

wylerCONNECT



The Interface

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1. wylerCONNECT User Manual

1.1 Introduction


Before you begin

Read through this user manual carefully before using the wylerCONNECT for the first time.

Please also note the safety instructions.

1.2 Note, Attention!, Warning!

For ease of reading, the following references are used in this manual:

- "Note♥:" Is used to highlight useful tips.
 - "Attention!:" Is used to help you avoid improper use or disadvantages.
 -  Is used to indicate conditions that are mentioned as required by law.
-

1.3 Name and address of manufacturer

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National representatives:

<https://www.wylerag.com/en/contact/representatives/>

1.4 Product trademark and type designation

Product trademark

wylerCONNECT

Classification: wylerCONNECT

*Product number 029-0001-001



**Subject to change*

1.5 Other applicable documents

You will find the **CE Conformity Declaration** and **this user manual** on our homepage at: www.wylerag.com

They can be found on the wylerCONNECT product page,
under „Download”

2. Product description, technical information

wylerCONNECT in brief, series and optional accessories

wylerCONNECT in brief

- The wylerCONNECT housing consists of plastic with a beechwood outer shell.
- The front is equipped with a screen.
- The left side features an RS485 connection and a USB-C port.
- The USB-C port will be connected to the USB-A port at the PC.
- The right side features an RGB diode.
- For triggering data recording remotely, there is an infrared (IR) receiver on the right side.
- As standard for the series, the wylerCONNECT is equipped with Bluetooth® LowEnergy/Legacy.
- Cabled sensors can be connected via the RS485 connection.
- A license management is available for the wylerSOFT licenses.



Dimensions, weight, protection rating, storage

- Dimensions L x W x H: 65 x 70 x 40 mm
- Weight: 140 g
- Protection rating: IP6x
- Storage: In case -20° to +60° C
- Operation: 0° to 40 ° C

Series-based accessories

- Cable USB-A/USB-C
- Infrared (IR) wylerTRIGGER
- Plastic case
- Quick reference guide
- This manual can be found at: www.wylerag.com

Optional accessories

Mechanical

- Protective cover screwed to RS485 port to prevent plugging.

Software (licenses management)

- Interface software as wylerINSERT
- Geometry software as wylerSPEC
- Monitoring software as wylerDYNAM
- Remote display software as wylerPLOT

3. Safety note

- The wylerCONNECT meets the applicable guidelines and norms.
 - See also:
 - the current wylerCONNECT CE Conformity Declaration at:
https://www.wylerag.com/fileadmin/pdf/cerificates_DoC/DoC_wylerCONNECT_R1.pdf
 - this user manual and quick reference guide.
 - the tool identification plate on the back of the device.
-

3.1 Appropriate use

- The wylerCONNECT is to be used solely for the reception of sensor or measuring device data.

The measurement can

- be received wirelessly via the BlueLEVEL, wylerLEVEL, BlueCLINO, wylerCLINO and Clinotronic S product lines.
- be received via RS485 cable (only for devices connected by sensors and cables).

Attention!: There are **no** other intended uses.

3.2 Inappropriate use

- Do not use under water, as the wylerCONNECT is not sufficiently watertight and the internal components can short circuit.
 - Not to be used as a hammer or in a weight-bearing capacity at any time. This will damage the housing.
 - Do not throw the wylerCONNECT. The housing can cause severe injury/damage upon impact with people and objects.
-

3.3 Electromagnetic environment

Note ♥: Assess the electromagnetic environment before using the device



Do not use the wylerCONNECT near sources of strong electromagnetic radiation (for example unshielded, intentionally operated high-frequency sources), as these can interfere with the proper operation of the device.

3.4 Additional information for FCC (USA) and IC (Canada)

FCC part 15 and ICES-0003

Class A Device

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”.

This Class A digital apparatus complies with Canadian ICES-0003.

Note: 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.

