). Red = Battery charging Off = Battery fully charged
4	Blue LED	No function
5	Key 1 (trigger button) Power ON and Scan	Batch mode Press for 1 second to power on the device. The device will immediately start the barcode laser to read a barcode. Captured barcodes will be stored in the device memory.
6	Key 2 (delete button)	Batch mode Press for 1 second to power on the device. The device will immediately start the barcode laser to read a barcode. Captured barcodes will be deleted from the device memory.
5+6	Key 1 + Key 2 Batch mode only	Pressing key 1 and key 2 for 4 seconds while in Batch mode deletes all captured data from the data file!

7	Key 3 (custom)	Batch mode Pressing key 3 shortly = no function Pressing key 3 for 4 seconds = save static data
8	Key 4 (custom)	Batch mode Pressing key 4 shortly = no function Pressing key 4 for 4 seconds = save static data
5+6+7+8	Key 1 + Key 2 + Key 3 + Key 4	System reset Press all four buttons for 5 seconds to reset the device. Please note: The device clock will be reset too! The device configuration will not be affected by a system reset.
9	USB protection clip Mini-USB interface	Rubber clip to protect the Mini USB port. Main communication and battery charging interface.
10	Scanning window	Protection glass for the barcode laser. To have the best reading performance, keep the glass clean and free of scratches.
11	Mounting plate	Holder to fix the belt clip (accessories).
12	Int. LiPo battery	Rechargeable LiPo battery 1300 mAh

4 Technical Data

Mechanical Data

Housing	Double-walled Inside: robust ABS Outside: protective rubber coating
Dimension (W x H x D)	87 mm x 48 mm x 26 mm (3.42" x 1.89" x 1.02")
Weight	96 g (3.39 oz)
Protection Class	IP 64
Color	black, red

Electrical Data

Barcode	1D: EAN-8, EAN-13, UPC-A, UPC-E Code 128, Code 39, Code 93, Interleaved 2of5, Codabar
Interfaces	USB Serial
Battery	1300 mAh Lithium Polymer, 3.7 V
Indicators	LED (red, green, yellow, blue) Speaker Vibration feedback
Keyboard	4 keys; each key is configurable
CPU	AVR 8bit, 32 MHz
Memory	16 KB RAM 6 MB Flash
Date / Time	Real-time clock
Supported OS	Win 7 / Win 8 / Win 10 (32 and 64 bit) / Server 2003/2000
Configuration	ECCOdownload Tool

Environmental Conditions

Temperature Range	
• Operation	0 °C up to 55 °C (32 °F up to 122 °F)
• Storage	-20 °C up to 60 °C (-4 °F up to 140 °F)
Humidity	5 % up to 95 % (non-condensing)
Drop	1.6 m drop to concrete

Standard Compliance

RoHS, WEEE, CE, FCC

5 Operation

5.1 Charging the Battery

Before the first operation, the main battery should be fully charged by using the included USB charging cable. As long as the battery is charging the red LED (3) will light solid red. After the battery is fully charged the red LED (3) turns off. A full recharge of the battery takes approx. 4 to 5 hours.

To charge the battery via USB follow the instructions below:

1. Remove the USB protection clip (9) from the device.
2. Connect the device to the USB port of a computer or to the USB power adapter (accessories).
3. As long as the battery is charging, the red LED (3) lights solid red.
4. After the battery is fully charged the red LED (3) turns off.

5.2 Device Reset

To reset the ID ECCO:Optimo press and hold the keys 1, 2, 3 and 4 (see chapter 3 Product Description on page 7.) for 5 seconds.

① NOTE:

***By reset the device loses its timestamp. Before continuing to use it you must synchronize the time settings by connecting the ID ECCO:Optimo with the ECCO Download Software.
Go to Settings -> Device -> Set Device Time.***

5.3 Configuration

For device configuration please download the ECCODownload Tool from www.panmobil.com/downloads. Via the ECCODownload Tool you can configure the "Dataset format" and the "Timestamp format in dataset".

5.4 Scanning

5.4.1 1D Laser

To scan a barcode follow the steps below:

5. Aim the scanner on the barcode.
6. Press the trigger key (5).
7. Ensure that the scanning line is directed straight on the barcode.
8. The ID ECCO:Optimo beeps and the yellow LED (2) goes off to indicate a successful decode.



Fig. 2: Barcode Scanner Alignment

6 Transmitting Barcode Data to a Host

To transmit scanned barcode data, please follow the steps below.

