Manual

Electronic Inclinometer

Clinotronic S

WYLER AG
Im Hölderli 13
8405 Winterthur
Switzerland
+41 233 66 66
www.wylerag.com
wyler@wylerag.com

Contents

1. Manual Clinotronic S 3
Introduction 3
Note, Attention !, Warning! 3
Manufacturer name and address 3
Product brand and type designation 4
Applicable documents 4
2. Product description, technical data 5
Measuring device, accessories 5
3. Safety instructions 7
Intended use 7
Not intended use! 7
Electromagnetic environment 7
Additional information for FCC (USA) and IC (Canada) 8
Safety Instructions Lithium Ion Batteries 9
Deadlines for calibration 10
4. Prepare product for use 11
Content of case 11
Controls 12
Charging with power adapter or operate on the laptop 13
5. Operation 14
5.1 Configurations 14
5.2 Measurment bases 15
5.3 Screen overview and keyboard 16
5.4 Switching On/Off, Measuring Range 17
5.5 Menu "Settings", entry and exit 18
5.6 Settings in "Device" 19
5.6.1 Device: "Brightness" 20
5.6.2 Device:"Bluetooth" 21
5.6.3 Zapper teach-in 22
5.7 Settings in "Units" 23
5.7.1 "Units" 24
5.7.2 Self-selected base mm/xxxx mm 25
5.8 Type of Measurement 26
5.8.1 Absolute measurement 27
5.8.2 Reversal measurement "Absolute Zero" 28
5.8.3 Temporary reference level "Relative Zero" 30
5.9 Device Info 32
5.9.1 Device Info 33
5.9.2 Advanced Settings 34
5.9.2.1 Use Local gravity 35
5.9.2.2 Disable local gravity 37
5.9.2.3 wylerMASTER calibration 38
5.9.2.4 Factory Reset 43
6. Maintenance 44
For safe operation 44
Cleaning 44
Troubleshooting 44
Address customer service 44
7. Disposal 45
Decommissioning, disposal 45
8. Document version and release notes 45

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: Incorrect manipulations or unintentional deletion of calibration data will be prevented by these instructions.

Note, Attention !, Warning!

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

- "Note:" This should highlight useful tips.
- "Attention !:" This is to avoid mishandling or disadvantages
- 

This mentions legally mandatory notes

Manufacturer name and address

WYLER AG
Im Hoelderli 13
8405 Winterthur
Switzerland

Phone +41 52 23 66 66 www.wylerag.com
Fax +41 52 233 53 20 wyler@wylerag.com

Representatives: **www.wylerag.com**

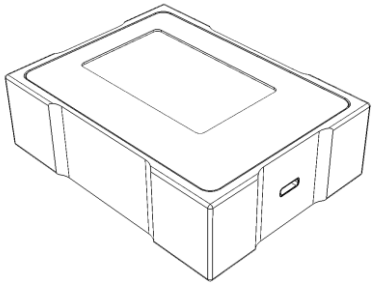
Product brand and type designation

Product brand

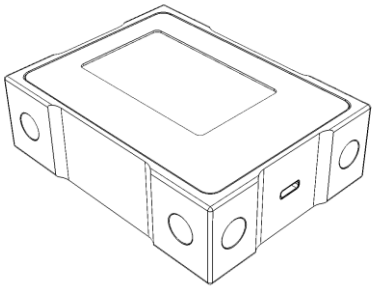
Clinotronic S

Type designation:

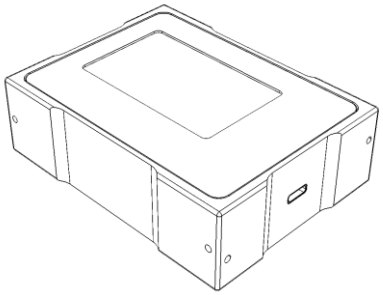
*Art. No. 015-S-XG45
without inserts



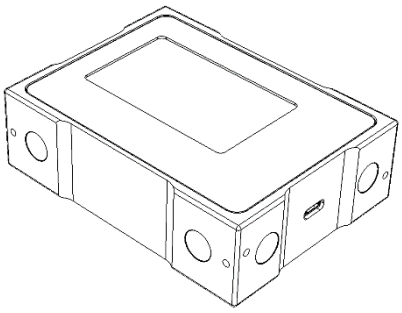
*Art. No. 015-S-HG45
with 2 magnets on each side



*Art. No. 015-S-PG45
with 2 M3 threads on all sides



*Art. No. 015-S-UG45
with 2 M3 threads on all sides



*Subject to change

Applicable documents

https://www.wylerag.com/fileadmin/pdf/cerificates_DoC/DoC_Clinotronic S_R2.pdf
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 4 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.
- On the front side located is 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
- Includet is also an infrared (IR) trigger for data acquisition
- 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).

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

Accessories

- wylerCONNECTMINI (Bluetooth® BLE)
- USB power adapter and cable USB-A/USB-C
- Infrared(IR)-Trigger
- Li-ion-Battery
- Koffer aus Kunststoff
- Manual
- Android-App in Google-Store, iOS-App in Apple Store

Note: Scope of delivery of the accessories is defined in the actual catalog!

Optional accessories *www.wylerag.com*

Soft ware
- Interface software
- Geometry measuring software
- Monitoring soft ware
- Software tools

Calibration
- wylerMASTER

Remote display
- Android smartphone with installed App

Energie
- 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 precise 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 form as a hammer because the measuring surfaces are beeing damaged and the device is therefore no longer measurable.
- The device must not be thrown. The aluminum housing can cause serious injuries and damages

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 und 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 3.6Vare 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 supervised.

Verschliessen Sie den Lithium-Ionen Batterien-Verschlussdeckel sorgfältig, aber nicht mit Gewalt!
Für die Dichtheit des Verschlusses ist ein Gummi-Dichtring montiert.

Note the current regulations of the airlines 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 circuit.
Underwater the short-circuit protection is not secure!

Deadlines for calibration

- The rhythm of the calibration 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

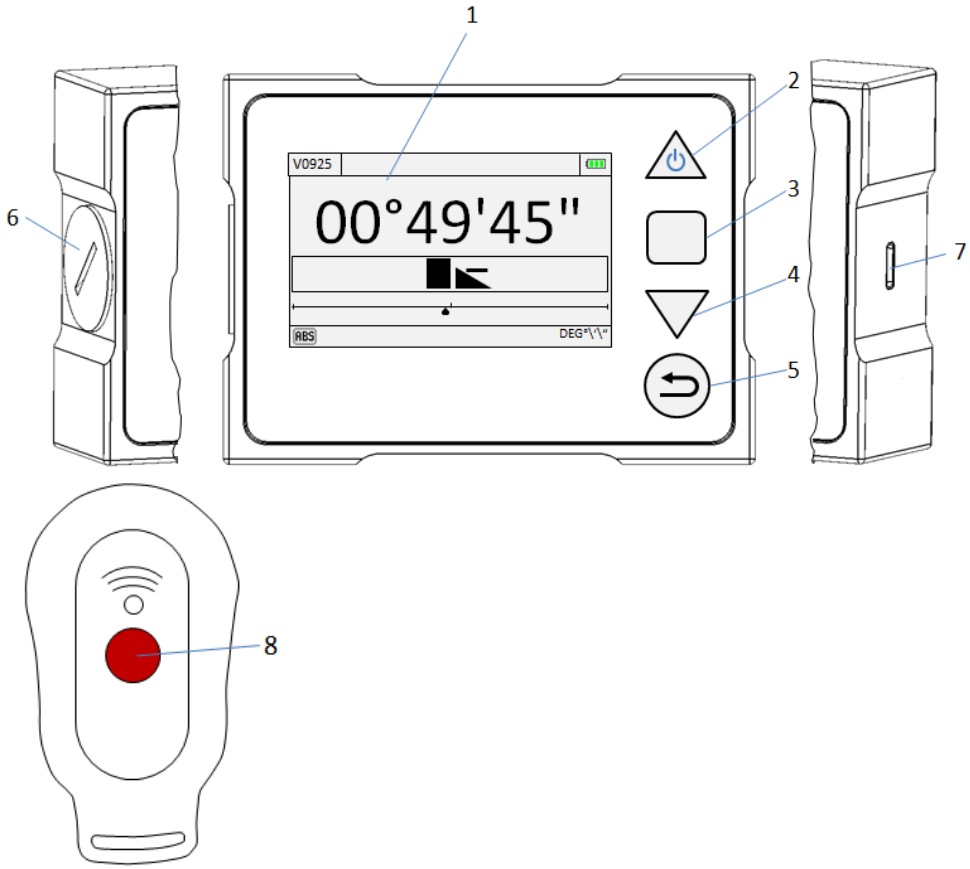
4. Prepare product for use

Content of case (including accessories)

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

Note: Scope of delivery of the accessories is defined in the actual catalog!

Controls

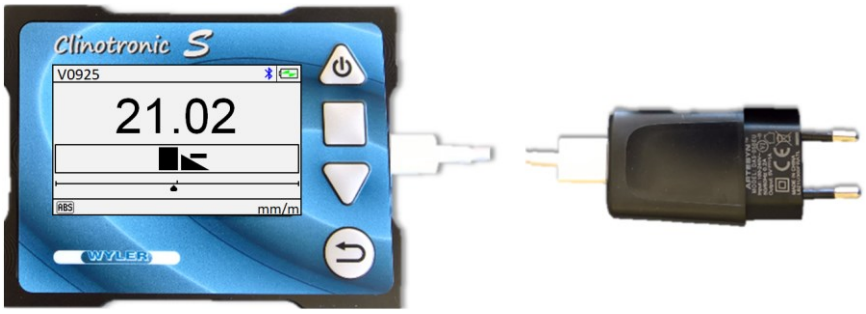


- **1** Screen
- **2** On/Off
- **3** Menu
  Enter
- **4** Arrow button down
  Short cut (hold 2 seconds) "Relative Zero"
- **5** Back/cancel
- **6** Lithium-ion battery lid
- **7** USB-C connection
- **8** wylerTRIGGER Infrared (IR) trigger

Replacement of Li-ion batteries

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

Charging with power adapter or operate on the 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

Attention !: While charging, you can **NOT** use the device.
During the charging process, the specification of the device **can not** be guaranteed due to temperature development during charging.
Charge the device before measuring!