4. Preparing product for use

4.1 Case contents

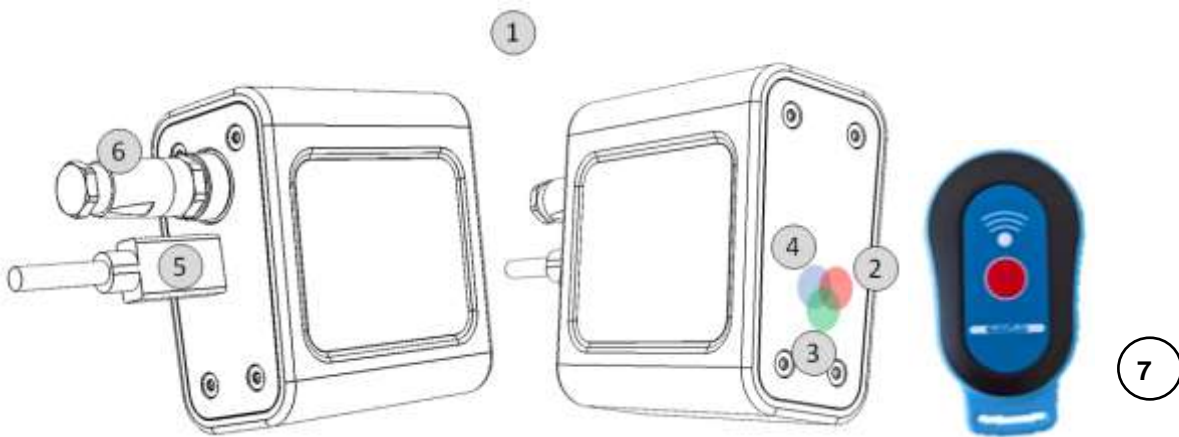


Product number 029-0001-002

- 1 Case
- 2 wylerCONNECT
- 3 USB-A/USB-C cable
- 4 wylerTRIGGER (infrared)
- 5 Quick reference guide

→This manual at www.wylerag.com

4.2 Overview of connecting elements, wylerTRIGGER (IR) and LEDs



- 1 Housing
- 2,3,4 RGB LEDs
- 5 USB-C connection for data transfer and FW updates via laptop
- 6 RS485 connection (Binder)
- 7 wylerTRIGGER

4.3 Connect wylerCONNECT to laptop



- Connect the wylerCONNECT to a laptop, using the USB cable.
- The cable connection provides the wylerCONNECT with a 5V power supply.

 **WARNING**



- A current limiter prevents too much current from being drawn from the laptop.

 **WARNING**



- Do not use a USB power source greater than 15W!

- The LED on the right-side glows green to indicate that the wylerCONNECT is ready for use.



5. Operation

5.1 Connection via Bluetooth (RFCOMM & Low Energy)

5.1.1 BlueLEVEL, wylerLEVEL, BlueCLINO, wylerCLINO product line, Clinotronic S

Note♥: The connecting of devices is always initiated via software.

The following software packages are available:

- wylerEXPLORER
- wylerINSERT
- wylerPLOT
- wylerDYNAM / wylerCHART
- wylerSPEC / wylerPROFESSIONAL / wylerELEMENTS

Connection via Bluetooth (RFCOMM)

Up to 7 measuring devices from the BlueSYSTEM product line



Connection via Bluetooth (Low energy)

Up to 7 Clinotronic S measuring devices



ATTENTION!: The number of connections depends on the possible interference fields.
(e.g. high-power machine tools)

ATTENTION!: If there are problems reconnecting, turn the relevant measuring devices off and back on again, and restart the software.

5.1.2 Incompatibilities

Attention!: The following devices are not compatible via Bluetooth:

- LEVELMETER 2000
- BlueMETER,
- BlueMETER SIGMA,
- BlueTC
- BlueLEVEL with former Bluetooth module version B2.3 and below



