Manual

Electronic Inclinometer

Clinotronic S

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Table of content

1. Manual Clinotronic S

Introduction

Before you start

Read this manual carefully before using the Clinotronic S for the first time.

Please also note the safety instructions.

Note♥: Mishandling or unintentional deletion of calibration data
are prevented by Note♥

Note♥, Attention !, Warning!

To make your reading easier, the following references are used in this manual:

- "Note♥:" This highlights useful tips.
- "Achtung !:" This is to avoid mishandling or disadvantages
- 

This indicates notes that are required by law.

Manufacturer name and address

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Representatives: **www.wylerag.com**

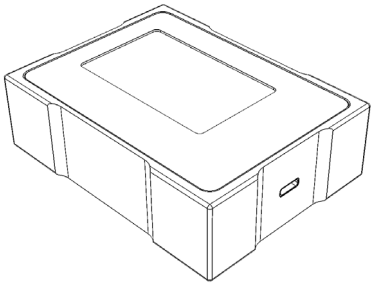
Product brand and type designation

Product brand

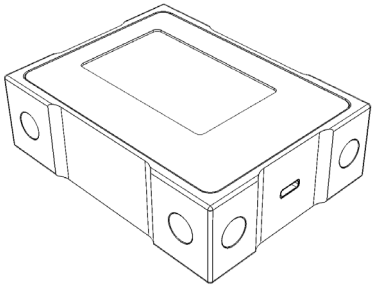
Clinotronic S

type designation:

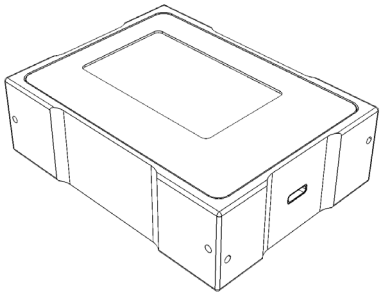
*Art. No. 015-S-XG45 without inserts



*Art. No. 015-S-HG45 with two magnets on each side



*Art. No. 015-S-PG45 with two M3 threads on all sides



*Subject to change

Applicable documents

The **CE Declaration of Conformity** can be found on our homepage at: www.wylerag.com at the product page Clinotronic S "Download".

2. Product description, technical data

Measuring device, accessories

The measuring device

- The housing of the Clinotronic S is made of black anodized aluminum.
- The four measuring bases are located in each of the quadrants (frame).
- The front and back are equipped with a plastic film.
  Screen area: The film is equipped with barely visible distance points against streaking when touched.
- The front consists of the color screen and the operating membrane keyboard
- On the right side is the USB-C port
- As standard, the device is equipped with Bluetooth® BLE and the wylerCONNECT MINI
- An infrared (IR) trigger for data acquisition is also included
- The power supply consists of a replaceable, rechargeable 3.6V lithium-ion battery
  The access is on the left.
- The device can be charged via the USB-C port and the included charging power supply (5V) or on laptop.

Dimension, weight, type of protection, storage

Measuring range:	± 45°
Resolution :	5 arcsec or 0.02mm/m
Dimension L x H x T:	100 x 75 x 30 mm
Weight:	400 g
Protection class:	IP64
Storage conditions:	-20° bis +60° C
Operating conditions:	0° to 40 ° C

Standard accessories

- wylerCONNECTMINI (Bluetooth® BLE)
- USB power adapter and cable USB-A/USB-C
- Infrared(IR) trigger
- Li-ion battery
- Plastic carrying case
- Manual
- Android App in Google Store, iOS App in Apple Store

Optional accessories *www.wylerag.com*

Mechanically

- Magnets below, above, left, and right. Art. No. 015-S-HG45
- Threads M3 bottom, top, left, and right Art. No. 015-S-PG45

Software

- Interface software
- Geometry measuring software
- Monitoring software
- Software tools

Calibration

- wylerMASTER

Remote display

- Android smartphone with installed App

Power

- Extra Li-ion batteries
- External charger for max two Li-ion batteries

3. Safety instructions

- The device complies with the applicable directives and standards

  Consult:
  - The current CE Declaration of Conformity Clinotronic S
  - This instruction manual and the quick reference
  - The type label on the back of the device

Intended use

- The Clinotronic is designed exclusively for measuring inclination angles.

  For this purpose, the device is placed on a flat, stable surface or held by hand

  The measured value can

  - be read directly on the screen
  - be read by Bluetooth® and app on smartphones as Android® or iOS®
  - be sent via Bluetooth® and wylerCONNECT MINI to a Windows computer

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

Not intended use!

- The device must not be used as a base, e.g. be used in a vise. The precision housing can be deformed and will be unusable.
- It must not be used under water, as the tightness class is insufficient and the device may suffer a short circuit inside.
- It must not be used in any way as a hammer as this damages the measuring surfaces, and the device is therefore no longer able to measure.
- The device must not be thrown. The aluminum housing can cause serious injuries and damage

Electromagnetic environment

Note♥: The electromagnetic environment should be assessed before operating this equipment

WARNING

Do not use this device near sources of strong electromagnetic radiation (such as unshielded, intentionally operated high-frequency sources), as these may interfere with proper operation.

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

FCC part 15 and ICES-0003

Device Class A

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

Safety instructions lithium-ion batteries

The lithium-ion batteries 3.6V are rechargeable
Type of battery: **18650**

Only the original type 18650 lithium-ion batteries may be used

Lithium-ion batteries are only allowed to be charged with the supplied chargers.
Lithium-ion batteries are only allowed to be charged under supervision.

Close the lithium-ion battery cover carefully, but not with heavy force!
A rubber gasket is installed to provide a seal.

Note the current airline regulations regarding the
transport of lithium-ion batteries in any baggage!

Do not immerse the device in water!
The lithium-ion batteries are protected against overcharging and short circuiting.
Underwater, the short-circuit protection is not ensured!

Frequency of calibration

- The calibration schedule must be determined by the customer.
- Our non-binding recommendation:

In case of suspected damage:	immediately
For weekly use or more:	every year
For monthly use:	every 2-3 years

- WYLER AG operates a calibration center for the parameters length, planarity and angles according to EN / ISO / IEC 17025.
- The accreditation is carried out by METAS.

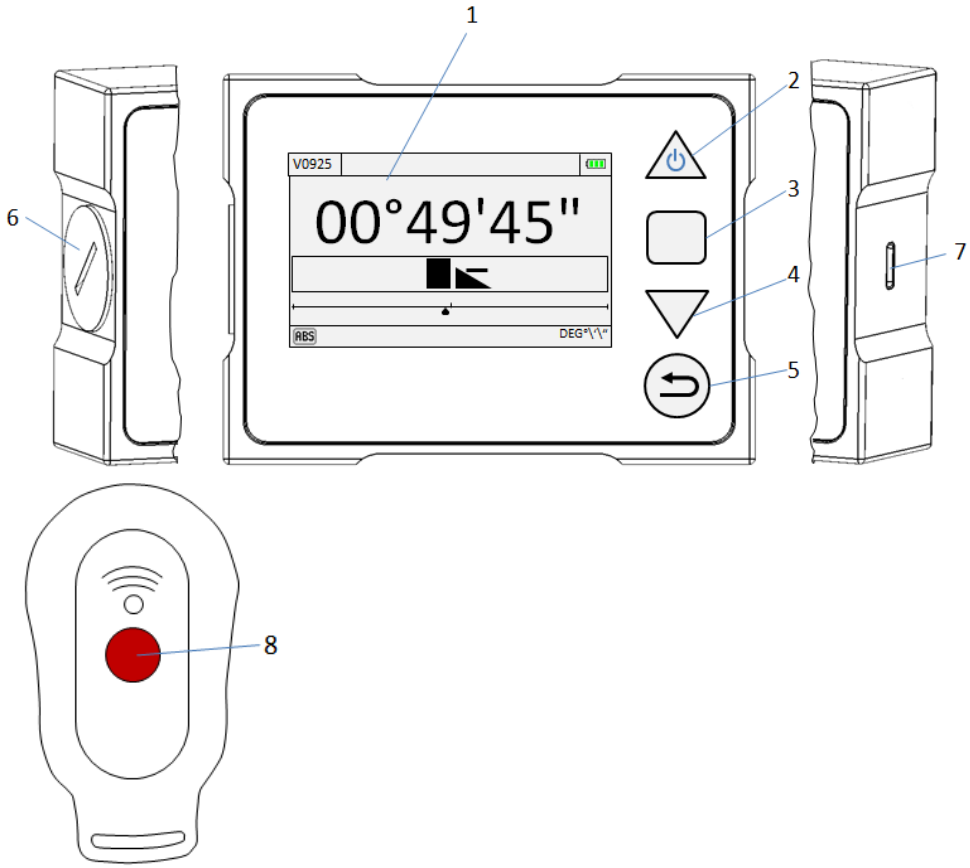
  WYLER accreditation number: SCS 044

4. Prepare product for use

Contents of case

1	Case
2	Clinotronic S
3	Lithium-ion batteries 3.6V, Type 18650
4	USB power adapter
5	Cable USB-A/USB-C
6	Infrared (IR) trigger
7	wylerCONNECT MINI
→	Quick reference
→	Manual download at www.wylerag.com

Controls

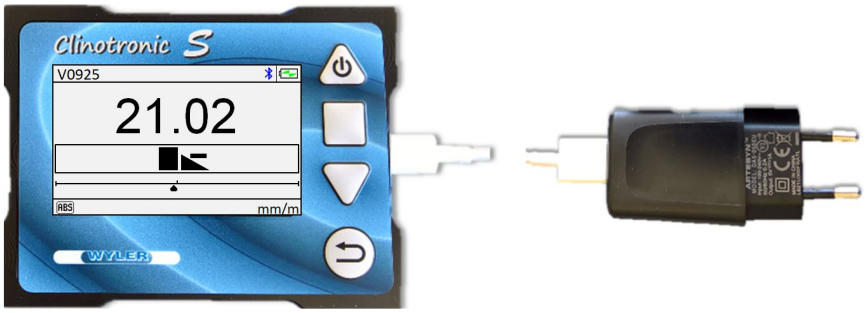


- **1** Screen
- **2** On/Off
- **3** Menu
  Enter
- **4** Arrow button down
  Shortcut (hold 2 seconds) "Relative Zero"
- **5** Back/cancel
- **6** Lithium-ion battery lid
- **7** USB-C connection
- **8** Infrared (IR) trigger

Replacement of lithium-ion (Li-ion) batteries

1 Remove battery lid, remove depleted Li-ion battery
2 Insert fully charged Li-ion battery (nose forward)
Close the lid. (Don't tighten too much)

Charging with power adapter or laptop



A Charging with power adapter

- Plug the charger into a power outlet (100-240V AC)
- Connect the Clinotronic S with the cable to the power adapter

Note ♥: While charging, you can use the device in only limited ways.
During the charging process, the specification of the device **can not** be guaranteed due to temperature development during charging.
Charge the device before measuring!