- Switch on the device.
- The device goes into battery charging mode. A large battery symbol appears on the screen.
- Once the battery is charged, the text "Charged" appears on the screen and the battery icon is no longer animated
- Disconnect the device from the USB cable. The device switches back to measurement mode and is ready for use.

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

B Usage via USB cable to the PC or laptop

- Connect the Clinotronic S with the cable to the PC or laptop
- The Clinotronic S is powered via the USB socket of the PC. The device remains in measuring mode

Note: If the device is connected to the PC via the USB cable, it is operated electrically.
But the battery is not charging.

5. Operation

5.1 Configurations

As stand alone device

for immediate measuring and reading

Wireless with an Android® smartphone and the free app "wylerUNIVERSAL" as a remote display

Wireless with the wylerCONNECT MINI for Windows computer

max 2 ⇒  wylerCONNECTMINI ⇒ PC 

e.g. with wylerEXPLORER

Note:	The wylerCONNECT MINI connects up to 2 Clinotronic S with the Windows computer. Use our software products: wylerEXPLORER: to display values. wylerCHART: to collect and display data with max. 2 Clinotronic S without sofware licence. SDK: to collect data with your own software. Visit: www.wylerag.com

---

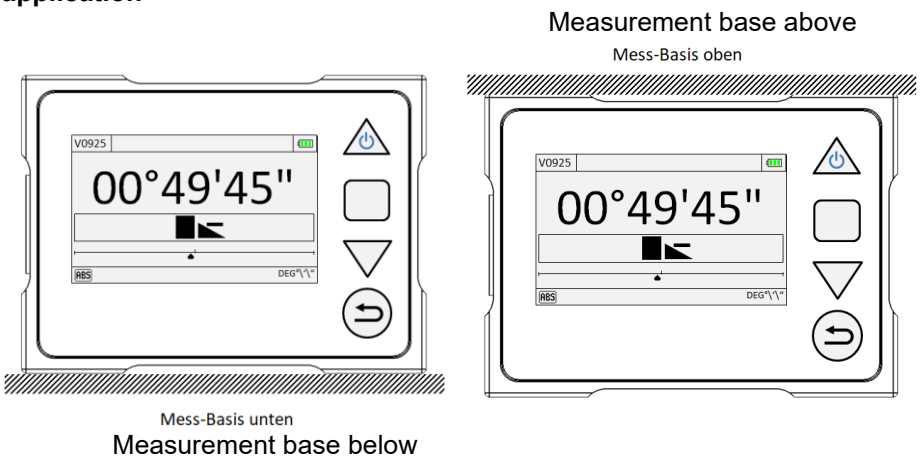
Connected via cable (USB-C / USB-A) with a Windows computer

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

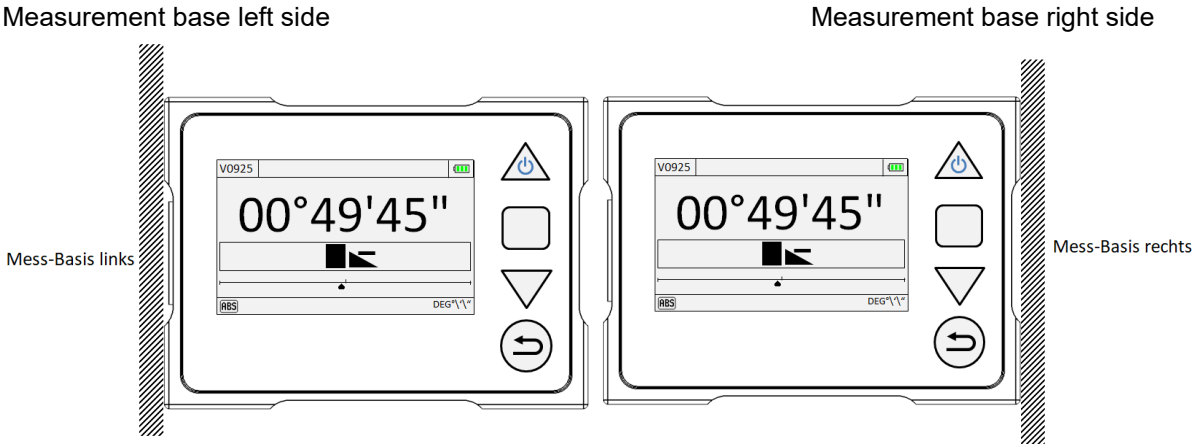
5.2 Measurment bases

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

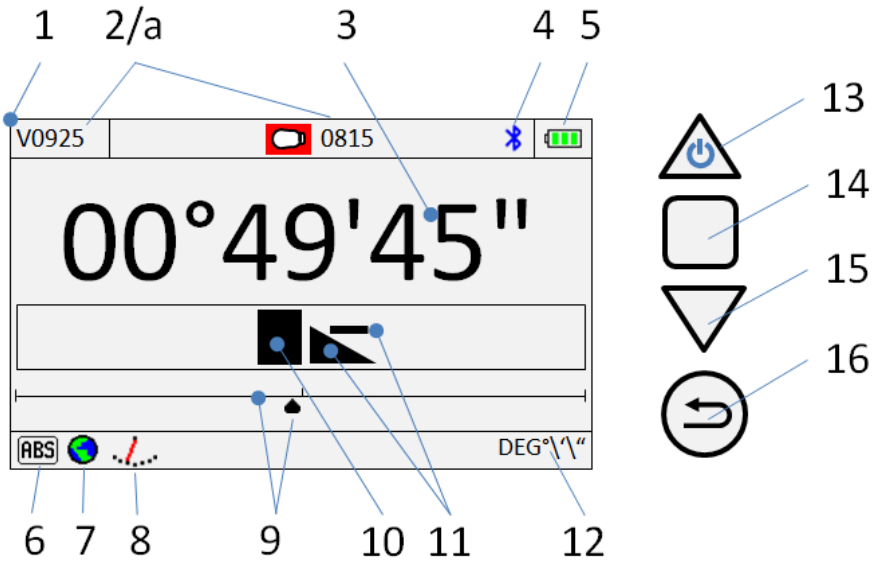
Horizontal application



Vertical application



5.3 Screen overview and keyboard

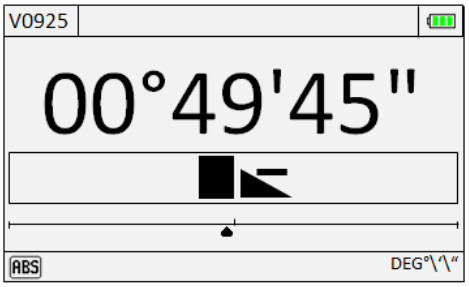


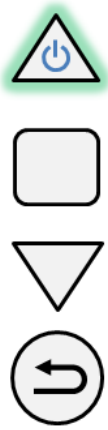
- 1 **Screen**
- 2 **Serial number; 2a IR number +** **1 x flash when triggered**
- 3 **Display of value** (depending on the selected unit)
- 4 **Radio** activated, not activated:
- 5 **Charge indicator** , empty , charging
- 6 **Mode of measurement** ABS = Absolute
  Mode of measurement *REL = Relative 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**
  Short cut (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

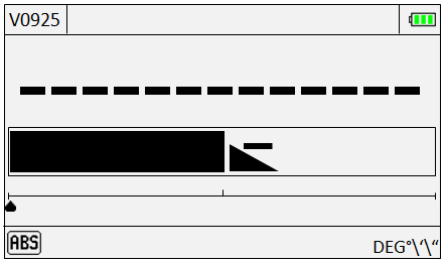
- To switch off press the button  until the following message appears:

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 Menu "Settings", entry and exit

- Press the button  to enter into menu "Settings"

In "Settings" contents:

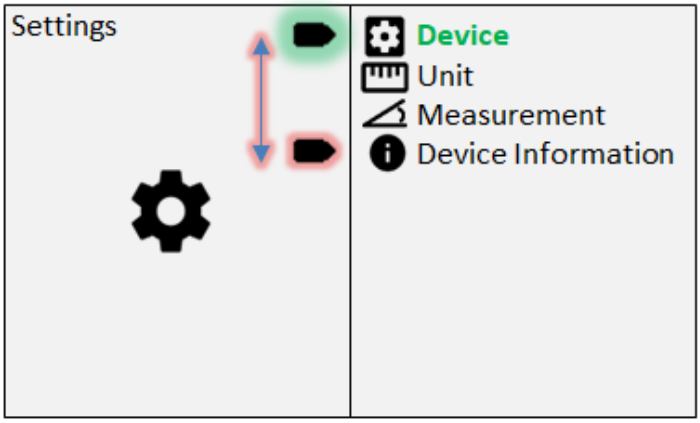
Device .....

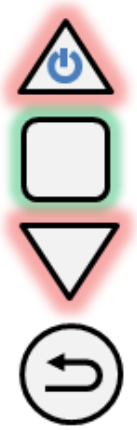
Unit.....

Measurement.....

Device Information.....

