Release 1.0
947-MA-0020-E

User Manual

wylerACCESS

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Swiss Quality

Table of Content

1. Introduction **2**
- 1.1 Preparing the wylerACCESS 2

2. Product Description **4**
- 2.1 Nameplate 4

3. Safety Information **5**
- 3.1 Declaration of Conformity 5
- 3.2 Intended use 5
- 3.3 Electromagnetic Compatibility (EMC) 5
- 3.4 Lithium-Ion Battery 6
- 3.5 Battery Disposal & Handling 6

4. Handling **7**
- 4.1 Positioning 7
- 4.2 Powering the Device 8
- 4.3 Charging the Battery 8
- 4.4 Device Care 8
- 4.5 Connection Configurations for ZEROTRONIC and ZEROMATIC 2/2 9
- 4.6 Configurations for Data Reading 10
- 4.7 Possible Power Sources 11

5. Device Overview **12**
- 5.1 wylerACCESS 12
- 5.2 Buttons and LEDs 13
- 5.3 Button Functions 14

6. Operation **15**
- 6.1 Switching On and Off 15
- 6.2 Sensors 15
- 6.3 Pairing the wylerTRIGGER 16
- 6.4 PC-Software 17
- 6.5 wylerUNIVERSAL App 17
- 6.6 Firmware-Update 17

7. Appendix **18**
- 7.1 Warranty 18
- 7.2 Repair and Transport 18
- 7.3 Storage 18
- 7.4 WEEE Directive 18
- 7.5 Manufacturer and Distribution Partners 18

1. Introduction

Thank you for choosing the wylerACCESS, a wireless interface designed to connect wired ZEROTRONIC and ZERO-MATIC sensors to PCs and mobile devices.
Please read this manual carefully before using the device for the first time.
Technical specifications can be found in the datasheet available on our website: www.wylerag.com.

Die Bedienung des wylerACCESS ist einfach und benutzerfreundlich.

A product training course is recommended. Our training sessions—offered in-house or through certified partners—cover:

- Proper handling of WYLER devices and software
- Introduction to various measurement methods

Additional background information on inclination measurement technology can be found in our technical compendium "*The Secrets of Inclination Measurement*", also available online.

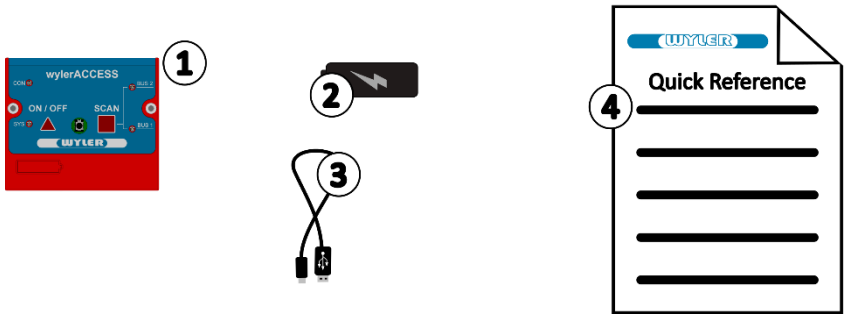
1.1 Preparing the wylerACCESS

1.1.1 Symbols Used in This Manual

NOTICE — Highlights helpful advice for operation.

WARNING — Indicates potential hazards or important precautions to prevent damage or incorrect measurements.

1.1.2 Scope of Delivery



1. wylerACCESS unit
2. Lithium-Ion-battery (1x)
3. USB-A to USB-C cable
4. Quick Reference

NOTICE

Details about the scope of delivery and about additional accessories can be found in the current catalog on our homepage: www.wylerag.com.

NOTICE

The carrying case is not included in the delivery but can be ordered separately.