- The charging symbol appears in the upper right corner:
- The device will automatically start charging

The following states of charge appear on the screen for 100%: or 75%: or 50%:

Almost empty: 25%

- Charge the Clinotronic S as soon as possible until the symbol 100% appears.

- Loading time full capacity: 8 h
- Typical usage time with radio switched on:
  - backlight medium 33 h

B Charge via USB cable to the PC or laptop

- Connect the Clinotronic S with the cable to the PC or laptop
- The Clinotronic S receives only a trickle charge with minimal power.
- This allows you to measure without heating up the Clinotronic S.
- Charge the device before measuring!

5. Operation

5.1 Configurations

As standalone

for immediate measuring and reading

Wireless with an Android® or iOS® smartphone and the free app "Clinotronic S"
as a remote display

Minimum requirement for Android®: for iOS®:

Wireless with the wylerCONNECT MINI for Windows computer

max 7 ⇒  wylerCONNECTMINI ⇒ PC 

e.g. with wylerEXPLORER

Note ♥: The wylerCONNECT MINI connects up to seven Clinotronic S units with the Windows computer.

Use our software products to collect and display data. Visit www.wylerag.com

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Connected via cable (USB-C / USB-A) with a Windows computer

Note ♥: With the cable, you can update the firmware of the Clinotronic S via Windows computer. The corresponding firmware loader can be found at www.wylerag.com

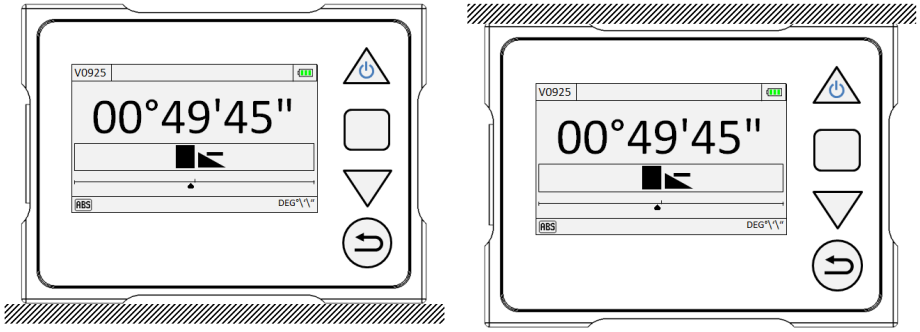
5.2 Measurment bases

The device is equipped with four (4) measuring bases with flat measuring surfaces

Horizontal application

Measurement base above

Mess-Basis oben



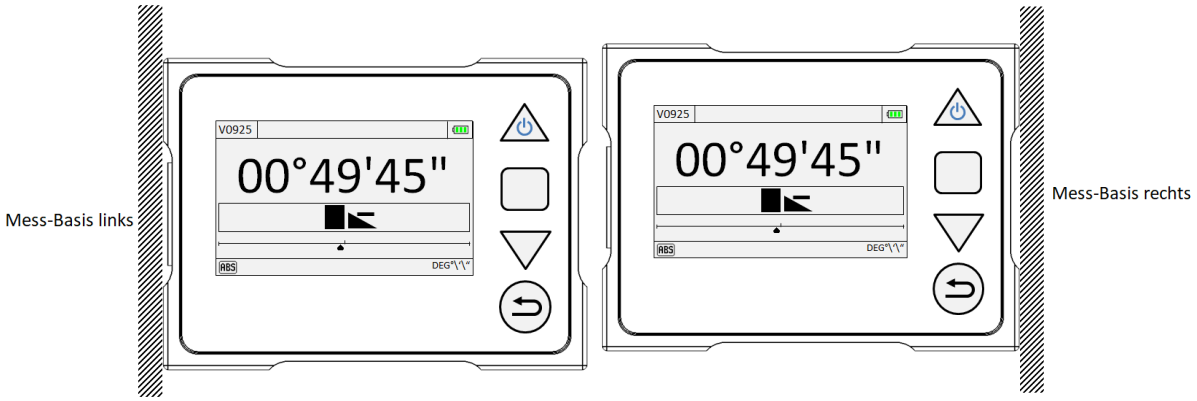
Mess-Basis unten

Measurement base below

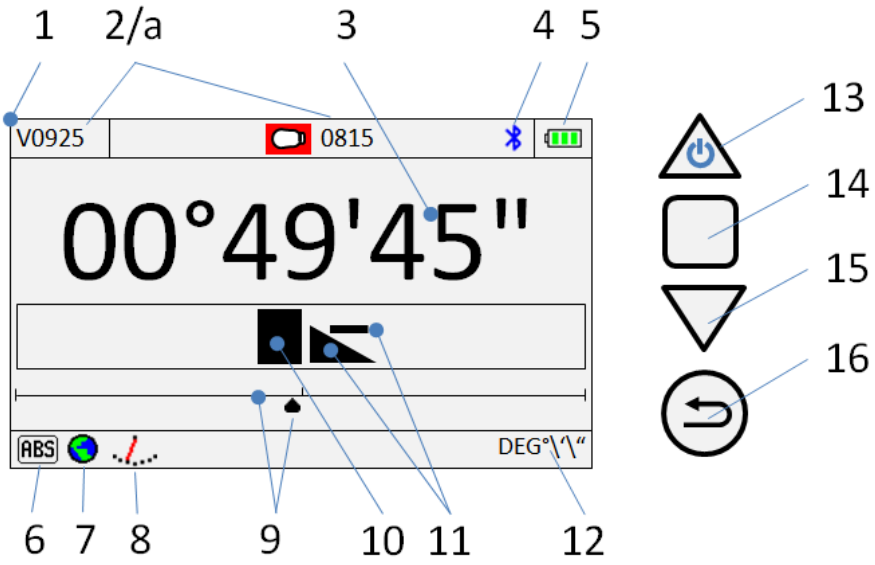
Vertical application

Measurement base left side

Measurement base right side



5.3 Screen overview and keyboard

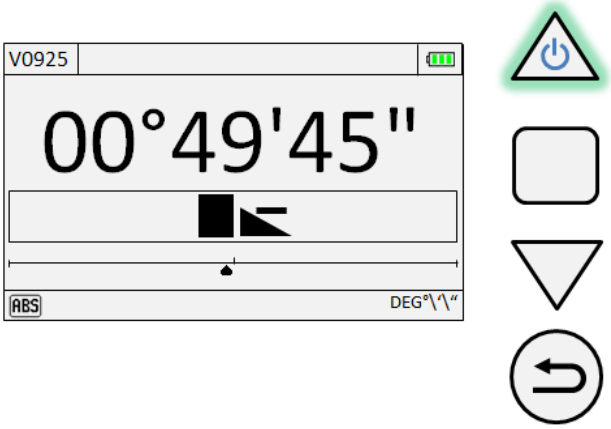


- 1 **Screen**
- 2 **Serial number; 2a IR number +** **1 x flash when triggered**
- 3 **Display of value** (depending on the selected unit)
- 4 **Radio** activated, not activated:
- 5 **Charge indicator** , empty , charging
- 6 **Mode of measurement** ABS = Absolute
  Mode of measurement *REL = Relative Zero (On-site relative zero)*
- 7 **Local gravity** is enabled
  Standard value (9.8065 m/s^2)
- 8 Calibration executed with **wylerMASTER**
- 9 Graphical display of the **entire angle range**
- 10 Graphical display of the **angle range near zero**
- 11 **Gradient triangle** and symbol plus / minus according to inclination
- 12 **Unit** (depending on the setting)
- 13 **On/Off**
  within menu: Up arrow
- 14 **Menu**
  within menu: Enter
  within submenu: Move cursor to the right
- 15 **Arrow down**
  Shortcut (press 2 seconds and release): "Relative Zero"
- 16 **Back / Cancel**
  within Menu: Move cursor to the left

5.4 Switching on/off, measuring range

Switch On

- Press the button  The screen starts immediately.



Note ♥:The device starts with the last used settings

Switch Off

- To switch off, press the button  until the following message appears:

Release the button. The device is switched off.

Measuring range

- The measuring range at new state or after factory reset: **~ 46.5°**
- After wylerMASTER calibration (see chapter 5.9.2.3) : **45°**

Over range

The device stands in over range condition

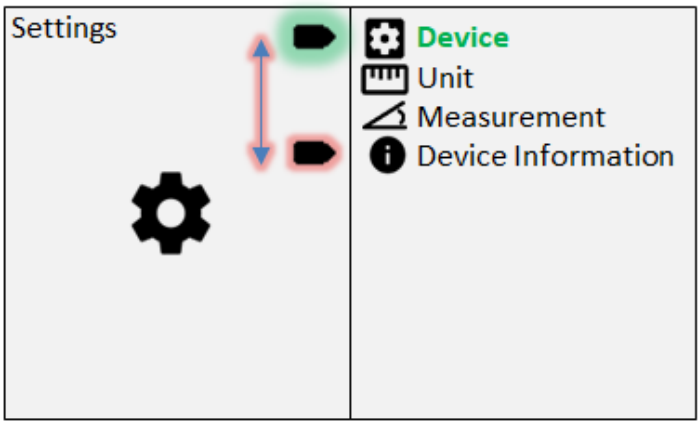
5.5 "Settings" menu, entry and exit

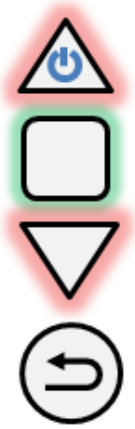
- Press the button  to enter the "Settings" menu

  In "Settings" contents:

  Device .....
  Unit.....
  Measurement.....
  Device Information.....

- Use the up arrow  and down arrow  to move the cursor  up und down.





- Using  select the desired menu item in the menu. .