- Use the arrow up  and arrow down  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

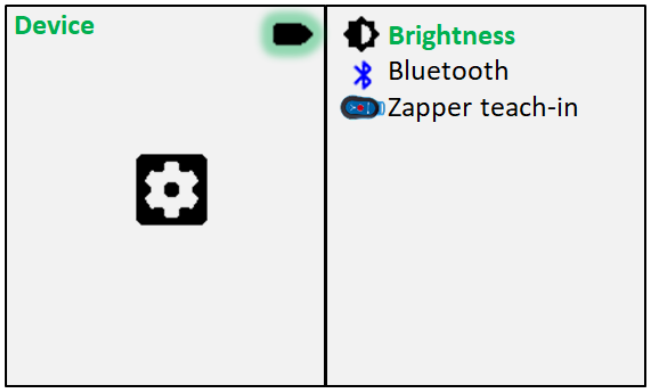
Note: With one or repeated clicks of  you will get back the next higher level in menu until the measurement mode appears

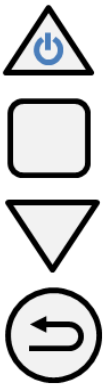
Note: With  you can also cancel any function (such as Relative Zero, etc.)

5.6 Settings in "Device"

Enter with  into the menu "Settings"

- Select with  the item "Device" 
- after that press: 





- "Device" contents:

  Brightness ..... 

  Bluetooth®..... 

  Zapper teach-in..... 

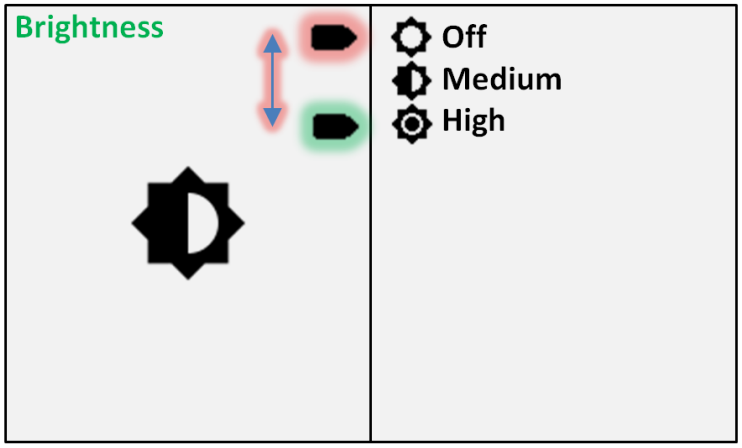
5.6.1 Device: "Brightness"

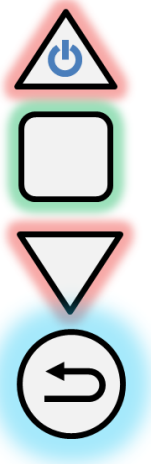
- In the menu"Devices" select with and the item "Brightness"
- Select with the desired brightness:

  Off

  Medium

  High





- Confirm with your choice

  or

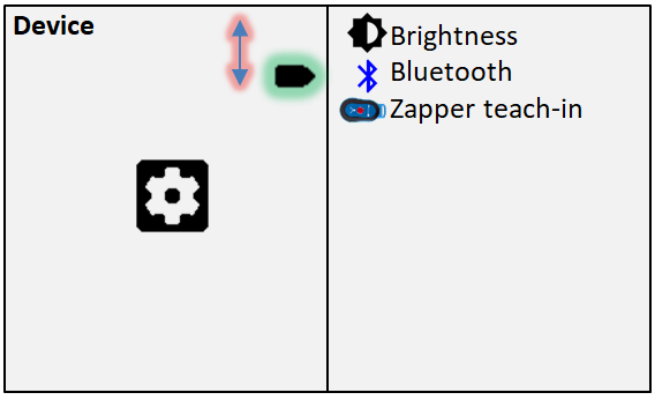
- cancel with

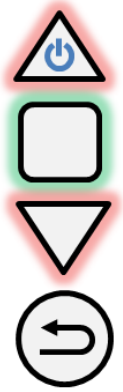
Note:	In both cases you will jump back to the "Device" menu
Attention !:	Depending on brightness level the unit consumes more power.

.

5.6.2 Device:"Bluetooth"

- In the menu "Device" select with  and  the item  "Bluetooth"

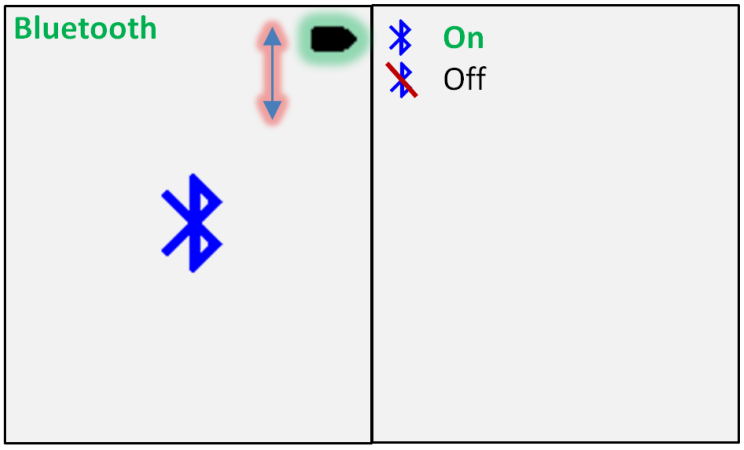


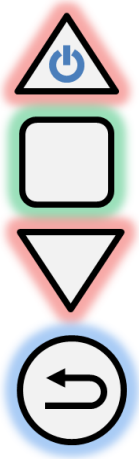


- Select  the desired setting:

  On 

  Off 





- Confirm with  your choice

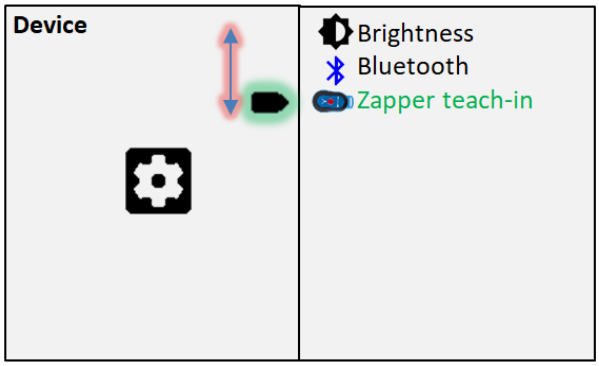
  or

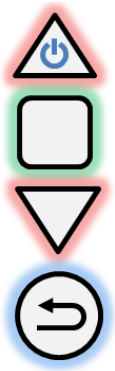
- cancel with 

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

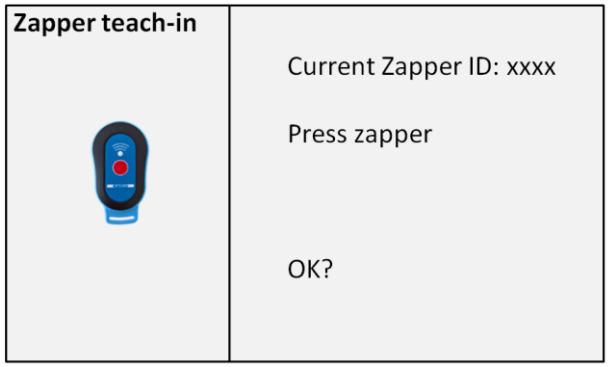
5.6.3 Zapper teach-in

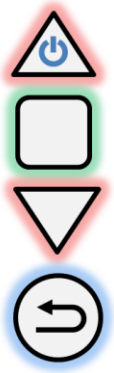
- In the menu "Device" select with  and  the item "Zapper teach-in" 



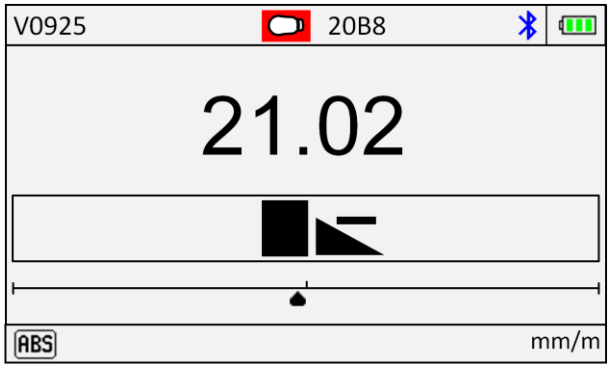


- Press the zapper (Infrared trigger) until "OK" appears.
- The zapper (Infrared trigger) is identified.