1.1.3 Additional Documents

The following documents are available on www.wylerag.com:

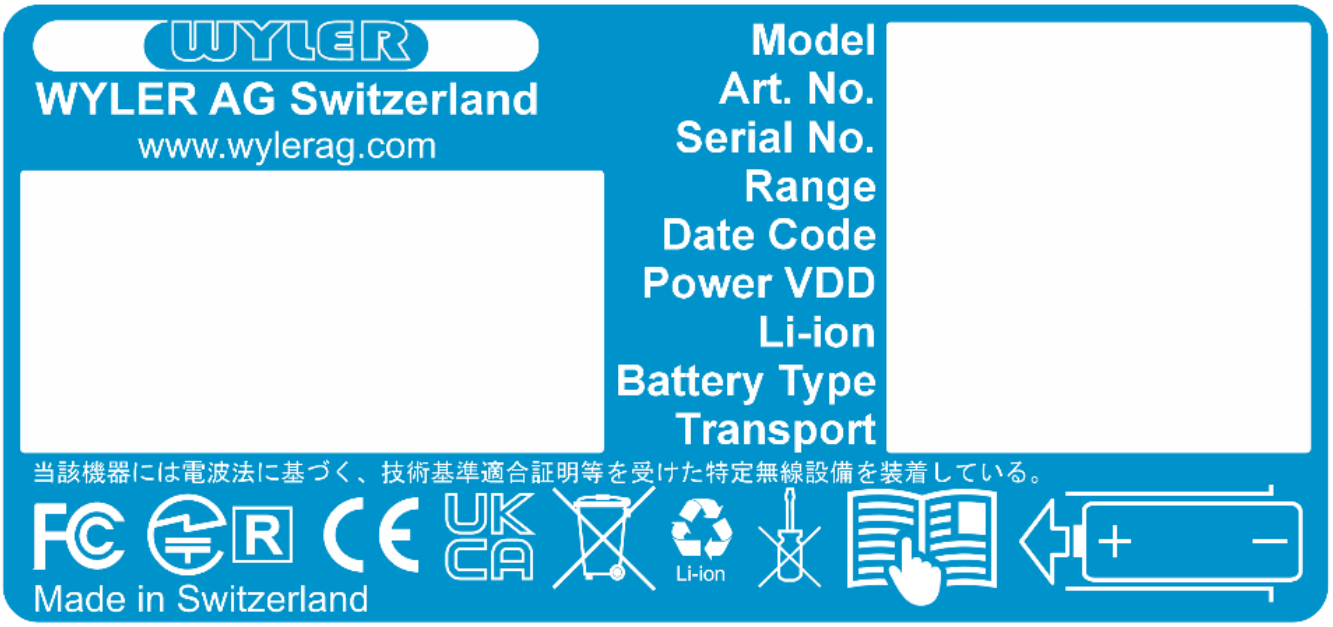
- Quick-start guide
- Latest version of this manual
- Declaration of Conformity
- Technical compendium "*The Secrets of Inclination Measurement*"
- Complete catalog with accessories

2. Product Description

The wylerACCESS is a battery-powered wireless interface that transfers measurement data from wired WYLER sensors (ZEROTRONIC and ZEROMATIC 2/2) to a PC or mobile device.
A smartphone can be connected via the wylerUNIVERSAL App for remote display of live measurement values.

2.1 Nameplate

The nameplate is located on the back of the device and includes the following certification marks:



Symbols indicate:

MIC / Giteki (Japan) – approved by the Ministry of Internal Affairs and Communications

CE (EU) – device conforms to EU safety, health, and environmental standards

Proper disposal required (device must not be disposed of with household waste)

Battery must be removed before disposal

Device must only be opened by WYLER service personnel

Read the User Manual before use.

Insert battery with the positive pole facing forward

3. Safety Information

WARNING ⚠

Die Sicherheit des wylerACCESS liegt in der Verantwortung des Betreibers.

3.1 Declaration of Conformity

CE

The Declaration of Conformity for the wylerACCESS is available on our website: www.wylerag.com.

3.2 Intended use

WARNING ⚠

The wylerACCESS is intended only as an interface for WYLER sensors.
Misuse may reduce the level of protection provided by the device.

Do **not**:

- Immerse the device in water or other liquids
- Expose the unit to strong impacts or forces
- Use non-WYLER accessories

3.3 Electromagnetic Compatibility (EMC)

The device complies with applicable EMC regulations in the EU, USA (FCC Part 15, Class A), and Canada (ICES-003, Class A).

WARNING ⚠

Use the device only in environments without strong electromagnetic interference.

WARNING ⚠

Operation in residential areas may cause radio disturbances; the operator may be required to correct them.