- With the button Back / Cancel  you return to the measuring mode

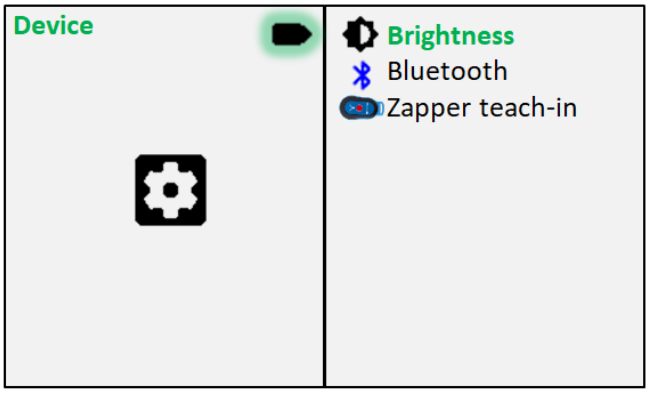
Note ♥: With one or repeated clicks of  you will return to the next highest level in the menu until the measurement mode appears

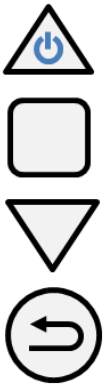
Note ♥: With  you can also cancel any function (such as Relative Zero, etc.)

5.6 Settings in "Device"

Enter with  into the "Settings" menu

- Use  to select "Device" 
- after that press: 





- "Device" contents:

  Brightness ..... 

  Bluetooth®..... 

  Zapper teach-in..... 

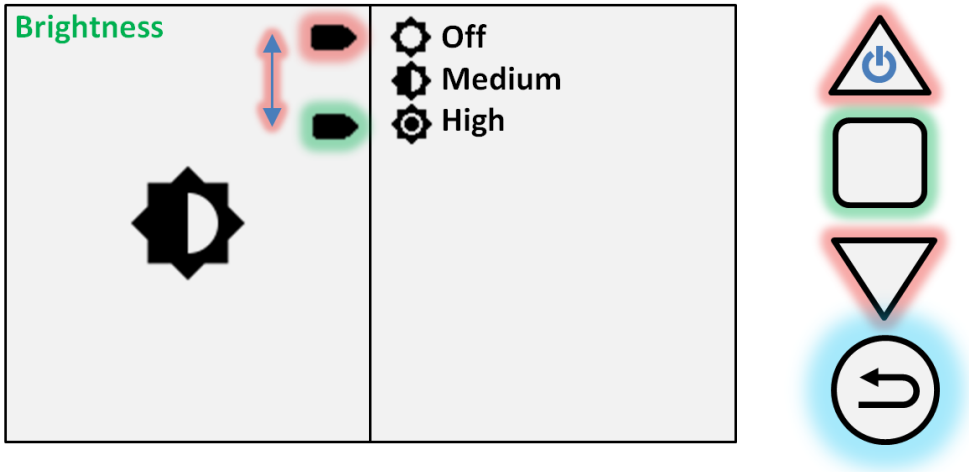
5.6.1 Device: "Brightness"

- In the "Devices" menu, use ▽ ⏻ and ▢ to select "Brightness" ◐
- Use ▽ ⏻ to select the desired brightness:

  Off ☼

  Medium ◐

  High ☼



- Confirm your choice with ▢

  or

- cancel with ⮌

Note ♥: In both cases you will jump back to the "Device" menu

Attention !: As the brightness level increases, the unit consumes more power.

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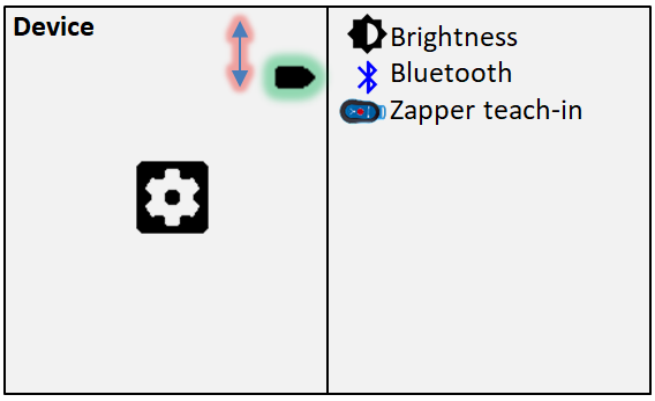
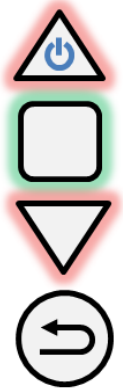
5.6.2 Devices:"Bluetooth"

- In the "Devices" menu, use  and  to select  "Bluetooth"

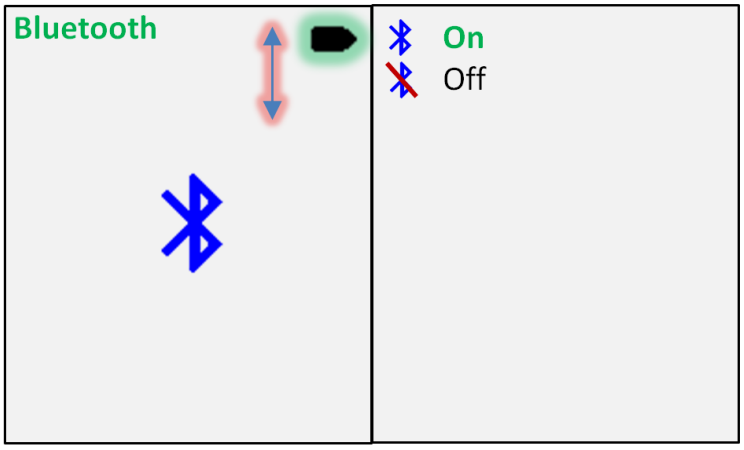


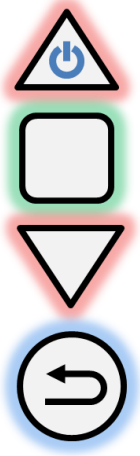


- Use  to select the desired setting:

  On 

  Off 





- Confirm your choice with 

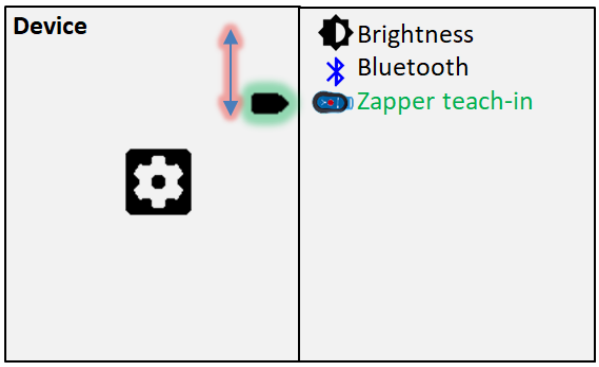
  or

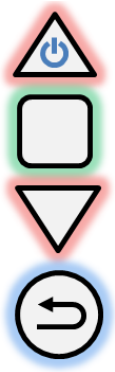
- cancel with 

Note ♥: In both cases you jump back to the "Device" menu

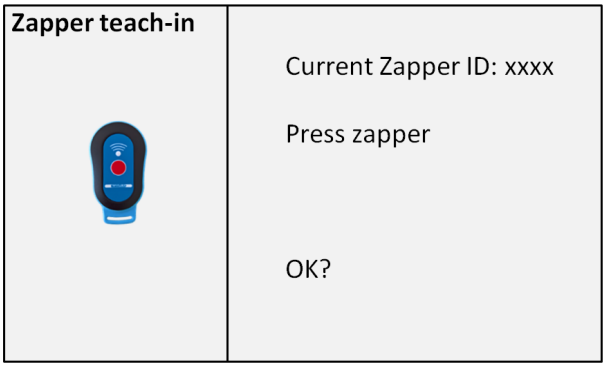
5.6.3 Zapper teach-in

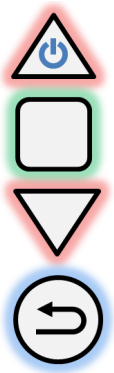
- In the "Devices" menu use  and to select "Zapper teach-in" 



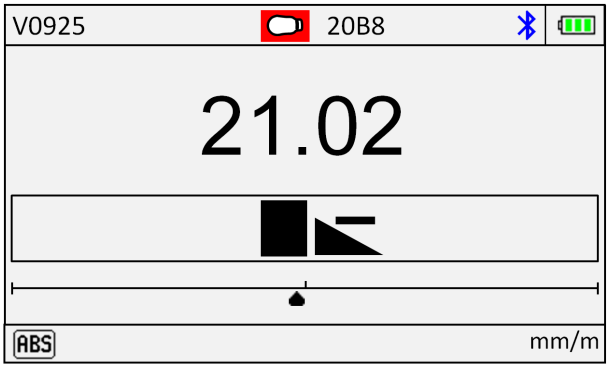


- Press the zapper (Infrared trigger) until "OK" appears.
- The zapper (Infrared trigger) is identified.





- When the zapper is pressed, the IR number appears in the top line for 1 second

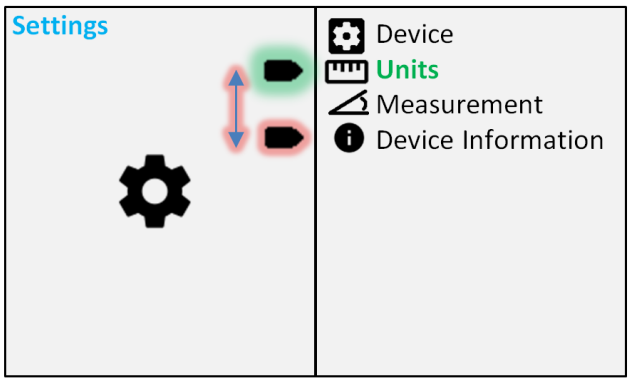


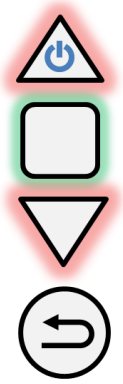
Note ♥:	You can "Teach-in" several devices with the same Zapper Application: Alignment with multiple devices simultaneously

5.7 Settings in "Units"

Use  to enter the "Settings" menu

- Use  and  to select "Units"  , after that: 