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

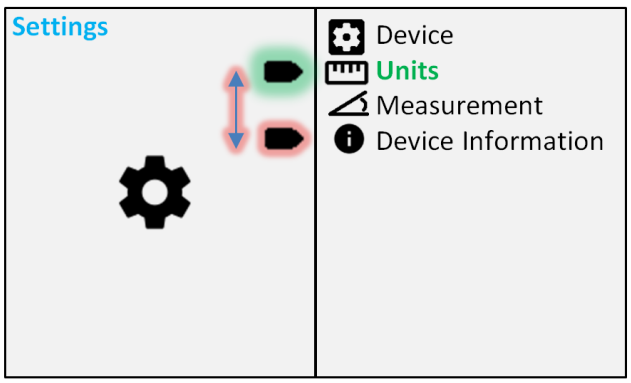


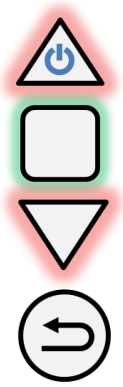
Note:	You can "Teach-in" several devices with the same Zapper Application: Alignment with multiple devices simultaneously

5.7 Settings in "Units"

Enter with  into menu "Settings"

- Select with  and  the item "Units"  , after that: 



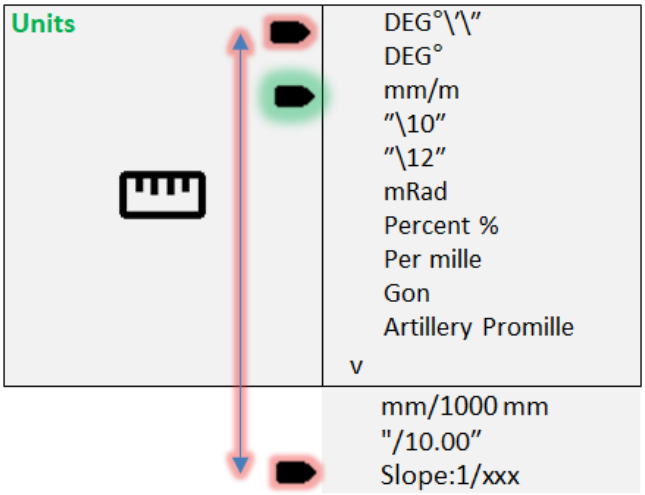


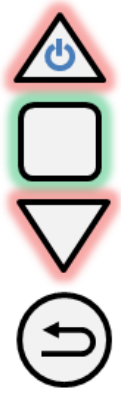
"Units" contents:

	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)

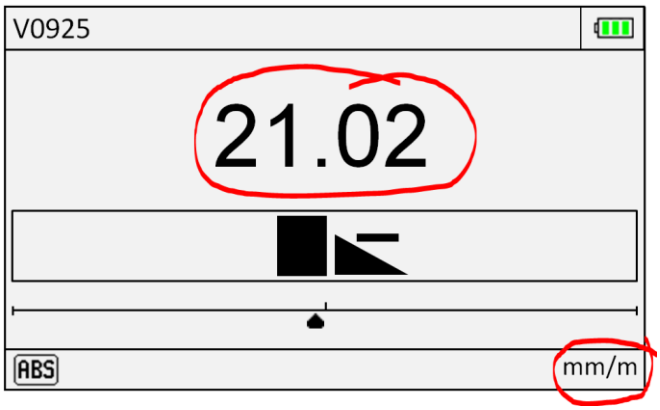
5.7.1 "Units"

- In the menu"Units" select with  and  the desired unit





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



The digits and the unit adapts accordingly your choice

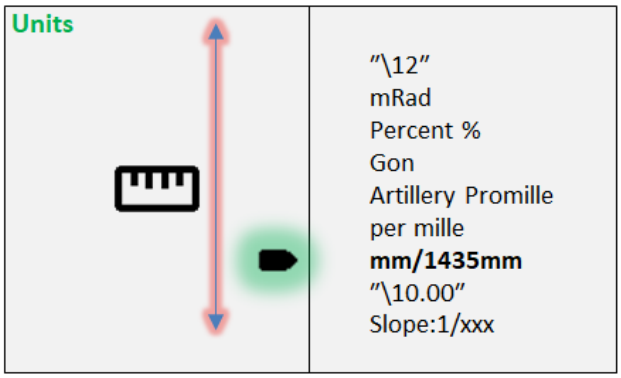
Note: Always check the unit at the beginning of a measurement!

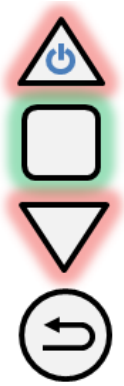
5.7.2 Self-selected base mm/xxxx mm

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

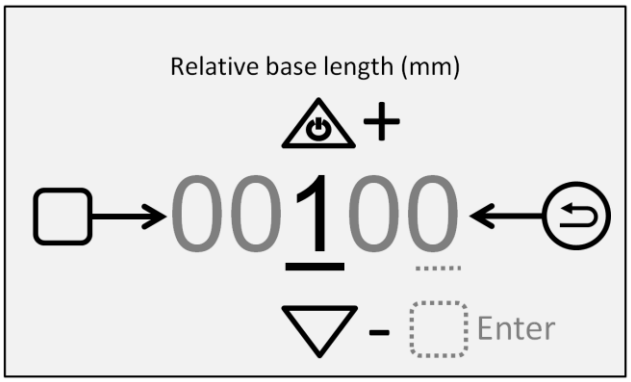
- In the menu "Units" select with  and  the item mm/1435mm

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





Value adjustment menu:

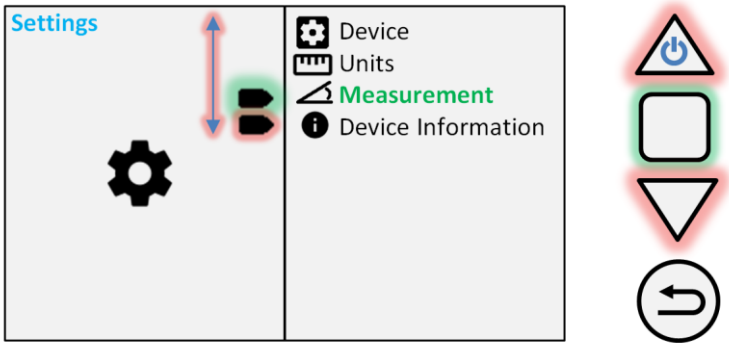


- Navigate with
   to the right
   to the left
- The value of the numbers change with
   in the direction of **+**
  in the direction of **-**
- Finish the input with  at the last digit
- In measuring mode, the modified unit appears at the bottom right

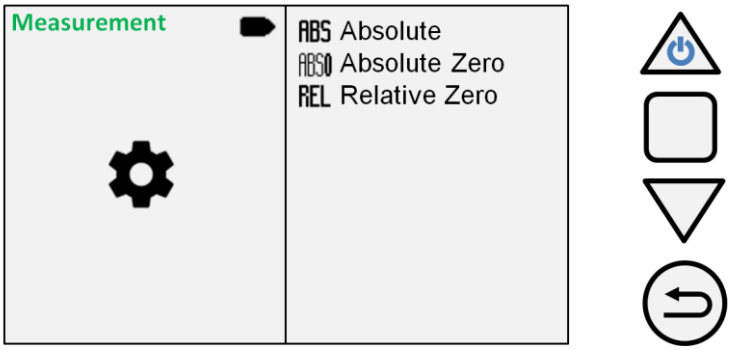
Note : The modified base also appears in the menu "Units"
Note : Correspondingly proceed with the unit "/10.00" (inches per selected base length in inches)

5.8 Type of Measurement

In the menu"Devices" select with  and  the item "Measurements" 



- after that: 



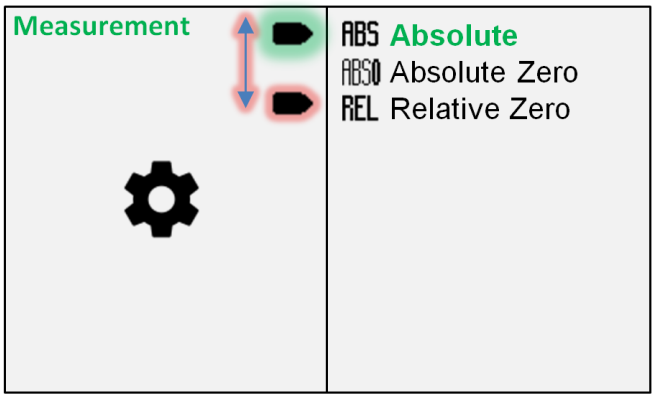
- The menu "Measurement" contents:

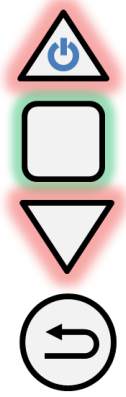
Absolute.....	ABS	uses last measured zero deviation
Absolute Zero	ABS0	triggers reversal measurement (zero deviation)
Relative Zero.....	REL	current position becomes reference level (relative zero)

5.8.1 Absolute measurement

Enter with  into Menu "Measurement"

- In the menu"Measurement" select with  the item "Absolut" ABS

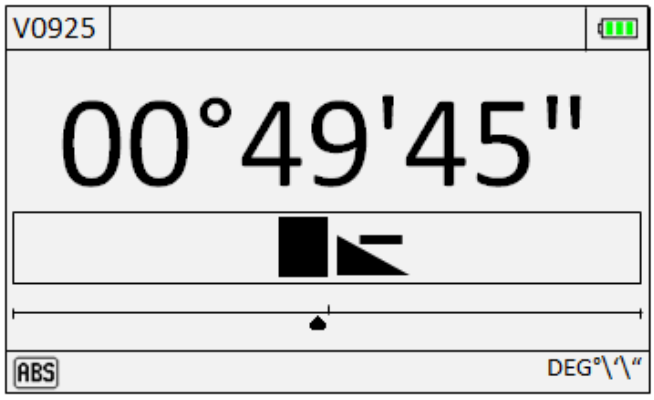


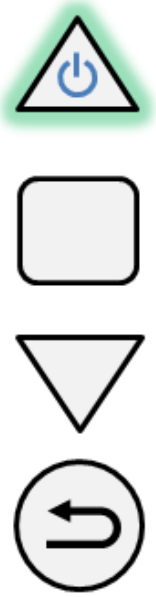


- after that: 
- The device returns into the measurement mode

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

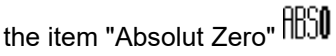
The measurement mode returns to **"Absolute"** ABS