3.4 Lithium-Ion Battery

Use only original WYLER lithium-ion batteries.

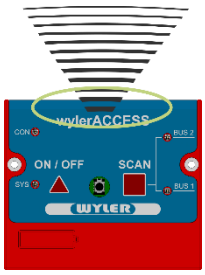
3.5 Battery Disposal & Handling

- Do not fully discharge the battery; ideal range is **20%–80%**
- Charge only with approved WYLER chargers
- Never charge unattended
- Do not charge below **0 °C** or discharge below **–20 °C**
- Keep battery contacts clean
- Ensure the battery compartment cap is tightly closed
- Do not immerse the device in water
- Store long-term at ~50% charge in a cool, dry place
- Remove batteries before disposal
- Never use damaged batteries
- Follow airline regulations when transporting lithium batteries

4. Handling

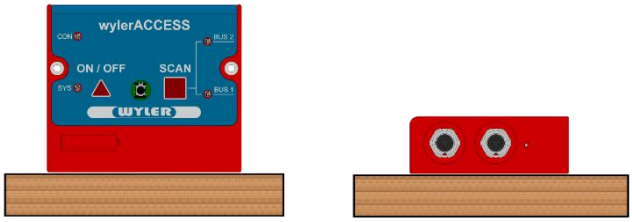
4.1 Positioning

For optimal wireless performance:

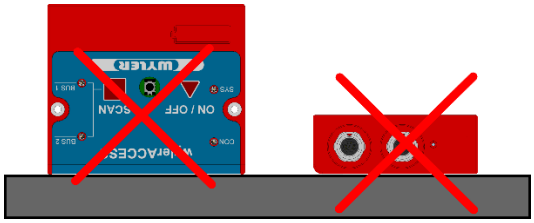


- **Antenna:** The antenna area is located in the indicated area. Keep the antenna area at least 1 cm away from conductive surfaces

- **Orientation**: The best orientation is **upright**. Acceptable orientation: **lying flat**.



- **Metal surfaces**: When placing the device on metallic surfaces, the wylerACCESS must not be positioned upside down or with the front facing downward.



Always observe the handling instructions for the connected sensor.

4.2 Powering the Device

The wylerACCESS can be powered by:

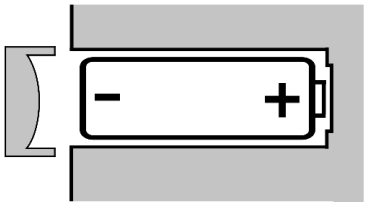
- Internal lithium-ion battery
- USB (5 V)
- External 24 V power supply (RS485 wyBus connector)

NOTICE

Always connect cables when the device is powered off.

Battery insertion:

- Switch off the device.
- Open the battery compartment.
- Remove old battery if present.
- Insert new battery with positive pole (+) forward.
- Close the cover and switch on the device.



4.3 Charging the Battery

- Red blinking SYS LED → battery too low
- Charge via USB-C using the included adapter
- Green blinking SYS LED → battery charging
- Device remains fully operational while charging

Charging via PC USB is possible but not recommended.

4.4 Device Care

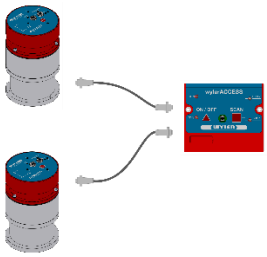
- Clean with a damp, lint-free cloth
- Do not use solvents or chemical cleaners
- Store the device in the carrying case
- Always connect cables with the device powered off

4.5 Connection Configurations for ZEROTRONIC and ZEROMATIC 2/2

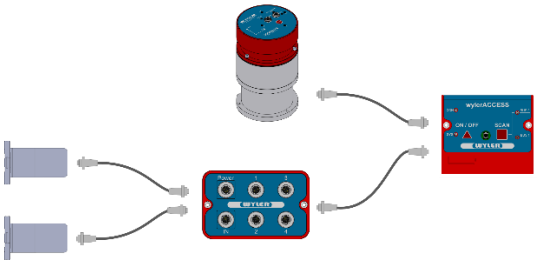
Sensors from the ZEROTRONIC family (ZEROTRONIC 3, ZEROTRONIC C, ZEROTRONIC 4C) and ZEROMATIC 2/2 devices are connected to the wylerACCESS (Bus 1 or Bus 2) using wyBus cables.
Other devices (e.g., BlueLEVEL) are **not supported**.