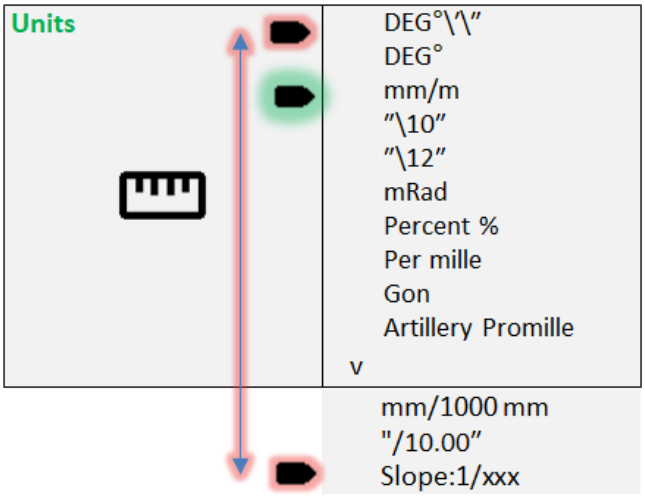


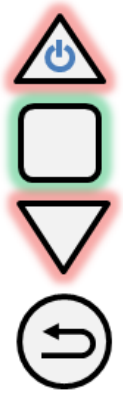
"Units" contents:

	Unit	digits		Explanation
•	DEG°\'\"	## ° ## ' ## "		Degree - Minute - Second
•	DEG°	## . ###		Degree decimal
•	mm/m	### . ##		Millimeter per Meter
•	"\10"	## . ####		Inch per 10 Inch
•	"\12"	## . ####		Inch per 12 Inch
•	mRad	### . ##		Milliradiant
•	Percent %	### . ###		Percent %
•	per mille	#### . ##		Per mille ‰
•	Gon	## . ###		400 gon = 360°
•	Artillery Promille	###		1 A‰ = 360° / 6400
•	mm/1435 mm	#### .##		Millimeter per self-selected base length in mm (Preset: mm/1435mm, European standard gauge)
•	"/10.00"	### . ###		Inch per self-selected base length in inch
•	Slope:1/xxx	1/#####	bis 1/#.####	Slope / Sink parameter (without unit)

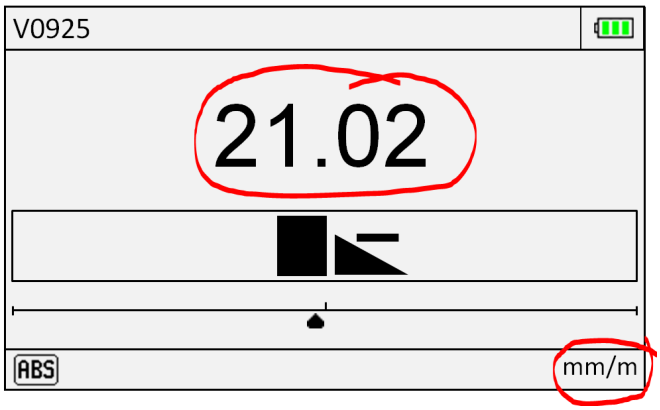
5.7.1 "Units"

- In the "Units" menu use  and to select the desired unit





- Confirm with  e.g.: **mm/m**



The digits and the unit adjusts according to your choice

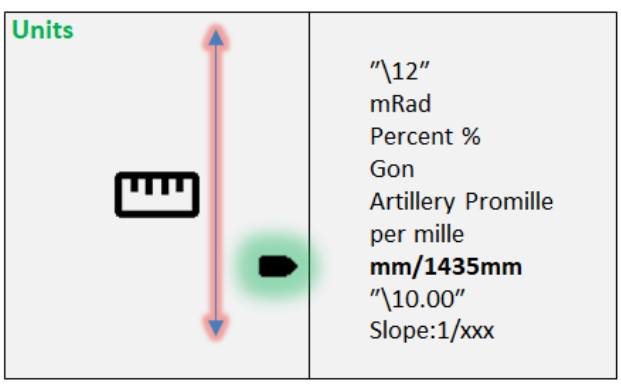
Note ♥: Always check the unit at the beginning of a measurement!

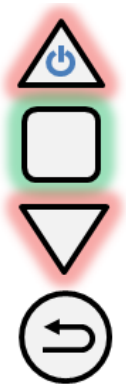
5.7.2 Self-selected base mm/xxxx mm

Note ♥: The unit **mm/xxxxmm** allows a freely selectable base length

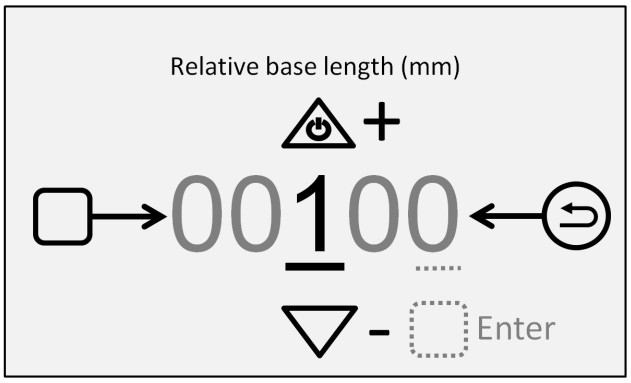
- In the "Units" menu use ▽ ⏻ and ▢ to select mm/1435mm

Note ♥: 1435 is the last selected value, hence it may be different.





Value adjustment menu:



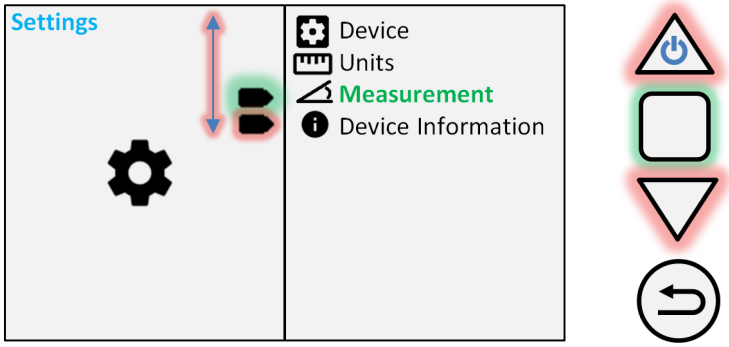
- Navigate with
  ▢ to the right
  ⮌ to the left
- The value of the numbers change with
  ⏻ in the direction of +
  ▽ in the direction of -
- Finish the input with ▢ at the last digit
- In measuring mode, the modified unit appears at the bottom right

Note ♥: The modified base also appears in the "Units" menu

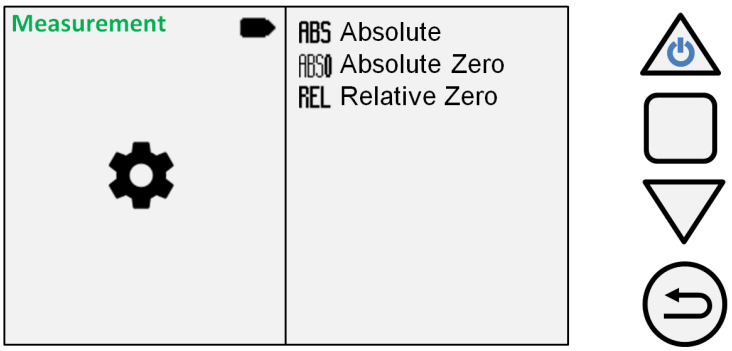
Note ♥: Correspondingly, proceed with the unit "/10.00" (inches per selected base length in inches)

5.8 Type of Measurement

In the "Devices" menu use  and  to select "Measurements" 



- after that: 



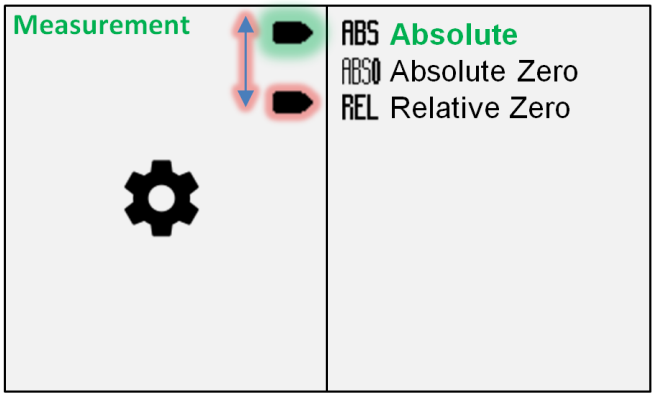
- The "Measurement" menu contents:

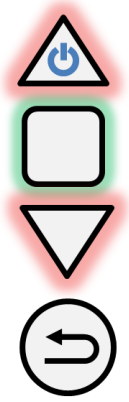
Absolute.....	ABS	uses last measured zero deviation
Absolute Zero	ABSO	triggers reversal measurement (zero deviation)
Relative Zero.....	REL	current position becomes reference level (relative zero)

5.8.1 Absolute measurement

Use  to enter the "Measurement" menu

- In the "Measurement" menu, use  to select "Absolute" ABS

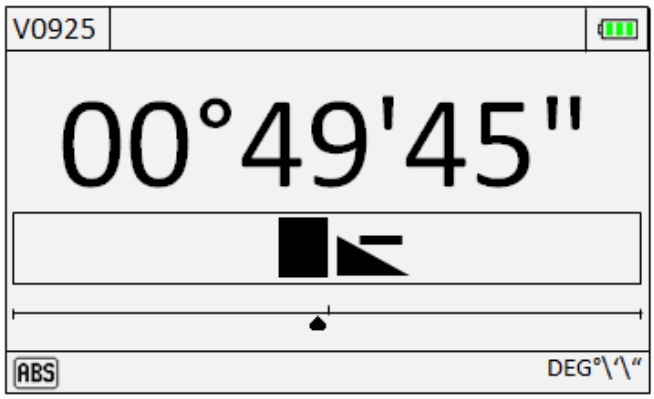


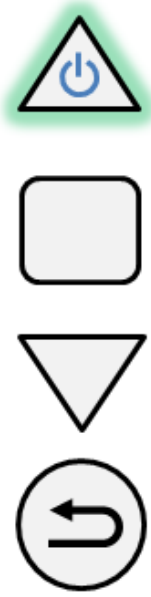


- after that: 
- The device returns to the measurement mode

Note ♥: How to use: Device is in Relative Zero mode.
The last zero offset will be used now