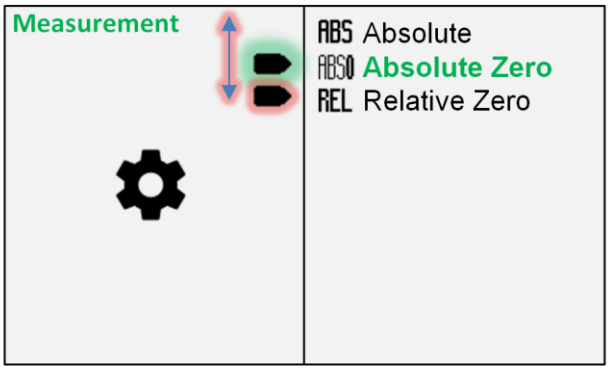


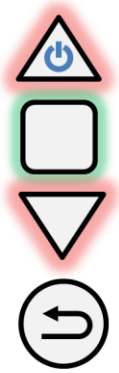


5.8.2 Reversal measurement "Absolute Zero"

Enter with  into Menu "Measurement"

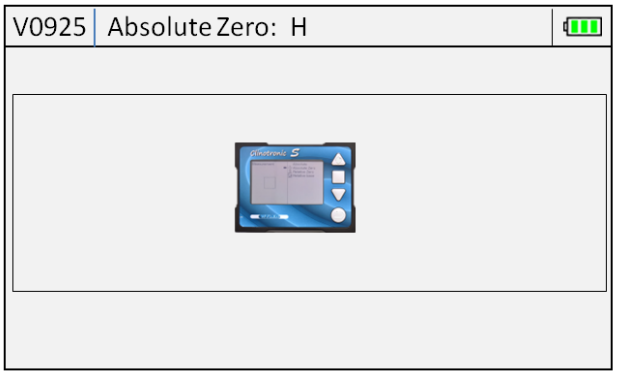
- In the menu"Measurement" select with  the item "Absolut Zero" 

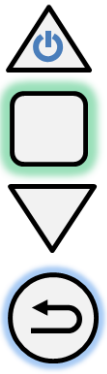




after that: 
The menu now guides you through the reversal measurement

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



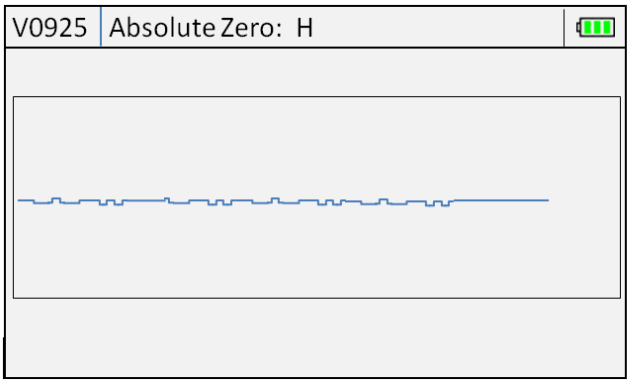


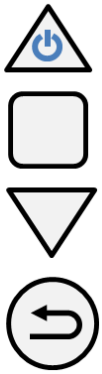
Note: To get a reliable reversal measurement the plateau should be aligned within +/- 0.06mm

- Trigger the measurement H with the IR trigger  or with 

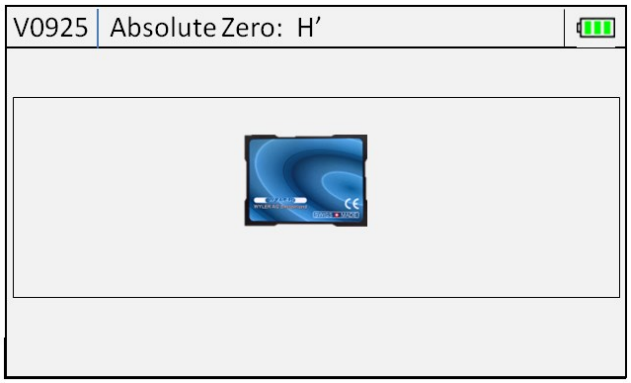
Note: You can cancel this process at any time with  and return to the measurement screen

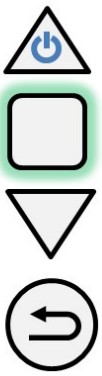
Please wait, the device records a stable value **H**.





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

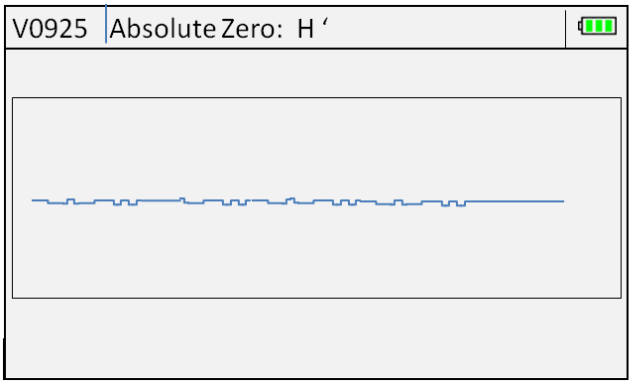


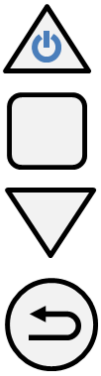


Now turn the device **at the same position** by 180°. → Position **H'**

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

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





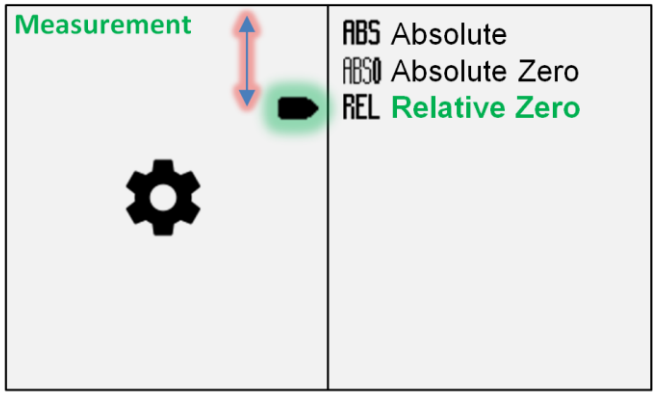
The device returns to the measuring mode immediately after reading the measured value H'

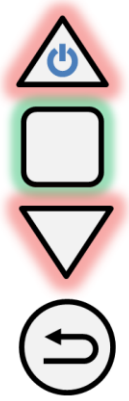
Attention !: The measurement mode "Relative Zero" is displayed with ABS at the bottom left

5.8.3 Temporary reference level "Relative Zero"

Enter with  into Menu "Measurement"

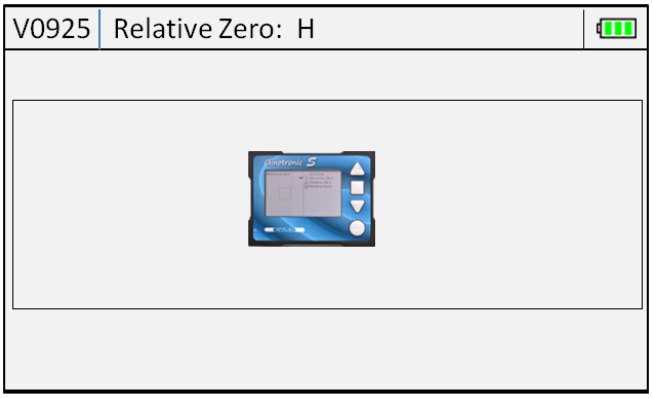
- In the menu"Measurement" select with  the item "Relative Zero" REL

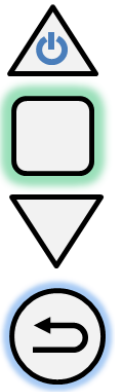




after that: 
The menu now guides you through the reversal measurement "Relative Zero"

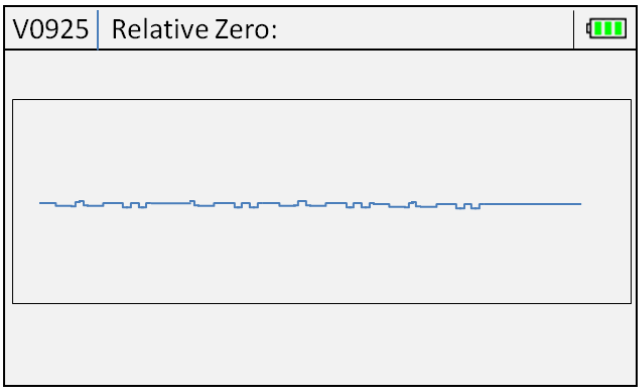
- Note: **Shortcut!** You can choose "Relative Zero" directly from the measurement mode by pressing 2 seconds (and then release) the button 

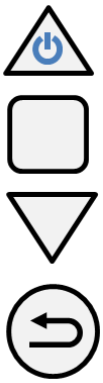




- Place the device on a **flat and stable** surface. → Position **H**
- Trigger the measurement H with the IR trigger  or with 
- Note: You can cancel this process at any time with  and return to the measurement screen

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

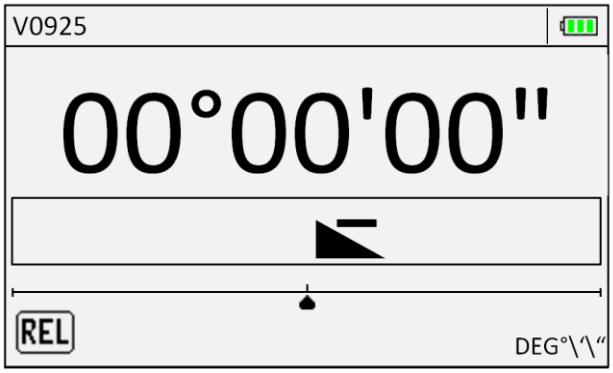


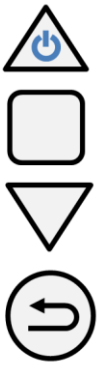


Attention !: Please do not touch the device until the measured value is recorded!