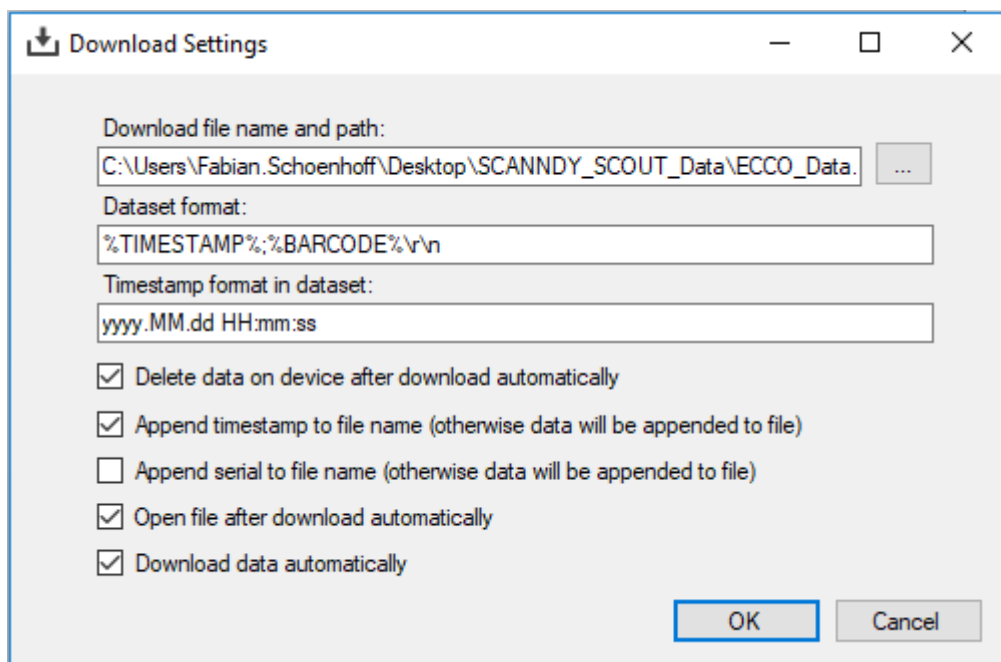
1. Connect your ID ECCO:Optimo to your PC, open the Ecco Download software and click “Connect”.



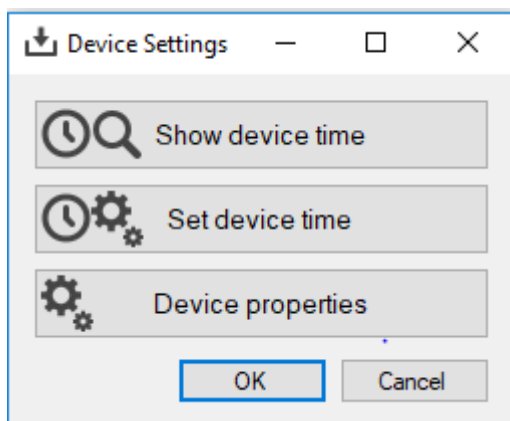
2. Once connected, click “Download” to fetch the scanned barcode data.



In the “Download Settings” you can specify the download path, the dataset and timestamp format as well as some other features.



In the “Device Settings” you can configure the device time and the device properties.



7 Troubleshooting

Problem	Possible Solution
Device does not turn on.	<ul style="list-style-type: none">• Make sure the battery is charged.• Press and hold the keys 1 to 4 for 5 seconds to reset the device.
Laser comes on but device does not decode barcode.	<ul style="list-style-type: none">• Ensure the device is configured to read the type of code being scanned.• Ensure the code is not defaced. Try to read another barcode.• Move the device closer to or further from the code. This depends on your barcode size.
The device is on but does not react on any keystroke.	<ul style="list-style-type: none">• Press and hold the keys 1 to 4 for 5 seconds to reset the device. <p>By reset the device loses its timestamp. Before you continue to use it, you must synchronize the time settings by connecting to a host. Connect the device again with the Master Setup- The time will be automatically synchronized with the system time of your PC. Specific configuration settings and data will not be lost by the reset. Stored data and configuration are not affected by a reset.</p>
Barcode reading ability has degraded.	<ul style="list-style-type: none">• Maybe the scan window has become dirty. Please clean your scan window with a soft cloth with water.
Nothing happens when the scan key is pushed.	<ul style="list-style-type: none">• Make sure your device is powered on (green LED on the left must be on).• Ensure that your keys are correctly configured.

8 Maintenance and Cleaning

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

9 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.

10 Approvals

10.1 Europe (CE)

Hereby FEIG ELECTRONIC GmbH declares that the radio equipment type ID ECCO:Optimo is in compliance with 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/>



11 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. 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.

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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.

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