The measurement mode returns to **"Absolute"** ABS

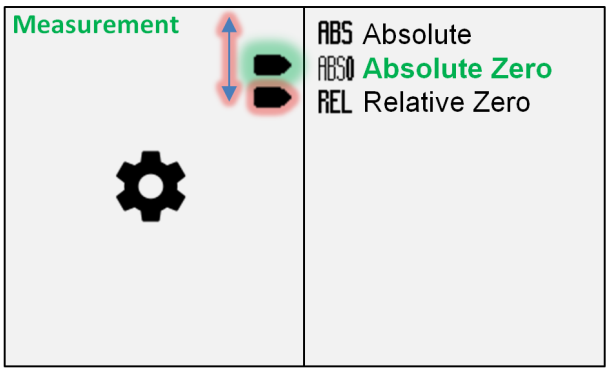


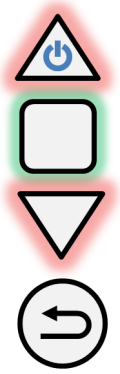


5.8.2 Reversal measurement "Absolute Zero"

Use  to enter the "Measurement" menu

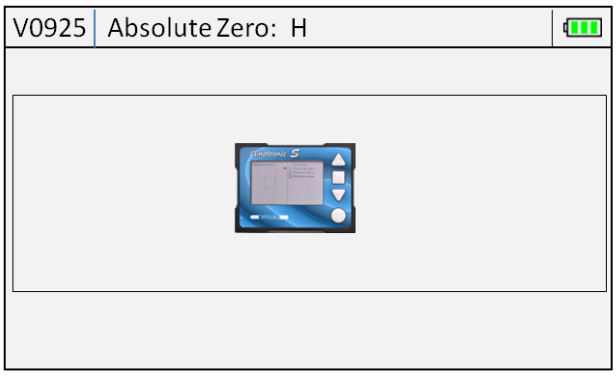
- In the "Measurement" menu, use  to select "Absolut Zero" 

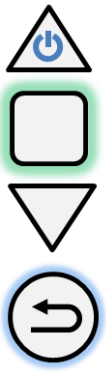




after that: 
The menu now guides you through the reversal measurement

- Place the device on a **flat and stable** surface. → Position **H**



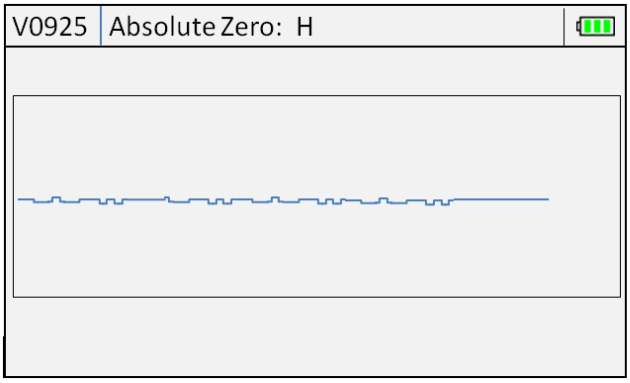


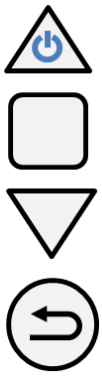
Note ♥: To get a reliable reversal measurement, the plateau should be aligned within +/- 0.06mm

- Trigger the measurement H with the IR trigger  or with 

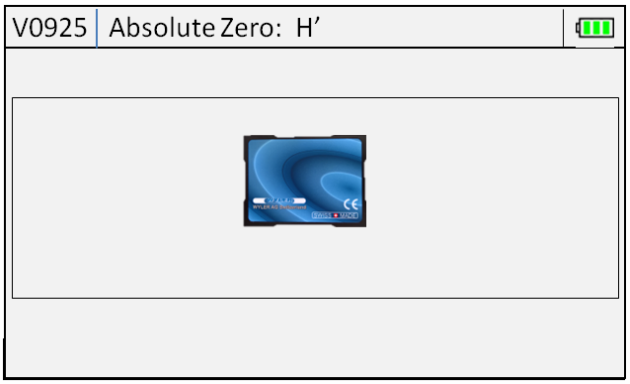
Note ♥: You can cancel this process at any time with  and return to the measurement screen

Please wait, the device records a stable value **H**.





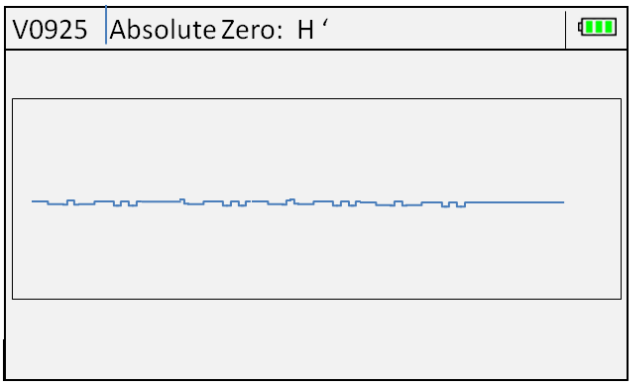
Attention !: Please do not touch the device until the measured value is recorded!

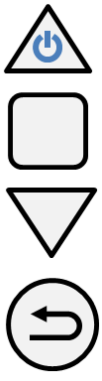


Now turn the device **at the same position** by 180°. → Position **H'**

- Trigger the measurement **H'** with the IR trigger  or with 

Attention !: Please do not touch the device until the measured value is recorded!





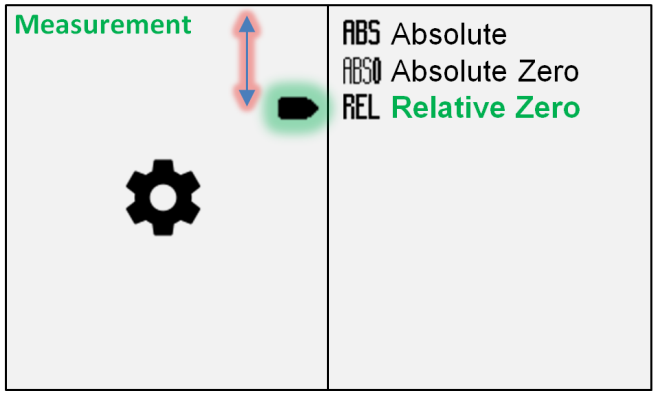
The device returns to the measuring mode immediately after reading the measured value H'

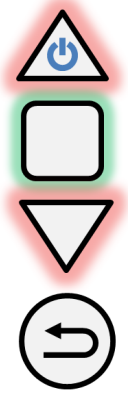
Attention !: The measurement mode "Relative Zero" is displayed with ABS at the bottom left

5.8.3 Temporary reference level "Relative Zero"

Use  to enter the "Measurement" menu

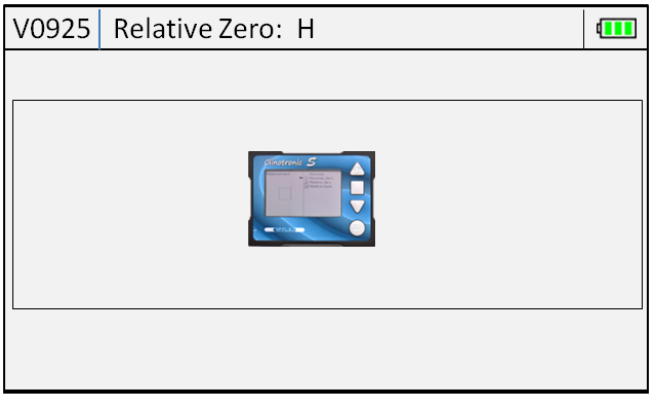
- In the "Measurement" menu, use  to select "Relative Zero" REL

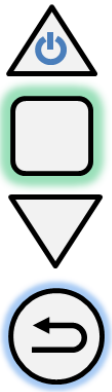




after that: 
The menu now guides you through the reversal measurement "Relative Zero"

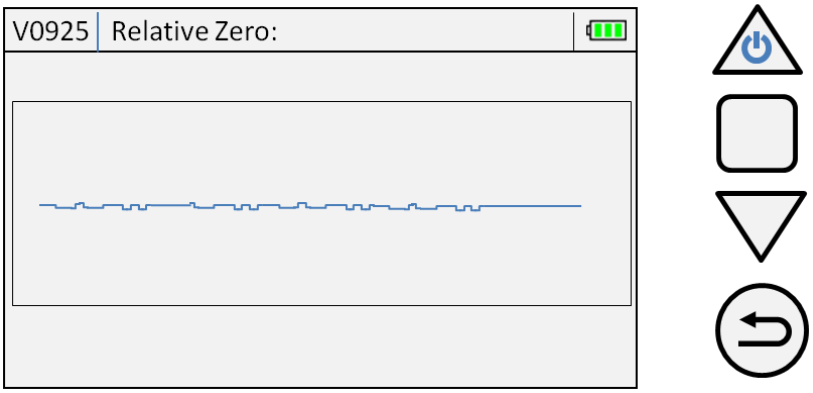
- Note ♥: **Shortcut!** You can choose "Relative Zero" directly from the measurement mode by pressing the  button for 2 seconds and then releasing





- Place the device on a **flat and stable** surface. → Position **H**
- Trigger the measurement H with the IR trigger  or with 
- Note ♥: You can cancel this process at any time with  and return to the measurement screen

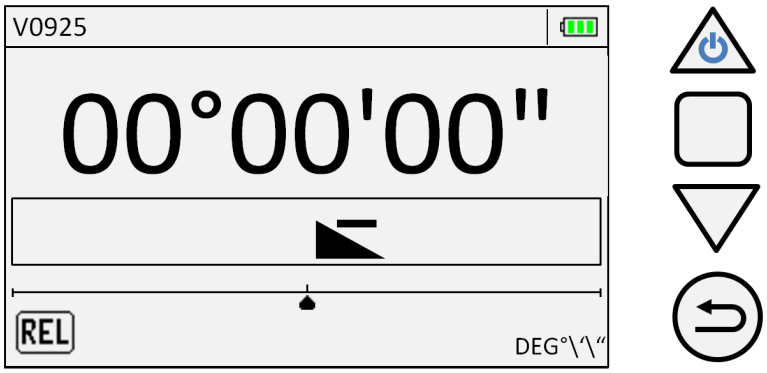
Please wait, the device records a stable value **H**.



Attention !: Please do not touch the device until the measured value is recorded!

The instrument will return to measuring mode immediately after reading the measured value H.