5.2 Connecting via RS485 cable:

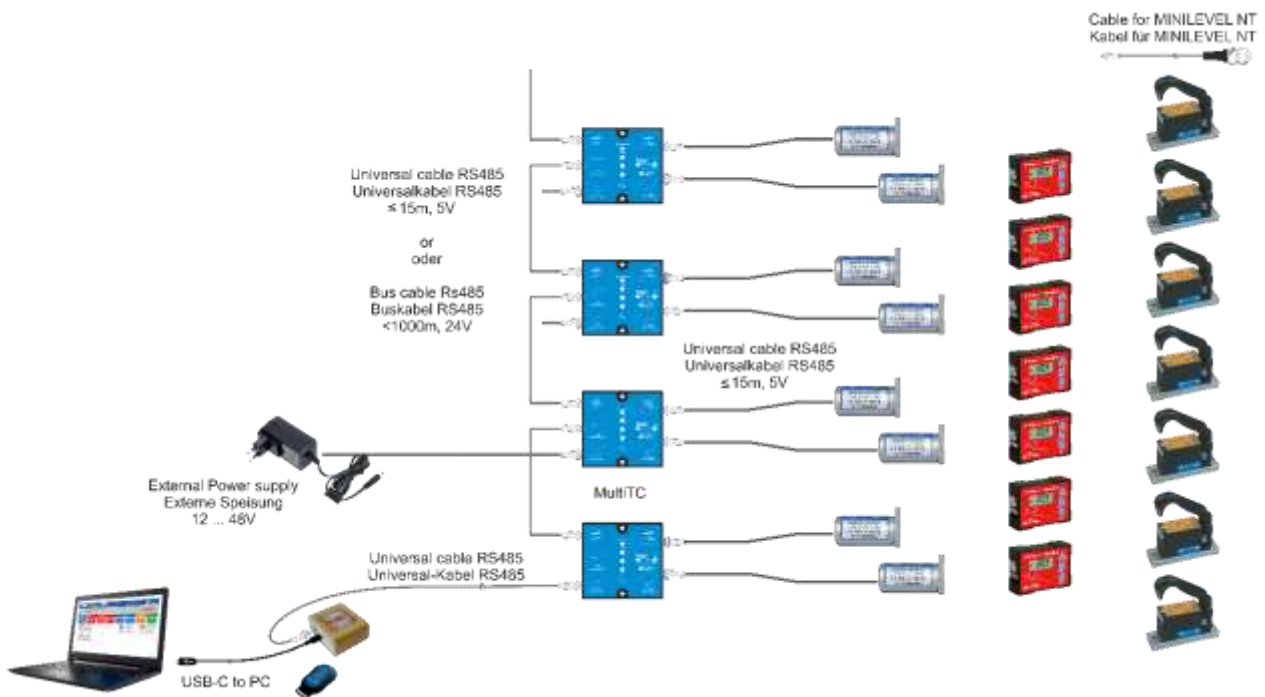
5.2.1 ZEROTRONIC sensors, Clinotronic PLUS, MINILEVEL NT via MultiTC, 5V/24V power supply

ZEROTRONIC 3 and ZEROTRONIC C: always via MultiTC (57600 Bd)

When using **more than 2** ZEROTRONIC sensors or measuring instruments or operating at a distance **exceeding 15m**: always work **with** an external power supply.

Note♥: With less load, the 5V supply from the RS485 output is sufficient.

ATTENTION!: Do not intermix with devices from the BlueSYSTEM product line.
ATTENTION!: The sampling rate diminishes as the number of devices increases.