Important rules:

- **Pure ZEROMATIC operation**: ZEROMATIC 2/2 devices must **not** share a wylerACCESS bus with ZEROTRONIC sensors.
  → a maximum of **two** ZEROMATIC 2/2 devices may be used with one wylerACCESS.



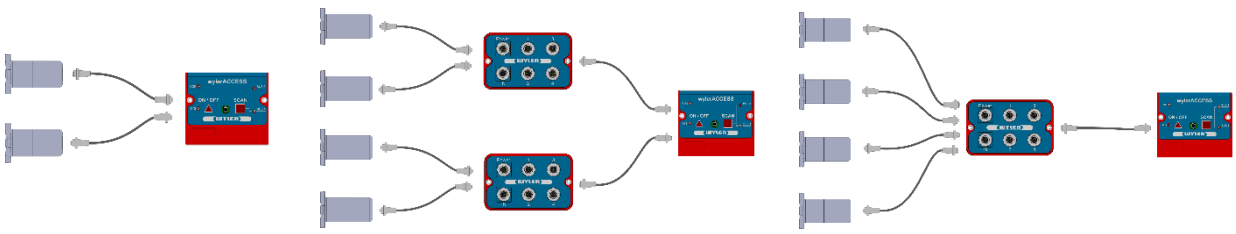
- **Mixed operation (ZEROMATIC 2/2 and ZEROTRONIC)**: Maximum of 2 ZEROTRONIC Sensors may be used.



NOTICE

The ZEROMATIC 2/2 must **not** share the same bus port with any ZEROTRONIC sensor.

- **Pure ZEROTRONIC operation**: A maximum of 4 ZEROTRONIC sensors may be used. They may be connected to Bus 1 and/or Bus 2 and/or an RS485 Hub (949-DB-0073). Any valid configuration is allowed.



NOTICE

To connect ZEROTRONIC sensors or ZEROMATIC 2/2 devices only use universal cables RS485 with a maximal length of 15 meters.

NOTICE

The MultiTC is not supported. In order to connect multiple sensors to a wyBus Port use an RS485 hub.

4.6 Configurations for Data Reading

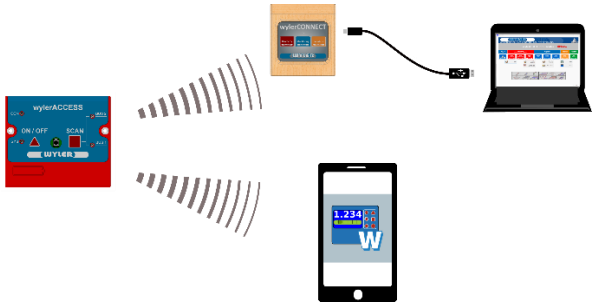
Communication with user software is achieved via Bluetooth. Indoor range is typically sufficient for reliable communication. Measurements can be read and settings managed using WYLER software applications or via wylerSDK3.

Available connections:

- **PC application**

- **Mobile App wylerUNIVERSAL**

- **Simultaneous PC + Mobile App connection is possible**

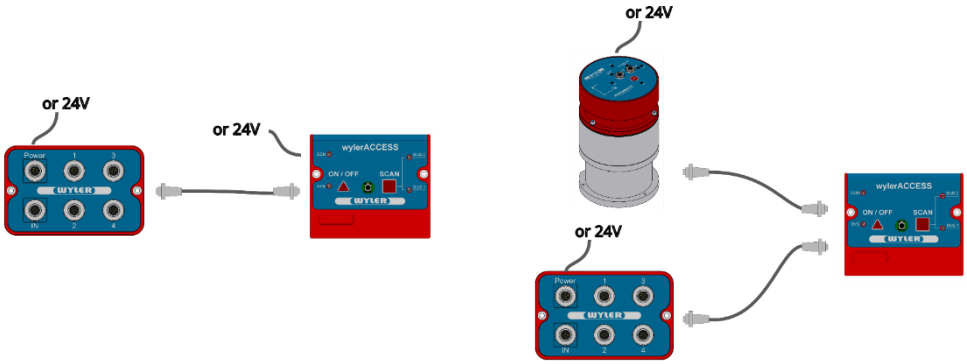


4.7 Possible Power Sources

- If only **ZEROTRONIC** sensors are connected, the following power sources may be used:
  - internal lithium-ion battery
  - USB power supply
  - External 24V source
- If **at least one ZEROMATIC 2/2** is used, an **external 24 V source is mandatory**.