Attention !: The measurement mode "Relative Zero" is displayed with REL at the bottom left



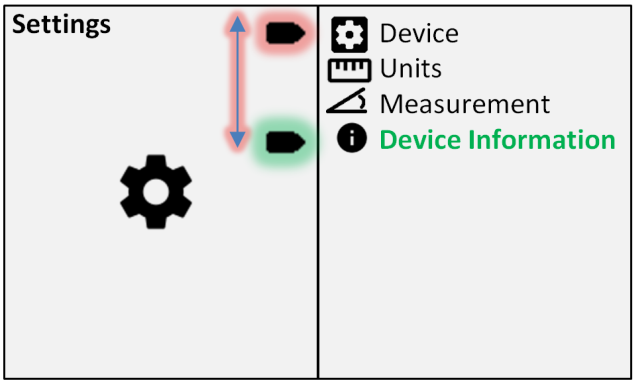
The device has now set the current level to relative zero

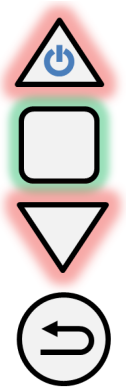
Note ♥: Around the zero position, the inclination triangle including the algebraic sign can alternate between + and -.
This is not a malfunction.

5.9 Device Info

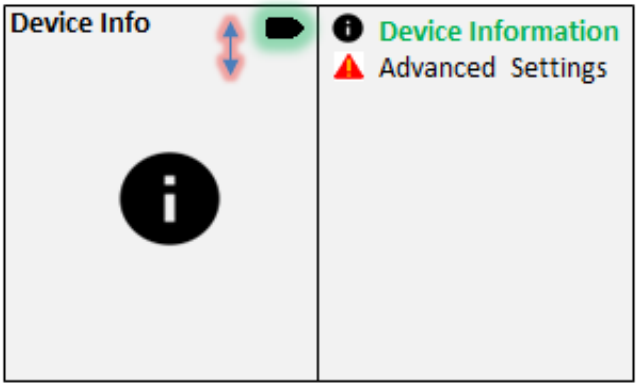
Use  to enter the "Settings" menu

- Use  and  to select "Device Information"





- after that: 



- "Device Info" contents:

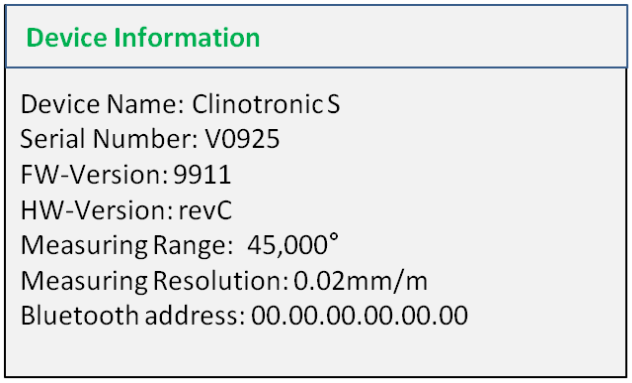
  Device Information  Firmware etc.

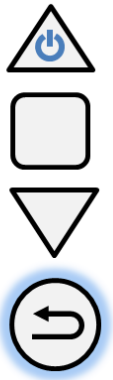
  Advanced Settings 

Note ♥: With  you return to the "Settings" menu.

5.9.1 Device Info

Use  to enter the "Device Information" menu





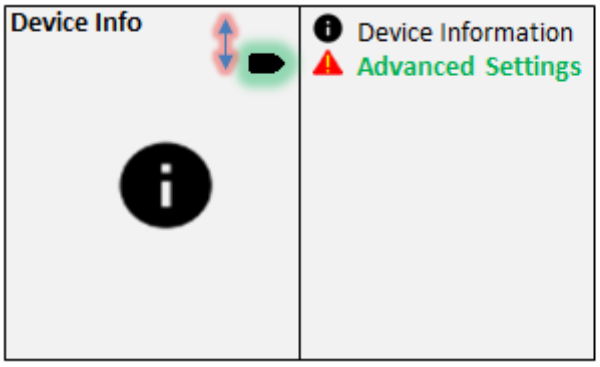
List of internal data.
The firmware version changes when a firmware update has been made.

- Note ♥: With  you return to the measurement mode.

5.9.2 Advanced Settings

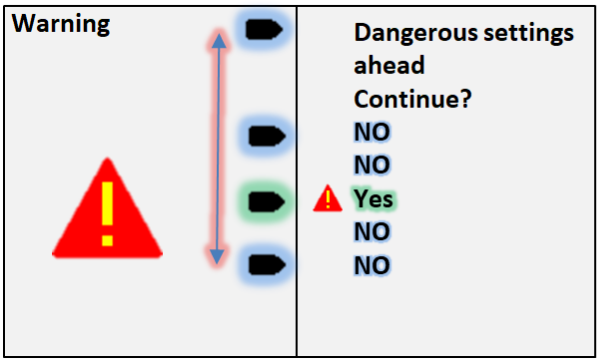
Use  to enter the "Device Information" menu

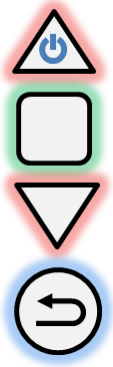
- Use  to select **Advanced Settings,** after that press: 



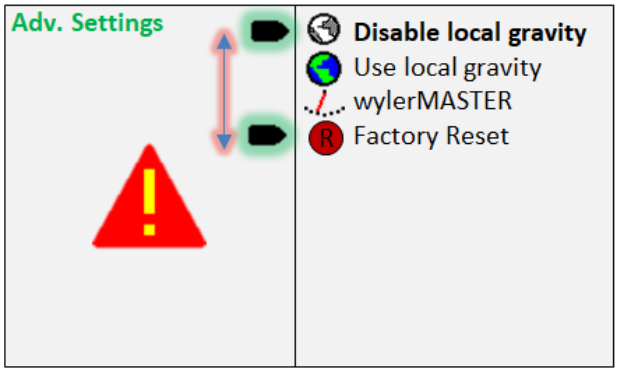
Use  to select "Yes"

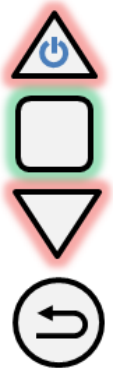
Attention !: This procedure prevents accidental mishandling.





Attention !: In this menu, calibration data is affected!
If you have any questions, please contact our local representative.





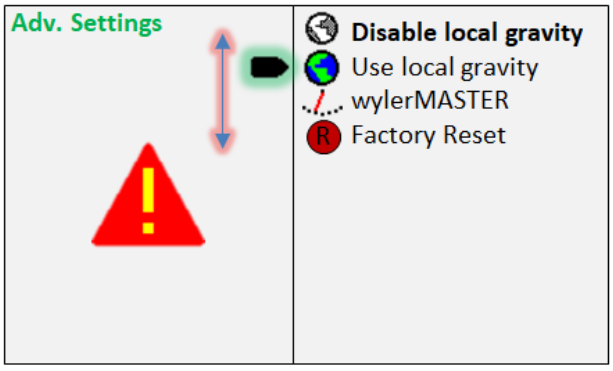
"Adv. Settings" contents:

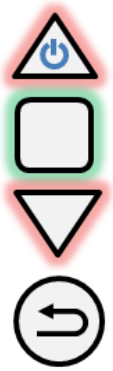
Disable local gravity.....	Reset local gravity to default 9.8065 m/s^2
Use local gravity.....	Set local gravity
wylerMASTER.....	Calibration with wylerMASTER (not included)
Factory Reset.....	Back to factory settings

5.9.2.1 Use Local gravity

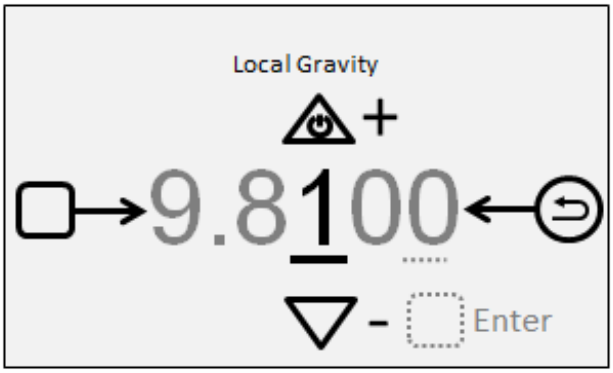
In the "Device info" menu, use ▽ △ and ▢ to select "Advanced Settings".

- Use ▽ △ to select "Use local gravity" 🌍





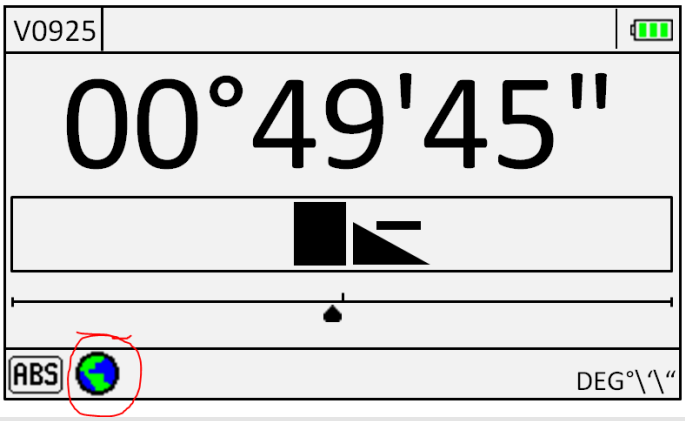
after that: ▢



  - Navigate with
    ▢ to the right
    ⮌ to the left
  - The value of the numbers change with
    △ in the direction of +
    ▽ in the direction of -
  - Finish by using ▢ at the last digit

Note ♥: The values can only fluctuate between 9.7xxx and 9.8xxx

The device returns to measuring mode.