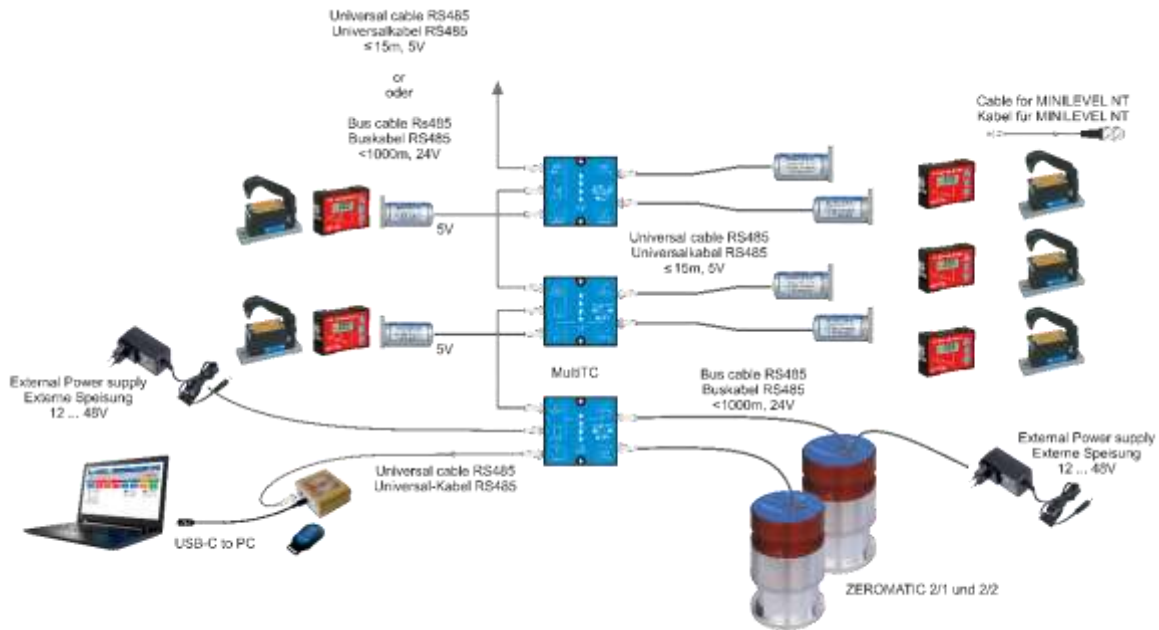


ATTENTION!: If there is an overload, the LED on the wylerCONNECT blinks red.
There will be no data transmission!
Remedy: Use an external power supply or reduce the number of sensors.

5.2.2 ZEROMATIC via MultiTC, 24V power supply, ZEROTRONIC, Clinotronic PLUS, MINILEVEL NT

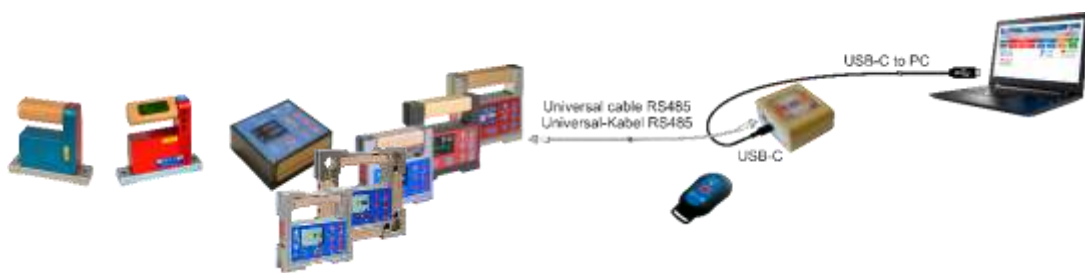
ZEROMATIC sensors always via MultiTC and with 24V power supply

ATTENTION!: Do not intermix with BlueSYSTEM product line.
ATTENTION!: The sampling rate diminishes as the number of devices increases.