Important restrictions:

- The power-carrying lines between the bus connectors are electrically linked.
  → Therefore, **only one external 24 V source may be connected** in the entire system.



- It makes no difference whether the 24 V supply is connected to the wylerACCESS, the RS485 hub, or the ZEROMATIC 2/2.

Additional note:

- If a 24 V external supply is used, a battery may still be inserted and a USB cable connected.

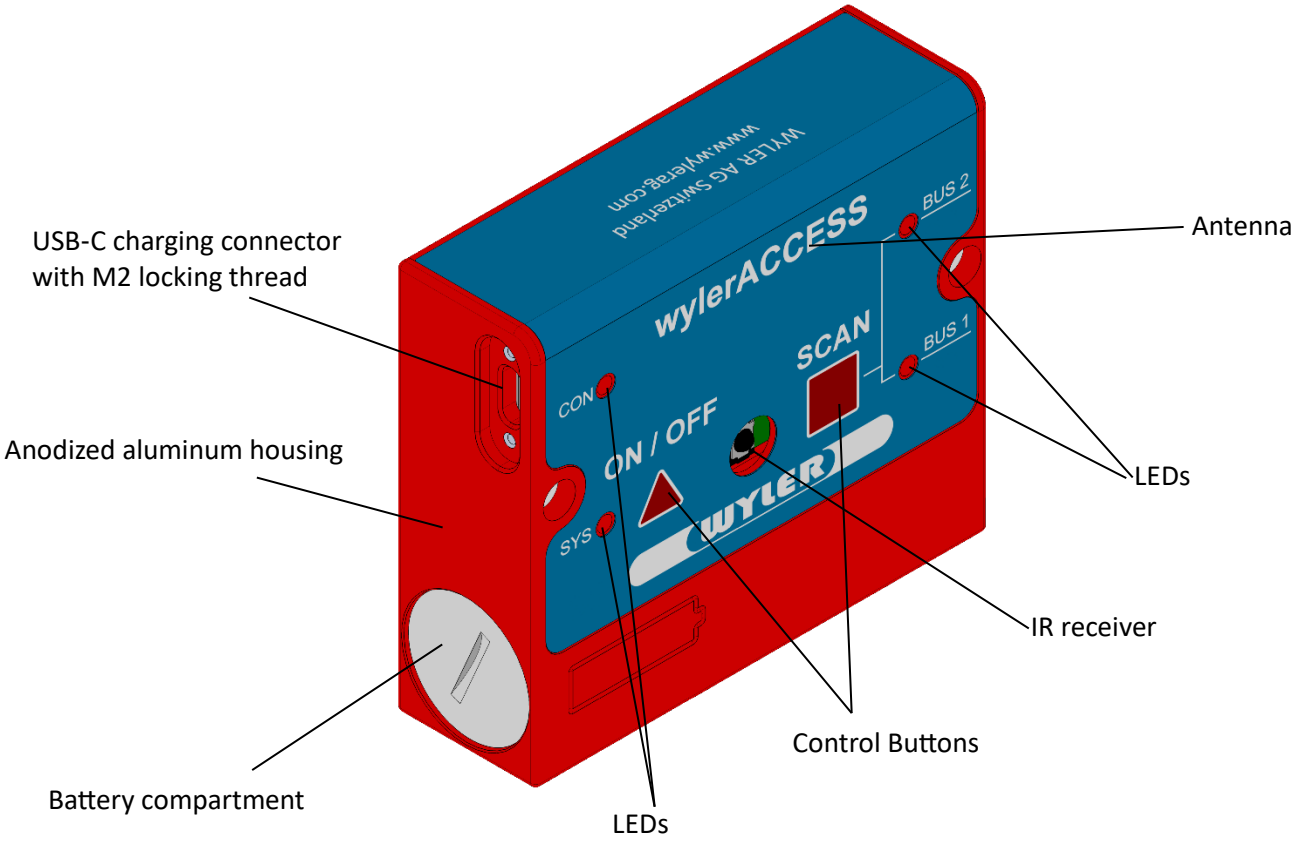
WARNING ⚠

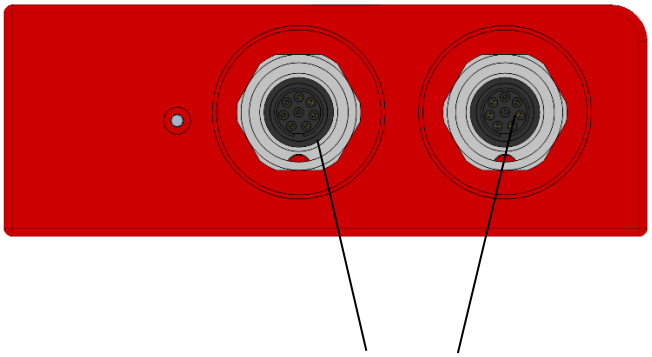
Use only one external 24 V source in the entire system.

Find more information about available accessories on the homepage: www.wylerag.com.

5. Device Overview

5.1 wylerACCESS





5.2 Buttons and LEDs

The following operating elements of the wylerACCESS are explained below:

	Description
1	**CON (Connections)-LED:** indicates the connection to the PC • **Green (solid)**: The device is connected to a PC and WYLER software via USB cable. • **Blue (solid)**: The device is connected to a PC and WYLER software via Bluetooth using wylerCONNECT.
2	**SYS (System)-LED:** indicates the system status • **Green (solid)**: Device is properly powered (battery or external power source). • **Green (blinking)**: The battery is charging. • **Red (blinking)**: Battery is low. Replace or recharge. • **Purple (blinking)**: The wylerACCESS is in wylerTRIGGER learning mode. The next signal from a wylerTRIGGER will be assigned.
3	**ON/OFF Button** • Use to power the device on or off.
4	**SCAN Button** • Starts a scan for connected sensors.
5	**Bus 1 & Bus 2 LEDs:** RS485 wyBus status indicators • **Green (solid)**: wylerACCESS bus is functioning correctly and sampling is active. • **Yellow (solid)**: At least one stored sensor is not connected. • **Red (solid)**: The device is overloaded or a short circuit occurred (affects both Bus 1 & Bus 2). Check wiring and system setup.