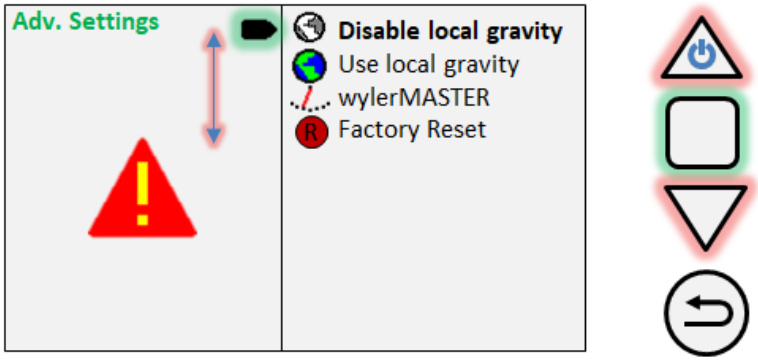


Note ♥: The measurement mode shows the globe symbol as a sign of using the local gravity

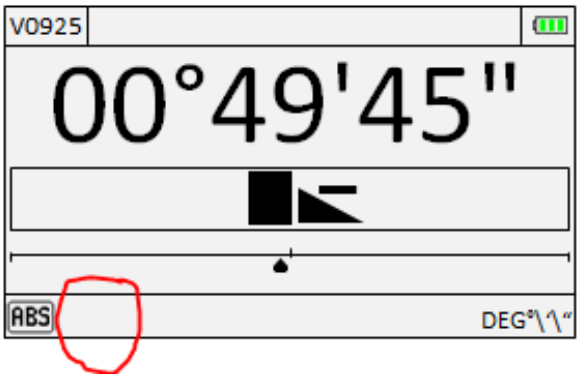
5.9.2.2 Disable local gravity

In the "Device info" menu, use  and  to select "Advanced Settings".

- Use  to select "Disable local gravity" 



after that: 

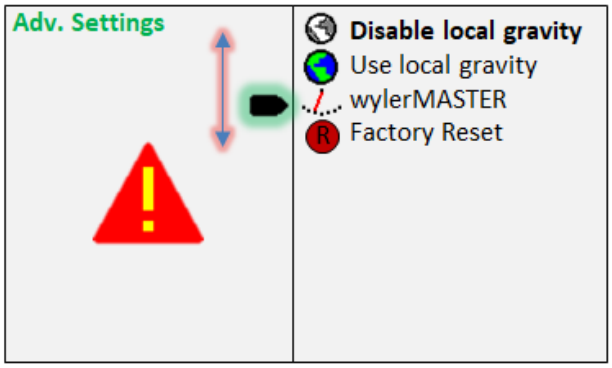


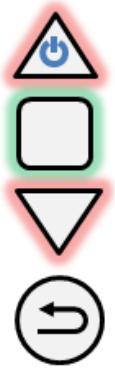
The globe icon disappears, indicating that the value of 9.8065 is restored.

5.9.2.3 wylerMASTER calibration

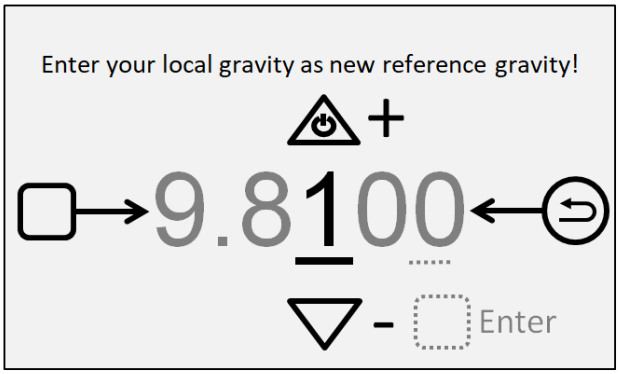
Attention!:	A calibration with the wylerMASTER requires the input of your local gravitation constant. It becomes the new reference! This makes it possible to continue to use the item "Use local gravity"! With factory reset you can return to factory settings.
Attention !:	The wylerMASTER itself must stand on a stable and flat surface, aligned within +/- 0.06mm in x and y direction. T = 20 °C +/- 2 °.

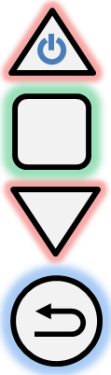
- In the "Device info" menu, use and to select "Advanced Settings".
- Use to select "wylerMASTER" , after that





- Enter your local gravitational constant.



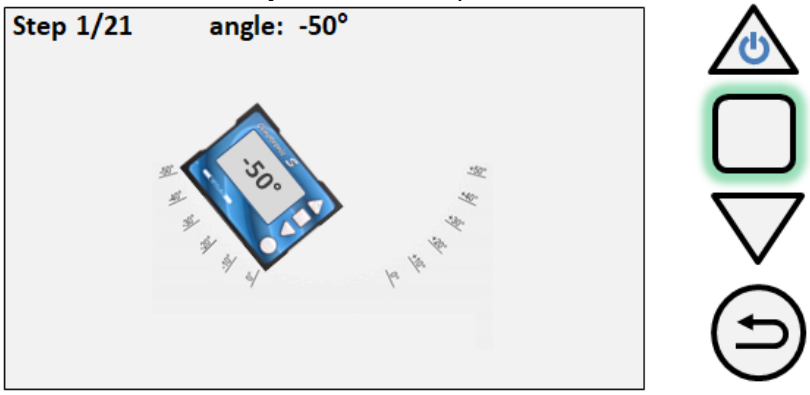


  - Navigate with to the right, with to the left
  - Change the value with in the direction of +, and with in the direction of -
  - Finish the input with at the last digit.

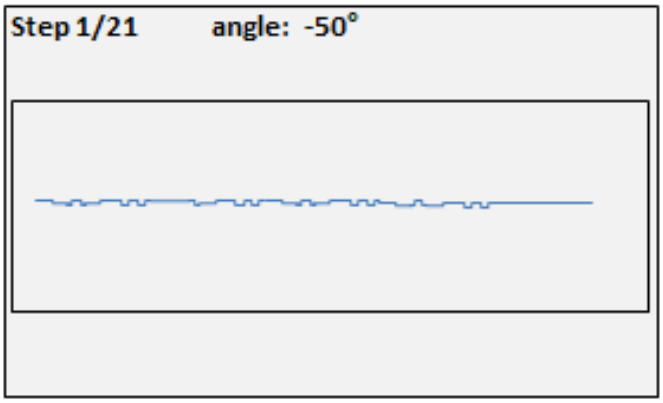
The calibration begins:

Note ♥: The menu will guide you through the process.

- Position the device on the wylerMASTER in position 1/21: **- 50 °**

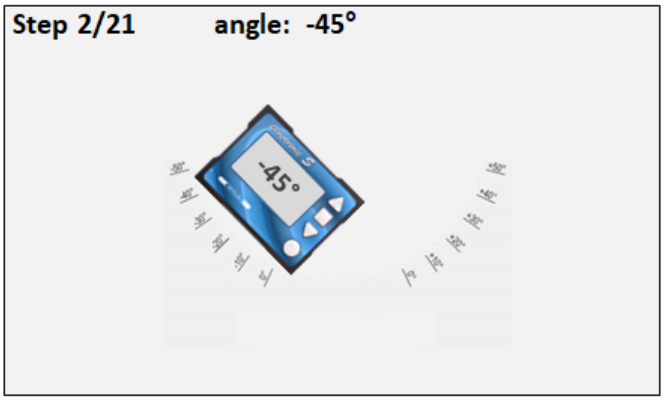


With the trigger  or by pressing  start the measurement.



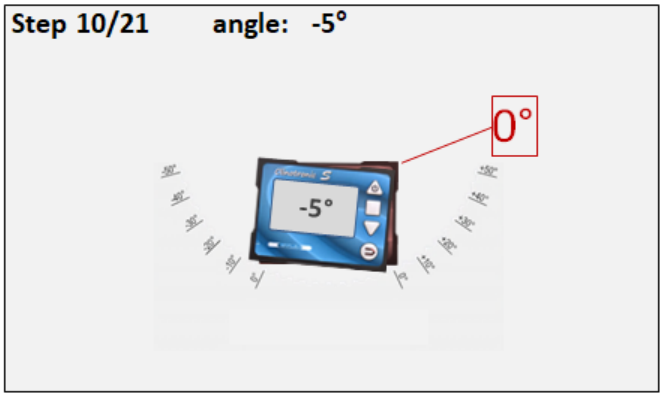
Note ♥: You can cancel the calibration at any time with 
The last calibration is retained. The device returns to measuring mode.

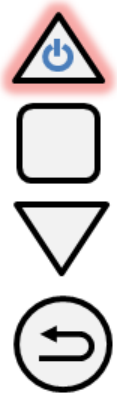
After successful measurement, position 2/21 is displayed at **- 45 °**



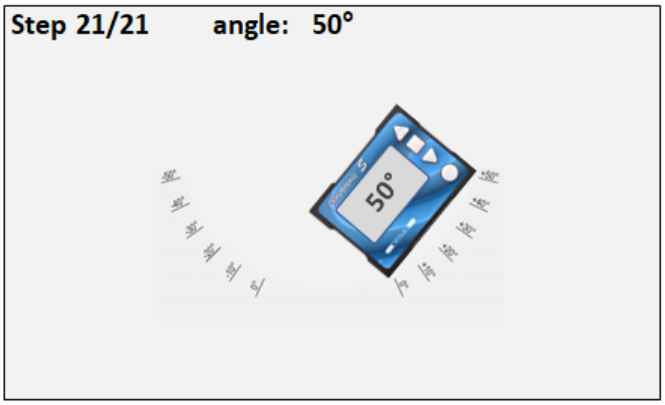
Note♥: You can measure a failed calibration point again.

Press  the last measurement is canceled. E.g. from O ° back to -5 °



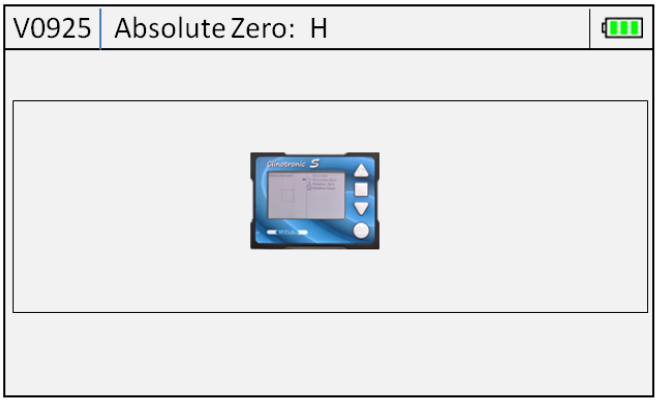


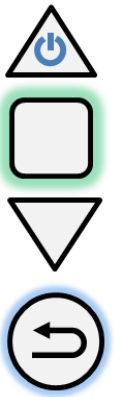
- Carry out the calibration according to the above steps until the 21st (last) measurement.



- After step 21, the calibration is completed. Now the reversal measurement (Absolute Zero) automatically follows. Follow the instructions.