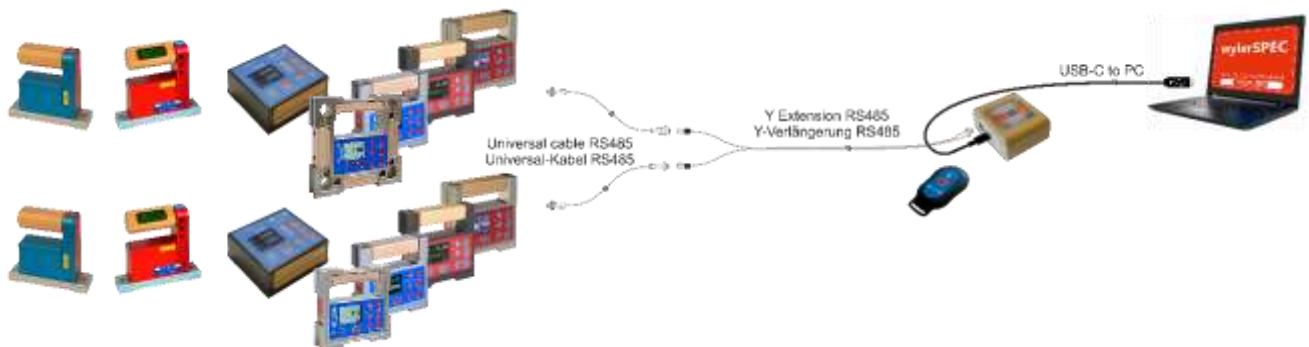


5.2.3 BlueSYSTEM product line, 5V power supply

BlueSYSTEM product line: 1 device connected directly via cable



BlueSYSTEM product line: 2 devices connected directly via cable



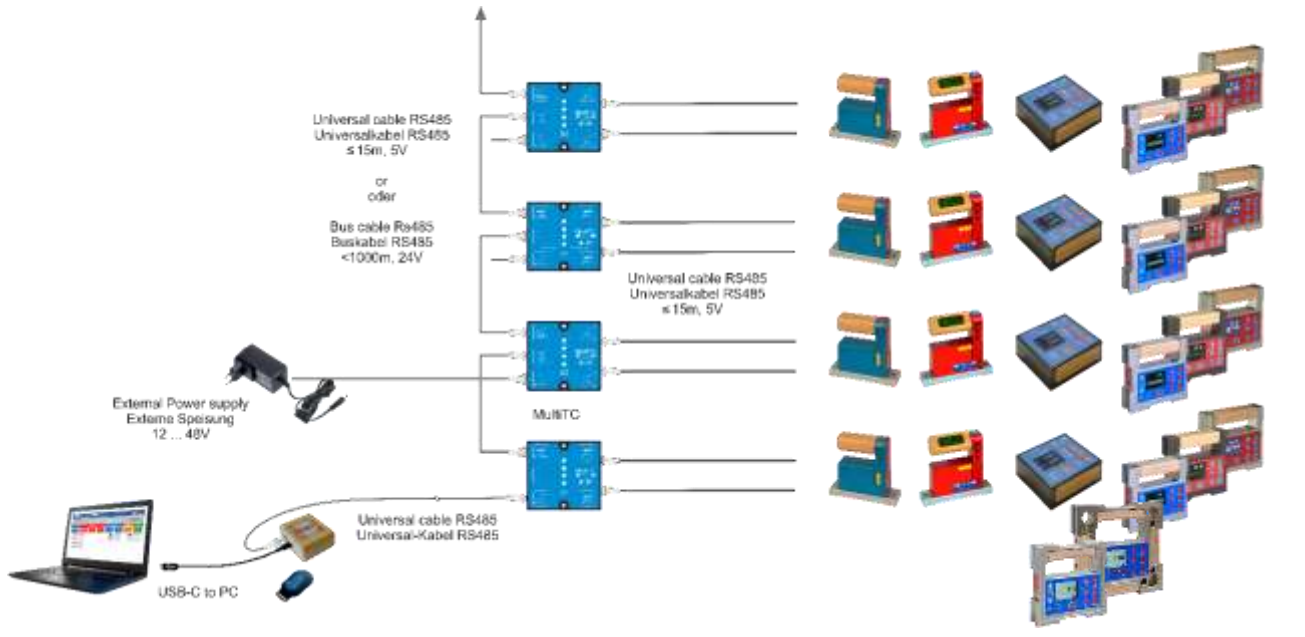
5.2.4 BlueSYSTEM product line 3 or more devices via MultiTC, 24V power supply

BlueSYSTEM product line: 3 devices or more

- Always via MultiTC with external power supply

ATTENTION!: Do not intermix with ZEROTRONIC, ZEROMATIC, Clinotronic PLUS, MINILEVEL NT and CLINO 2000 devices.

ATTENTION!: The sampling rate diminishes as the number of devices increases.



5.2.5 BlueMETER SIGMA, BlueTC, 5V power supply

ZEROTRONIC product line:

1 BlueMETER SIGMA via cable

- Up to 4 ZEROTRONIC sensors

ATTENTION!: Note: Baud rate maximum: 9600 Bd



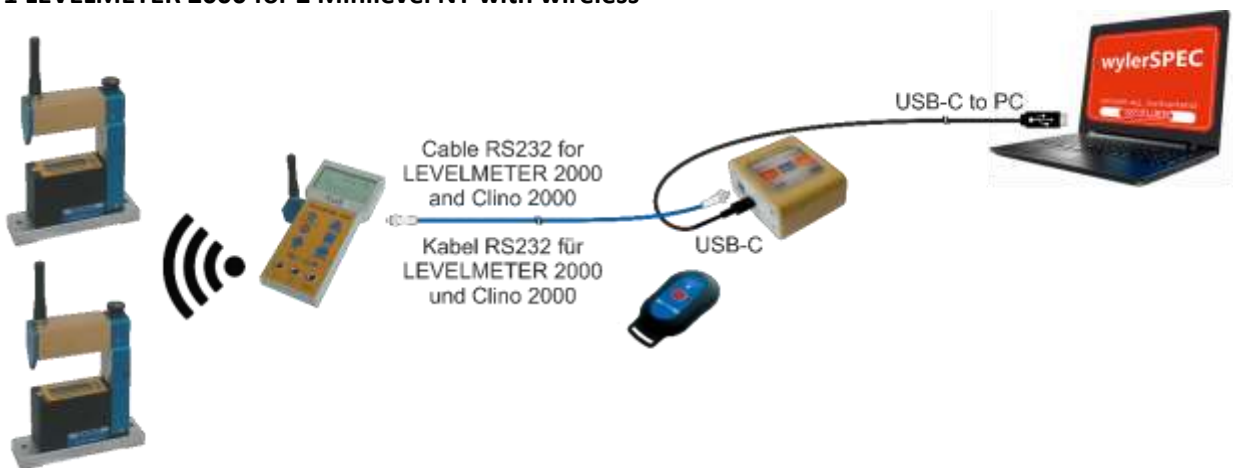
5.2.6 MINILEVEL NT, MINILEVEL NT wireless with LEVELMETER2000, CLINO 2000