5.3 Button Functions

	**ON/OFF Button**
Switch on	Hold the ▲ - button until all LEDs light up. Release the button once only the SYS LED remains lit.
Switch off	Hold the ▲ - button until all LEDs turn off.

	**SCAN Button**
Scan	Press the ■ - button to initiate the wylerACCESS to search for connected devices.
Pairing wylerTRIGGER	Hold the ■ -button between 2 to 5 seconds to put the device into wylerTRIGGER learning mode.

NOTICE

The wylerACCESS can be configured in various ways through software – therefore the status display on your device may differ. The behavior described above refers to factory default settings (after a factory reset).

6. Operation

The wylerACCESS offers a wide range of functions and configuration options to ensure optimal use in various measurement scenarios.

6.1 Switching On and Off

To switch on:

Hold the ▲ - button until all LEDs light up.

Release the button once only the SYS LED remains lit.

To switch off:

- Hold the ▲ - button until all LEDs turn off.

Additional behavior:

- The wylerACCESS turns on automatically when connected to an external power source (USB or 24 V).
- If a charged battery is installed, the device remains powered on when cables are disconnected.
- If no battery is installed, the device turns off when cables are removed.

6.2 Sensors

Connecting and Power Supply
Use only Wyler RS485 universal cables to connect ZEROTRONIC or ZEROMATIC 2/2 sensors.

- Cable length: up to 15 m
- Suitable for ZEROTRONIC 3, ZEROTRONIC C
- Suitable for 24 V sensors (e.g., ZEROMATIC)

Refer to section 4.5 for valid configurations and section 4.7 for allowed power sources.

Pairing with wylerACCESS
Before sensors can be detected, their **bus addresses** must be correctly set in the software.