- Place the device on a **flat and stable** surface. → Position **H**



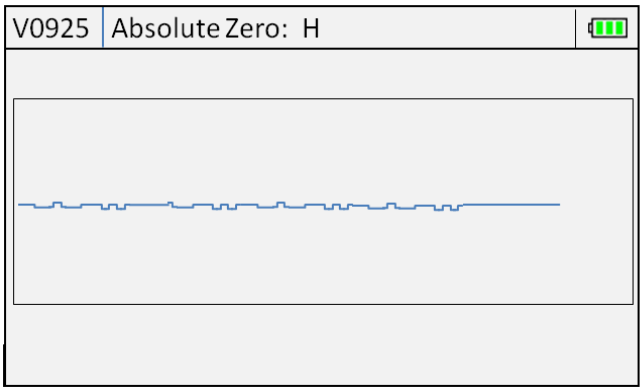


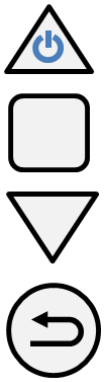
Note ♥: To get a reliable reversal measurement, the plateau should be aligned within +/- 0.06mm

- Trigger the measurement **H** with the IR trigger  or with 

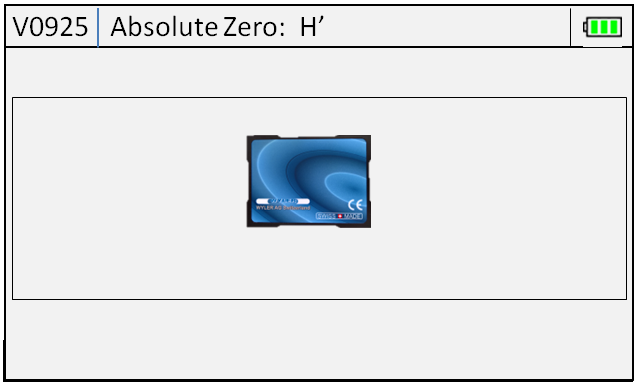
Note ♥: You can cancel this process at any time with  and return to the measurement screen

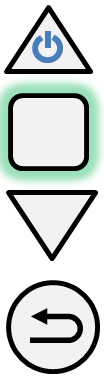
Please wait while the device records a stable value **H**.





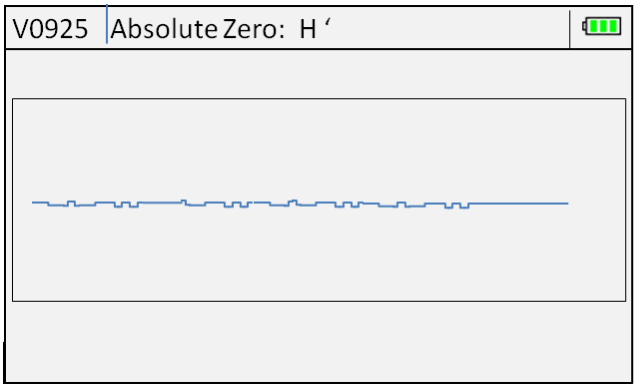
Attention !: Please do not touch the device until the measured value is recorded!

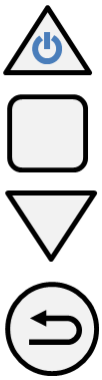




- Now turn the device **at the same position** by 180°. → Position **H'**
- Trigger the measurement **H'** with the IR trigger  or with 

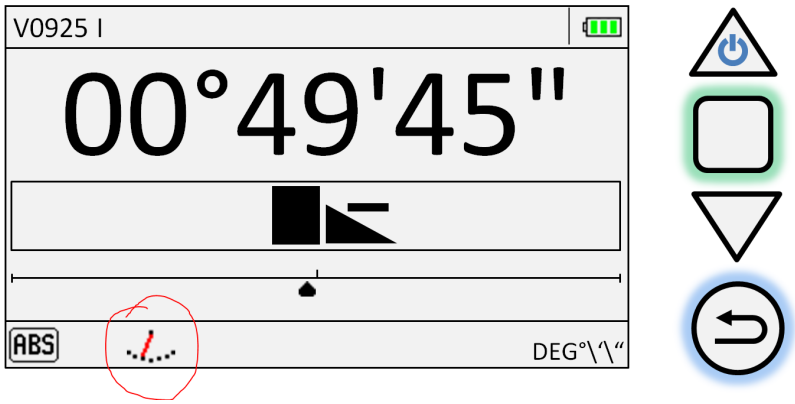
Attention !: Please do not touch the device until the measured value is recorded!





- The device automatically returns to measuring mode

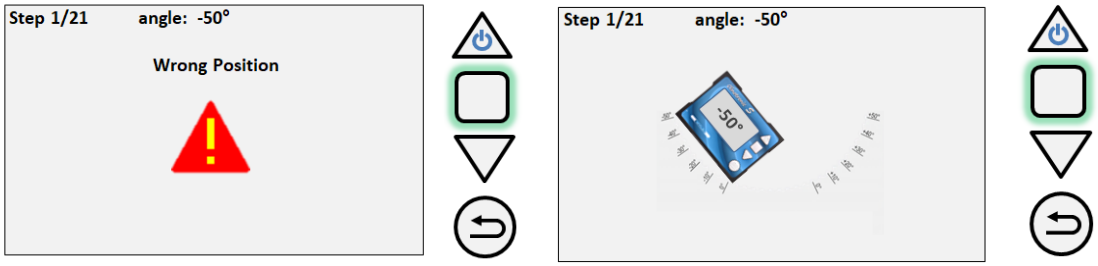
Attention!: The device indicates  to show the wylerMASTER calibration applied.



Note ♥: If the device is in the wrong position, an error message "Wrong Position" appears.

1. Acknowledge this message with ▢
2. Position the device as required by the user interface..

Example **1.** **2.**



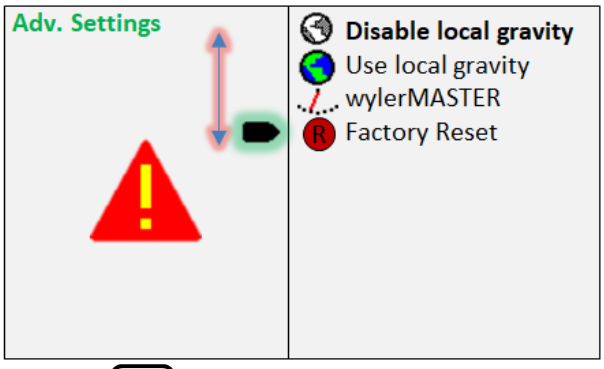
Note ♥: The measuring range after a wylerMASTER calibration is 45 °
After a factory reset, the measuring range is slightly increased to about 46.7 °

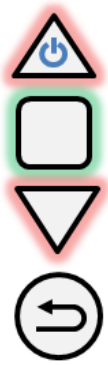
5.9.2.4 Factory Reset

"Attention !:" The factory reset resets all settings back to factory settings including the wylerMASTER calibration and the local gravitational constant

In the "Device info" menu, use  and  to select "Advanced Settttings"

- Use  to select "FactoryReset"

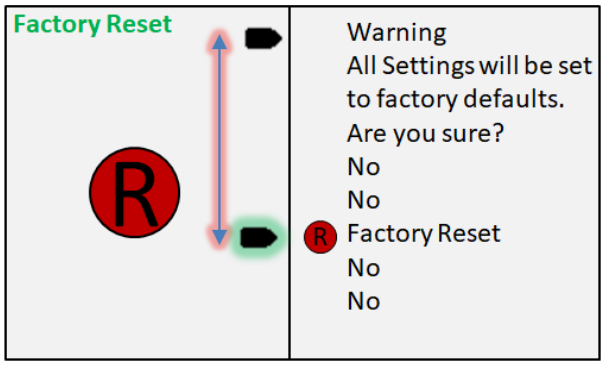


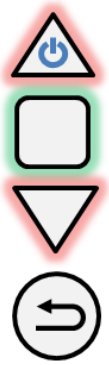


after that: 

- Use  to select "Factory Reset"

Attention !: This procedure prevents accidental mishandling





Attention !: The Clinotronic S now has its original data in memory. For a precise absolute measurement, please carry out a reversal measurement process as described in chapter 5.8.2.

6. Specifications

Technical specifications	
Measuring range	±45°
Resolution	5 arcsec or 0.02mm/m
Limit of error; *M_W= rad out; t=constant*	0.04% M_W / minimum 5 arcsec
Drift / 24 h	max 10 arcsec
Response time	≤ 5 sec
Mechanical accuracy of the housing	Flatness of the measuring bases 0.01 mm Rectangularity to the basic base 0.01 mm Parallelism to the basic base 0.01 mm
Digital ouput	USB-C
Power supply **-** Lithium ion battery **-** external power supply	3.6V, 3333 mAh, (12 Wh) 5V (USB-C)
Operating time at medium brightness, Bluetooth® activated	33h
Charging time after complete emptying	8h
Maximum power consumption during the charging process, incl. max brightness and Bluetooth® on	500 mA, 5V
Dimension (L x W x H)	100 x 75 x 30mm
Weight of device / incl. accessories and case	400g / 850g
Protection class	IP64
Storage temperature	-20° to +60° C
Operating temperature	0° to 40 ° C

7. Maintenance

For safe operation

Store the device in a dry carrying case
at a minimum of: - 20 ° C
at a maximum of: +60 ° C

Cleaning

- The device can be cleaned with commercially available alcohol-based cleaning agents and disinfectants.

Troubleshooting

Please contact:

WYLER AG
Im Hoelderli 13
8405 Winterthur
Switzerland
Tel. +41 52 23 66 66 www.wylerag.com
Fax +41 52 233 53 20 wyler@wylerag.com or
The country representatives can be found at: www.wylerag.com

Repackaging before re-transport

Ship the device in a carrying case in an additional cardboard box.
Observe the regulations of your chosen transport company.

Address customer service

If you have any questions, and if you are located in Switzerland:

WYLER AG
Im Hoelderli 13
8405 Winterthur, Switzerland
Tel. +41 52 23 66 66
Fax +41 52 233 53 20
www.wylerag.com
wyler@wylerag.com

For questions, if you are outside Switzerland in a country with a WYLER representative:

Country representatives: www.wylerag.com

Otherwise, contact us directly

8. Disposal

Decommissioning, disposal

- When decommissioning the Clinotronic S, note the local regulations for the disposal of electronic waste.
- The Li-ion batteries must be disposed of properly.

Document version and release notes

2.5. 2019 R1.1.1.DE Author: A.Schuhmacher