2 MINILEVEL NT, cable connected, without LEVELMETER 2000

Note ☒: Also functions with only one device connected



1 LEVELMETER 2000 for 2 Minilevel NT with wireless



1 CLINO 2000

ATTENTION!: Only **ONE** device can be connected.



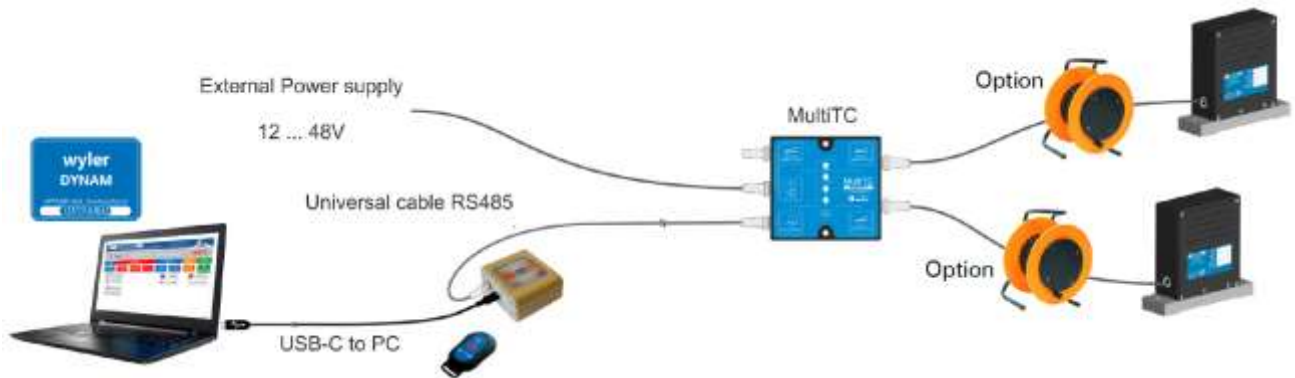
5.2.7 Using Seatronic (wylerDYNAM)

wylerDYNAM software:

- Seatronic application

ATTENTION! Always use the 24V external power supply.

Note ♥: In this configuration, the maximum baud rate of 57600 is achieved.



5.2.8 Incompatibilities

ATTENTION! The following devices are not compatible:

Transceiver/Converter (TC, silver)



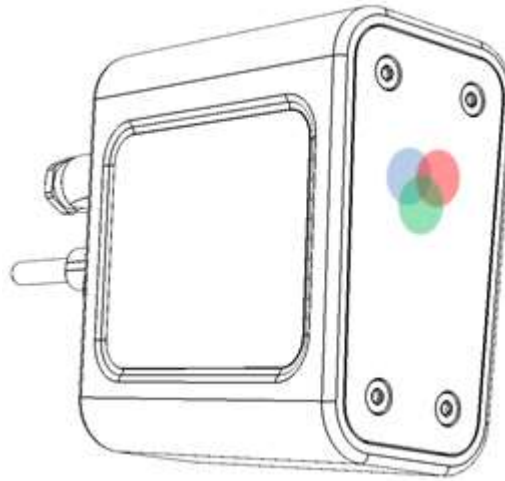
miniTC

5.2.9 Cable list from wylerCONNECT with product number

Cable	Length in m	Product number	Voltage	Male/Female
Y-extension RS485	0.4	029-004-878-Y	5/24V	m/2f
Universal cable RS485	2.5	029-025-878-001	5/24V	m/m
"	5	029-050-878-001	5/24V	m/m
"	10	029-100-878-001	5/24V	m/m
Universal angled cable	2.5	029-025-878W003	5/24V	m/m
"	5	029-050-878W003	5/24V	m/m
"	10	029-100-878W003	5/24V	m/m
Cable RS232 for LM2000/Clino2000	2.5	029-025-858-001	Data only	m/m