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





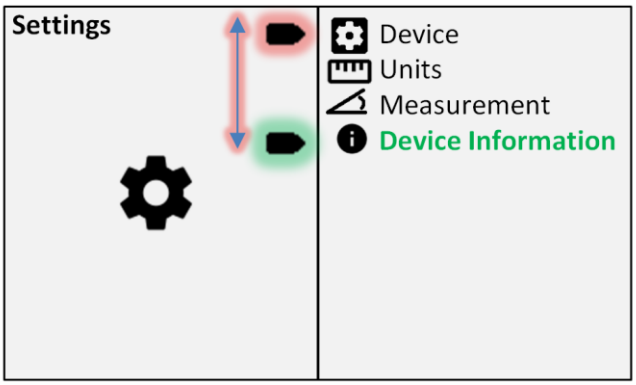
The device has now set the current level to relative zero

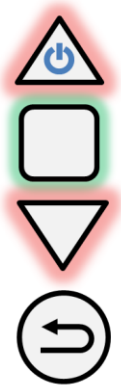
Note: Around the zero position, the inclination triangle including the sign can alternate between + and -. This is not a malfunction.

5.9 Device Info

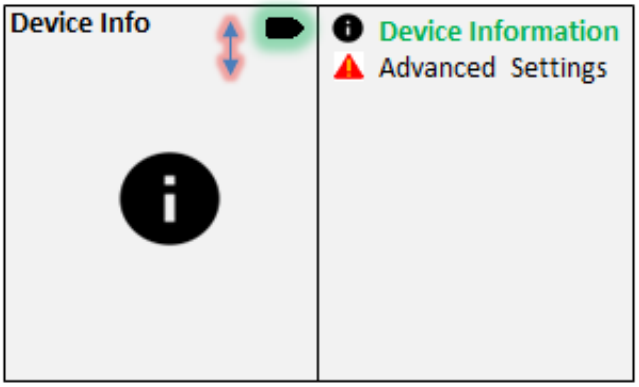
Enter with  into the Menu "Settings"

- Select with  and  the item "Device Information"





- after that: 



- "Device Info" contents:

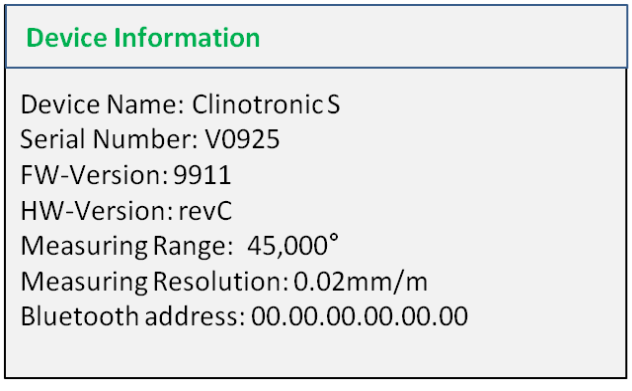
  Device Information  Firmware etc.

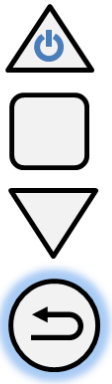
  Advanced Settings 

Note: with  you return back into the Menu "Settings".

5.9.1 Device Info

Enter with  into the Menu "Device Information"





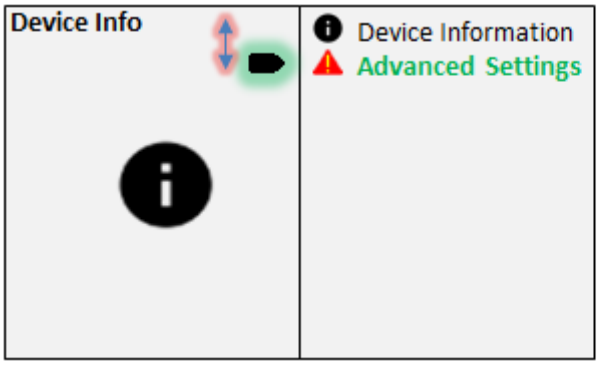
List of internal data.
The firmware version changes when a firmware update has been made.

- Note: with  you return back into the measurement mode.

5.9.2 Advanced Settings

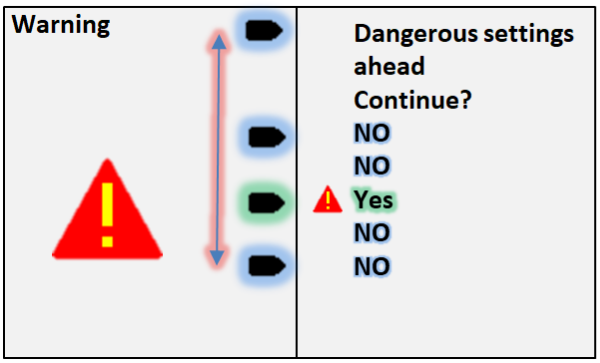
Enter with  into Menu "Device Information"

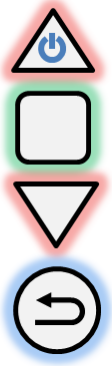
- Select with  the item **Advanced Settings,** after that press: 



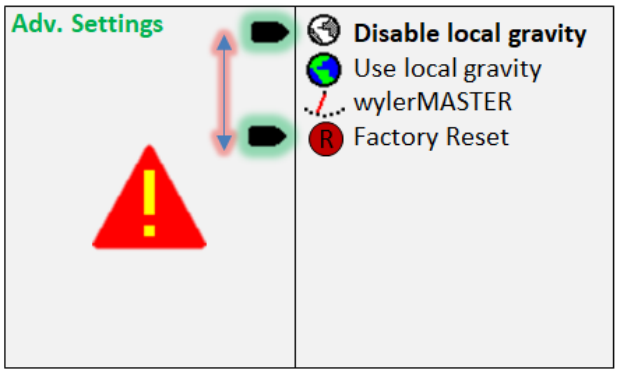
Select with  the item "Yes"

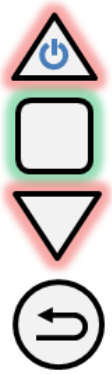
Attention !: This procedure prevents accidental manipulation.





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





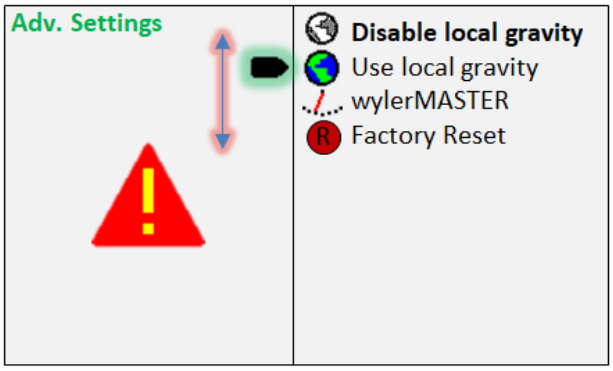
"Adv. Settings" contents:

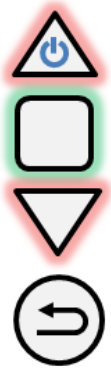
Disable local gravity.....	Reset local gravity to default 9.8065 m/s²
Use local gravity.....	Set local gravity
wylerMASTER.....	Calibration mit wylerMASTER (not included)
Factory Reset.....	Back to factory settings

5.9.2.1 Use Local gravity

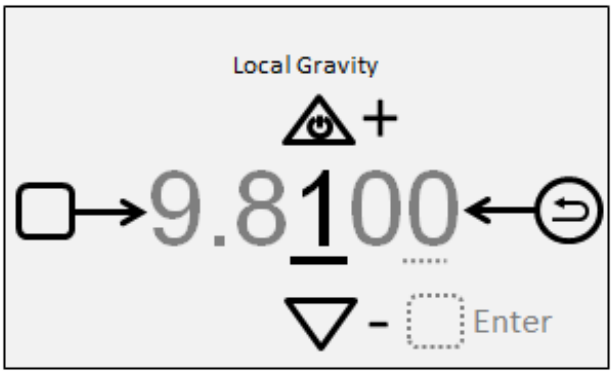
In the menu "Device info" select with  and  the item " Advanced Settings".

- Enter with  "Use local gravity" 





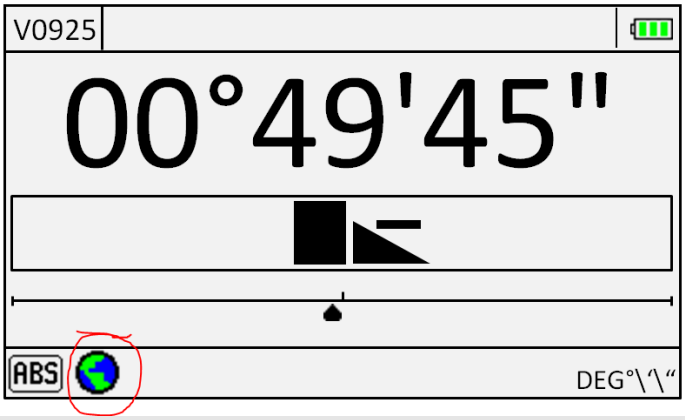
after that: 



  - Navigate with  to the right
     to the left
  - The value of the numbers change with
     in the direction of **+**
    in the direction of **-**
  - Finish the with  at the last digit

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

The device returns to measuring mode.