- Valid address range: **1–253**
- Each address may only appear **once per bus**

Behavior during startup:

- If no sensors are stored, the device automatically performs a scan on both buses using the predefined scan range.
- A larger scan range increases scan duration.
- Detected sensors are stored and reused on the next startup.
- No automatic scan occurs if sensors are already stored.

To scan for newly connected sensors during operation:

- Press the SCAN button.
- Bus LEDs blink yellow during scanning.
- A successful scan results in the corresponding bus LED turning solid green.

6.3 Pairing the wylerTRIGGER

The wylerTRIGGER can trigger measurements simultaneously on all connected sensors.

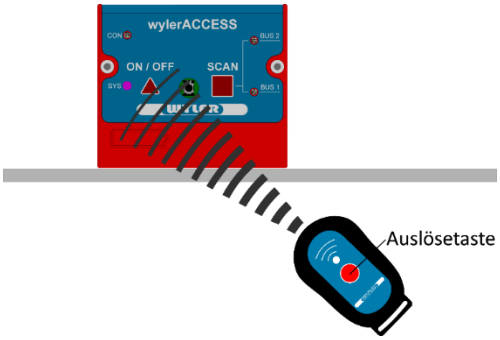
- To pair wylerTRIGGER with wylerACCESS:

  1. Ensure the wylerACCESS is switched on.

  2. Point the wylerTRIGGER toward the front of the wylerACCESS. Press and hold the **SCAN / trigger-learn** button for 2–5 seconds, then release.
     → SYS LED begins blinking purple.

  3. Point the wylerTRIGGER at the device and briefly press the trigger button.
     The wylerTRIGGER's LED must be green (replace button cell if not).

  4. All LEDs on the wylerACCESS flash red.
     → The wylerTRIGGER is now paired.



To test: press the wylerTRIGGER button again – all four LEDs must flash.

- To delete a paired wylerTRIGGER:

  1. Press and hold the button on the wylerACCESS for 2–5 seconds and release.
     → SYS LED blinks purple.

  2. Do **not** press the wylerTRIGGER for **20 seconds**.
     → The stored wylerTRIGGER is removed.

Additional notes:

- A wylerTRIGGER can be paired with **multiple devices** simultaneously.
- When a new wylerTRIGGER is paired, the previously stored one is removed.
- Pairing persists even after powering off or resetting the device.

6.4 PC-Software

Several PC applications are available to evaluate and process measurement data.

- The free software wylerSOFT 3 enables firmware updates and license management.
- Additional WYLER software packages provide advanced functions for geometry measurement and monitoring.

More information is available at: www.wylerag.com.

6.5 wylerUNIVERSAL App

The wylerACCESS can be connected to the **wylerUNIVERSAL** mobile app (for remote display of measurement values).

- Available free of charge on the **Google Play Store** (Android).
- Supports:
  - Mobile measurements
  - Differential measurements (with multiple devices)
  - Export to CSV

A simultaneous connection between wylerACCESS → Mobile App and wylerACCESS → PC is possible.

6.6 Firmware-Update

To perform a firmware update:

1. Connect the wylerACCESS to a PC using a USB cable.

2. Start wylerEXPLORER 3 via wylerSOFT 3.
   If a new firmware version is available, the software will notify you and offer the update.

NOTICE

Do not turn off the device or disconnect the cable during the update!

7. Appendix

7.1 Warranty

Information regarding warranty duration and coverage is available at: www.wylerag.com.

7.2 Repair and Transport

Devices can generally be repaired; however, a successful repair cannot always be guaranteed.
If you want to have your device repaired, please contact WYLER AG or one of our distribution partners.
Shipping instructions:

- Always ship the device in its original case, placed inside an additional cardboard box.
- Follow the relevant transport company regulations.

7.3 Storage

For long-term storage:

- Place the wylerACCESS in its carrying case.
- Store it in a dry environment and within the temperature range specified in the datasheet.

7.4 WEEE Directive

Devices must be disposed of in accordance with the WEEE Directive. Guidelines are provided in the quick start guide on our website.

7.5 Manufacturer and Distribution Partners

For inquiries in Switzerland:

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www.wylerag.com

For international inquiries, please refer to the local distribution partners listed on our website.

Änderungen

Revision	Beschreibung	Name	Datum
1.0	Released	M. Stalder	16.02.2026

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