5.3 LED notifications

List of LED notifications



Function, purpose	Trigger	Solid	Blinking 0.5Hz	Rapid blinking 1Hz	Final state
Use device	Connection to laptop	green			solid green
Device searches via cable	via software			green	rapid blinking green
Device searches wirelessly	via software			blue	rapid blinking blue
Device searches via cable and wireless	via software			blue+green	rapid blinking blue+green
Device is connected via cable	via software		green		rapid blinking
Device is connected wirelessly	via software		blue		blinking
Device is connected via cable and wirelessly	via software		blue+green		blinking blue+green
Trigger recognized	Recognizing the trigger			red	1 ping
Overcurrent signal	Too many users		red		blinking red
Fault		red			solid red

5.4 wylerTRIGGER teach-in, using

- Take the wylerTRIGGER , aim it toward the wylerCONNECT and press the initiation button on the wylerTRIGGER for at least 5 seconds. The connection is confirmed if the red LED lights once.
- From now on, every initiation of the wylerTRIGGER will be confirmed on the wylerCONNECT by the LED lighting once.
- wylerTRIGGERs can be taught to recognize multiple devices concurrently.
- With each recognizing procedure, the most recently used wylerTRIGGER is deleted.

5.5 SW licenses ex works, obtaining additional licenses

Visit the wylerSOFT Info-Center at: <https://www.wylerag.com/en/products/software-wylersoft/>
Then select wylerLICENSE in the SDK Tools section



Select "Request Quote for Product License" to order new software.



Follow the instructions given by the wylerLICENSE program.

5.6 FW update

Connect the wylerCONNECT to the computer using a USB-C/USB-A cable.

Start the wylerEXPLORER and follow the on-screen instructions.

6. Specifications, tool identification plate

Technical Specifications	
Maximum BT range	15-20 m
Digital input	1 x RS485
Digital interface	1 x USB-C (Standard 2.0)
Power supply - External power supply	5 V (USB-C)
Maximum power consumption during data capturing via Bluetooth®	1500 mA, 5 V
Maximum allowable power source output	≤ 15 W
Dimensions (L x W x H)	65 x 70 x 40 mm
Device weight / incl. accessories and case	140 g / 300 g
Protection class	IP6x
Storage temperature	In the case at -20° to +60°C
Operating/ambient temperature	0° to 40 °C

Tool identification plate



When decommissioning the wylerCONNECT, comply with local regulations regarding the disposal of electronic waste.



Only the WYLER AG Switzerland service center is authorized to open the device.



Read the User Manual before initial use.

7. Maintenance

7.1 For safe operation

Store the device in the case, safe from moisture
Safe storage temperature range: -20°C to 60°C

7.2 Cleaning

- The device can be cleaned with off-the-shelf cleaners and with alcohol-based disinfectant.
-

7.3 Troubleshooting

If you have any questions, please contact:

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Fax +41 52 233 53 20 wyler@wylerag.com

You can find the national representatives at:

<https://www.wylerag.com/en/contact/representatives/>

7.4 Repacking prior to transport

Ship the device in its case in additional card packaging.
Be sure to follow the provisions set forth by the shipping company you are using.

7.5 Customer service address

If you are located in Switzerland and have questions:

WYLER AG

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www.wylerag.com

wyler@wylerag.com

If you are outside of Switzerland and have questions:

National representatives:

<https://www.wylerag.com/en/contact/representatives/>

8. Disposal

Decommissioning, disposal



- When decommissioning the wylerCONNECT, comply with local regulations regarding the disposal of electronic waste.
-

9. Document version and updates

13.01.2020	R1.1.1.1 EN	Author: A. Schuhmacher User Manual with product launch January 2020
02.02.2020	R1.1.2.1 EN	Author: A. Schuhmacher Correction of phone number in Chapter 7.5
20.02.2023	R1.1.3.1 EN	Author: G. Lasczyk General corrections and adaptations