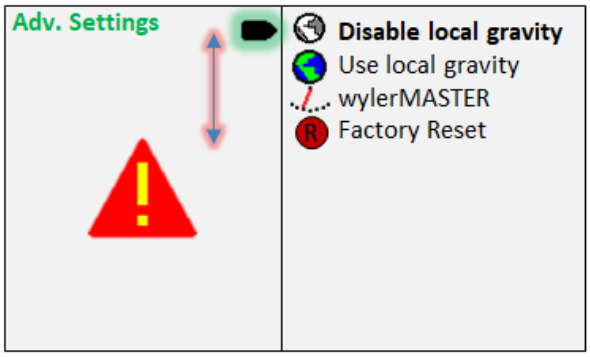


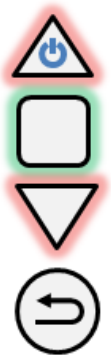
Note: The measurement mode shows the globe symbol as a sign of using the local gravity

5.9.2.2 Disable local gravity

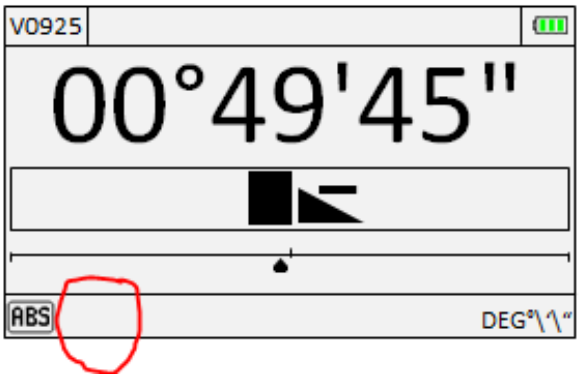
In the menu "Device info" select with  and  the item " Advanced Settings".

- Select with  "Disable local gravity" 





after that: 

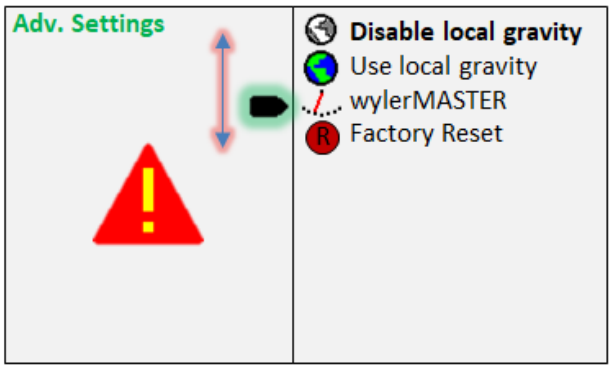


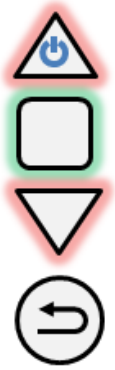
The globe icon disappears, so the default value of 9.8065 is restored.

5.9.2.3 wylerMASTER calibration

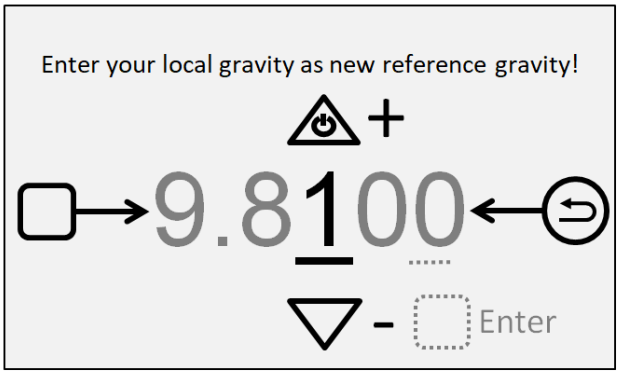
Attention!:	A calibration with the wylerMASTER requires the input of your local gravitation constant. It becomes the new reference! This makes it possible to continue to use the item "Use local gravity"! With factory reset you can return to factory settings.
Attention !:	The wylerMASTER itself must stand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

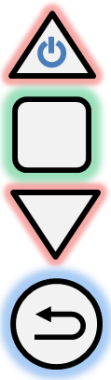
- In the menu "Device info" select with and the item " Advanced Settings".
- Select with "wylerMASTER" , after that





- Enter your local gravitational constant.



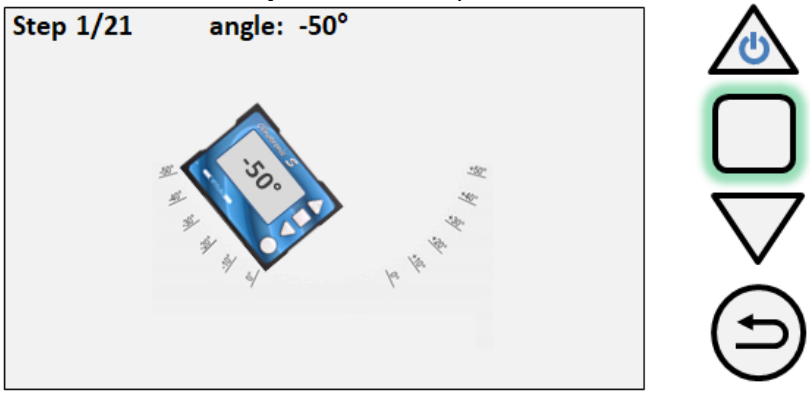


  - Navigate with to the right, with to the left
  - Change the value with in the direction of + with in the direction of -
  - Finish the input with at the last digit.

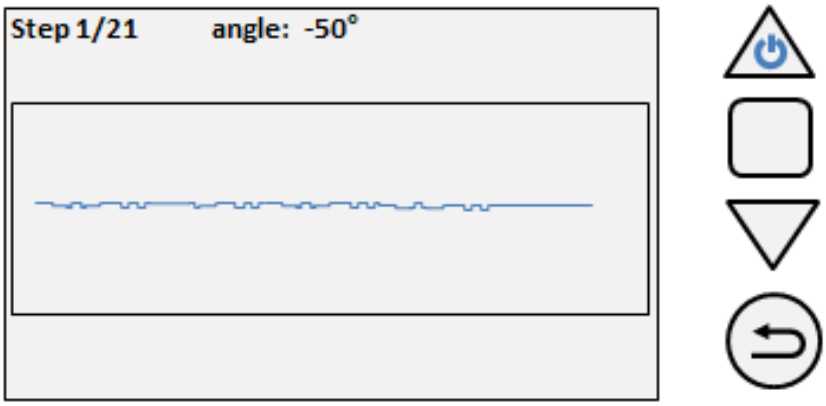
The calibration begins:

Note: The menu will guide you through the process.

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

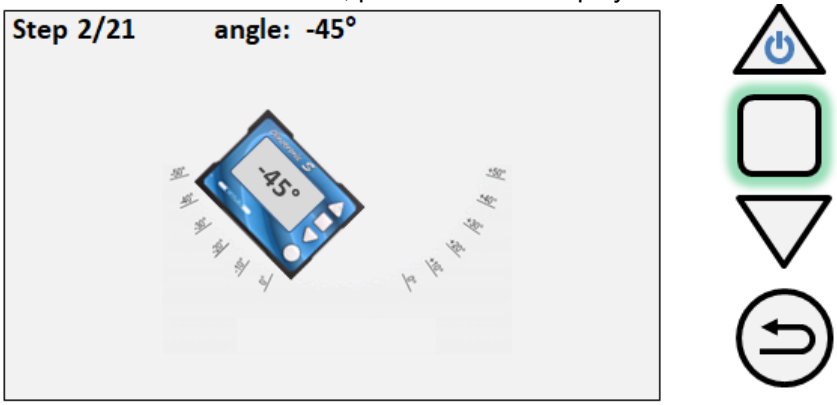


With the trigger  or pressing  start the measurement.



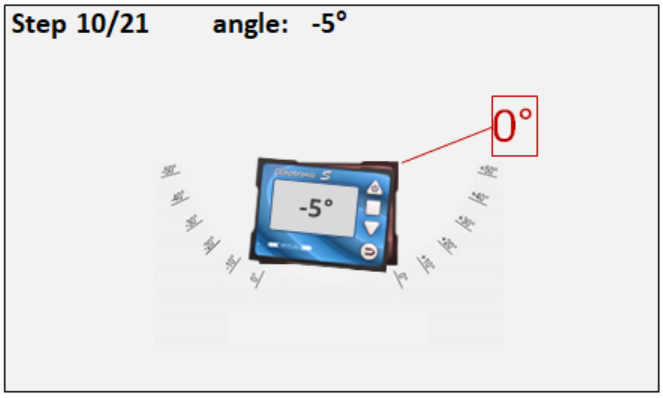
Note: You can cancel the calibration at any time with 
The last calibration is retained. The device returns to measuring mode

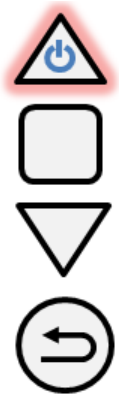
After successful measurement, position 2/21 is displayed at **- 45 °**



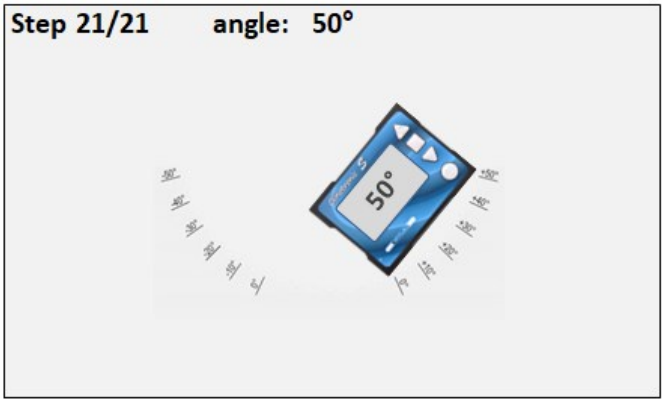
Note: You can measure a failed calibration point again.

Press  the last measurement is canceled. E.g. from 0° back to -5°



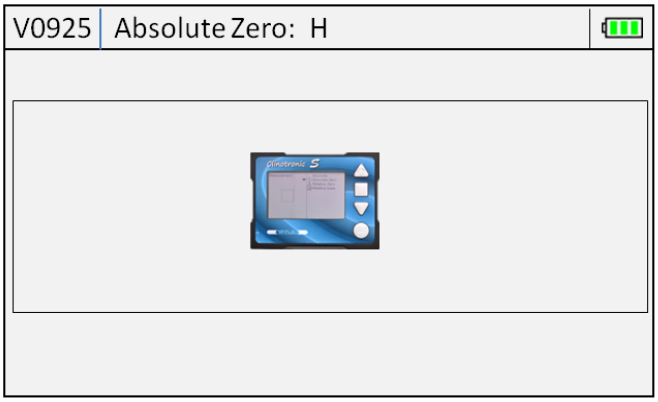


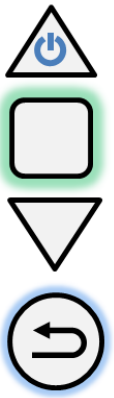
- Carry out the calibration according to the above steps until the 21st (last) measurement.



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

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



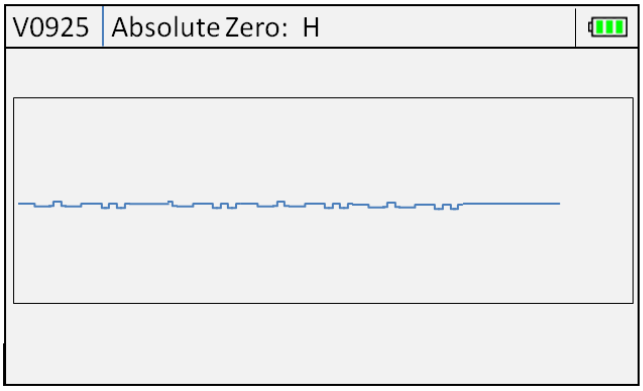


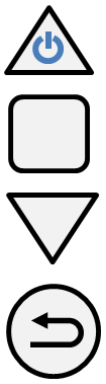
Note: To get a reliable reversal measurement the plateau should be aligned within +/- 0.06mm

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

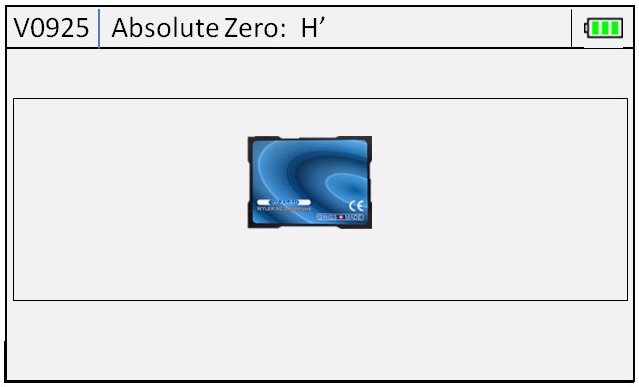
Note : You can cancel this process at any time with and return to the measurement screen

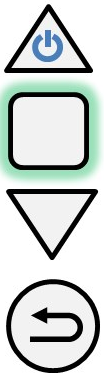
Please wait, the device records a stable value **H**.





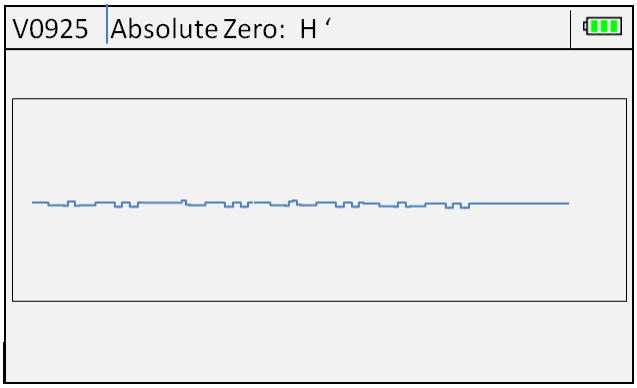
Attention !: Please do not touch the device until the measured value is recorded!

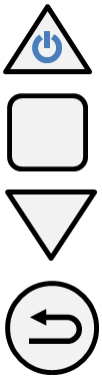




- Now turn the device **at the same position** by 180°. → Position **H'**
- Trigger the measurement **H'** with the IR trigger  or with 

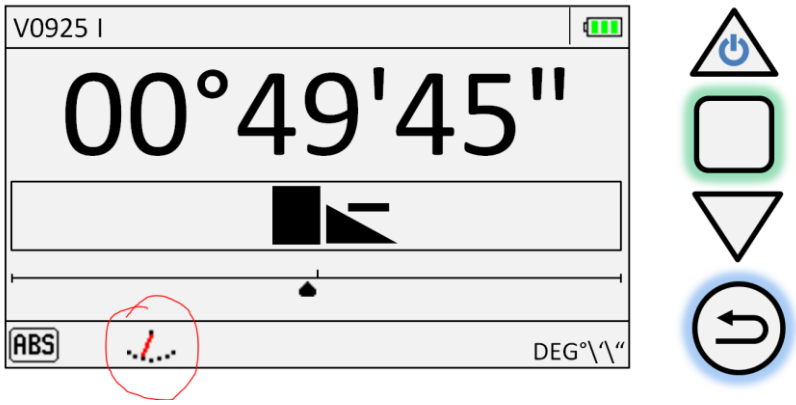
Attention !: Please do not touch the device until the measured value is recorded!





- Device automatically returns to measuring mode

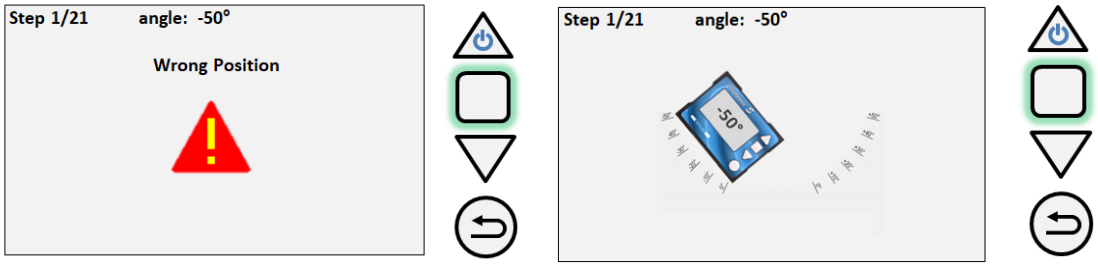
Attention!: The device shows with  the new status executed wylerMASTER calibration



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.**



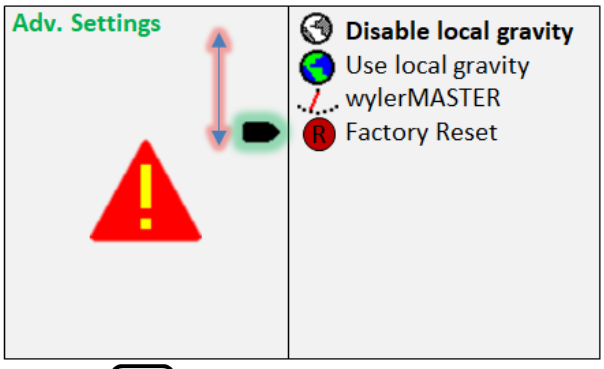
Note: The measuring range after a wylerMASTER calibration is 45 °
After a factory reset, the measuring range is slightly increased at about 46.7 °

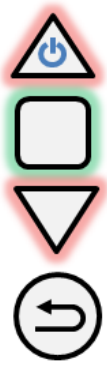
5.9.2.4 Factory Reset

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

In the menu"Device info" select with  and  the item " Advanced Settttings

- Select with  the item "FactoryReset"

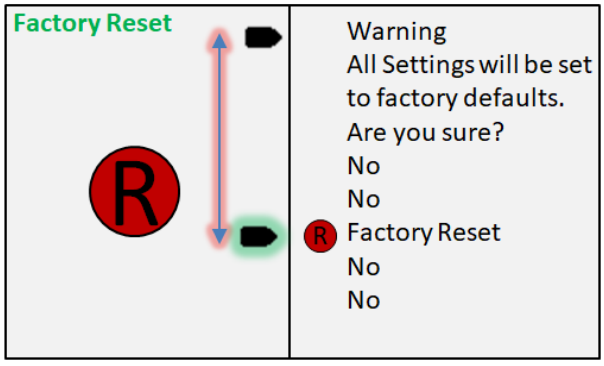


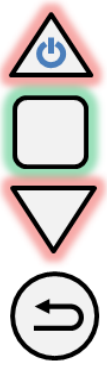


after that: 

- Select with  the item "Factory Reset"

Attention !:	This procedure prevents accidental manipulation





Attention !:	The Clinotronic S contents now original data in memory. For a precise absolute measurement please carry out a reversal measurement process according to chapter 5.8.2.

6. Maintenance

For safe operation

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

Cleaning

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

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/en/contact/representatives/

Repackaging before re-transport

Ship the device in a suitcase 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/en/contact/representatives/

otherwise contact us directly

7. 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 properly.

8. Document version and release notes

Date		Text:	Author:	checked
02.05. 2019	R1.1.1.	First Edition	A.Schuhmacher	MS
20.05.2021	R1.2	Reformulate battery charging behaviour	M.Stalder	SA
22.07.2021	R1.3	New Logo, New Doc.-no.	A.Schuhmacher	MS
27.01.2022	2.0	Fixed tipo, Edition	A.Schuhmacher	MS
21.07.2022	3.0	Definition of the options, Edition	Urs Kammacher	KM