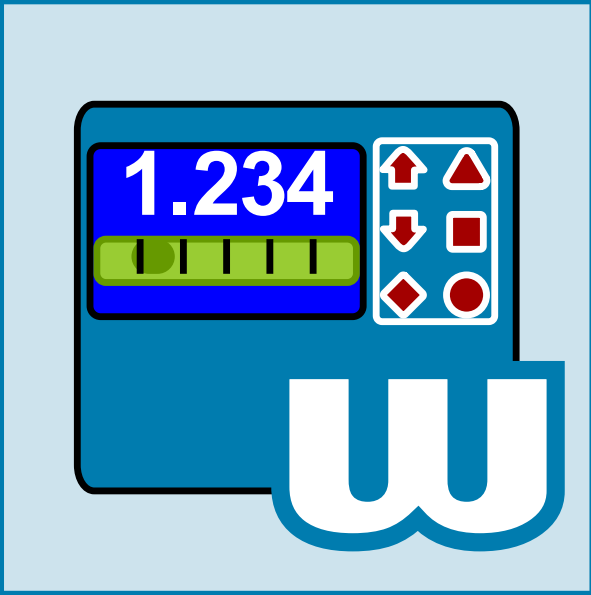
Release 2.0
947-MA-0027-E

Manual

APP wylerUNIVERSAL



WYLER AG - Inclination Measuring Systems
Im Hölderli 13, 8405 Winterthur, Switzerland
+41 52 233 66 66 | wyler@wylerag.com | www.wylerag.com

Swiss Quality

Table of contents

1. Introduction

This document is a user manual and contains information on operating the APP wylerUNIVERSAL. Please read these operating instructions carefully before using the APP wylerUNIVERSAL for the first time.

It is advisable to acquire this understanding in a product training course. A well-founded introduction will enable you to learn important skills and use the app optimally. You can attend product training courses either with us or with one of our partner companies. You can acquire the following knowledge:

- Correct handling of the measuring devices and the corresponding software
- Getting to know the different measuring methods

In addition to a training course, you will find explanations of the basics of inclination measurement technology in the compendium " The secrets of inclination measurement ", which can be found on our homepage: www.wylerag.com.

1.1 Labeling system

This symbol is used to highlight useful information and tips.

1.2 Other applicable documents

The following documents on our homepage (www.wylerag.com) are helpful when using the APP wylerUNIVERSAL:

- Compendium "The secrets of inclination measurement"
- Data sheet for technical data on the measuring device
- Declaration of conformity (DOC)
- Current version of the manual

2. Description of the APP wylerUNIVERSAL

The APP wylerUNIVERSAL enables a remote display of measured values from different measuring devices and sensors in real time.

In the APP wylerUNIVERSAL, various parameters, such as the unit of measurement or measuring mode, can be set and values from up to four measuring devices/sensors can be displayed in parallel. If several devices are connected, it is also possible to display the measured values in the differential mode. The measured values can also be saved and exported as a CSV file.

3. Handling

Observe the following points in order to achieve the most accurate measurement values possible:

Regularly carry out a reversal measurement with the connected measuring device/sensor, especially before a measurement. The wylerTRIGGER can be used.

Also observe the instructions for handling the connected measuring device/sensor, which are described in the respective operating instructions.

3.1 Installation

The APP wylerUNIVERSAL can be downloaded free from the Google Play Store (Android).

NOTE

Android based devices with an operating system from Android 11 and a resolution of 1480x720 pixels are compatible.

3.2 Configuration

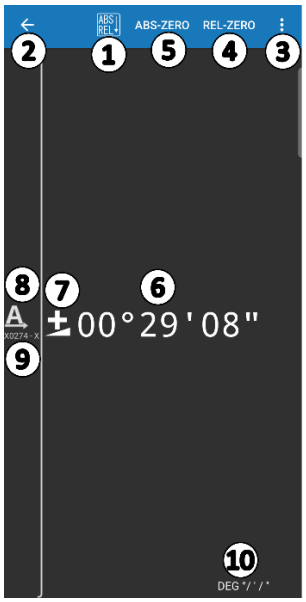
The APP wylerUNIVERSAL can be connected to the following measuring devices/sensors:

- BlueLEVEL (from version 530/5.0.30.0)
- BlueLEVEL II (from version 1.0.16.0)
- BlueLEVEL-2D (from version 469/4.0.69.0)
- wylerLEVEL (from version 1.0.0.0)
- wylerLEVEL Frame (from version 1.0.0.0)
- BlueCLINO (from version 478/4.0.78.0)
- BlueCLINO HP (from version 478/4.0.78.0)
- wylerCLINO (from version 1.0.0.0)
- wylerCLINO Frame (from version 1.0.0.0)
- ZEROTRONIC connected via a wylerACCESS
- Clinotronic S (from version 1.0.0.0)

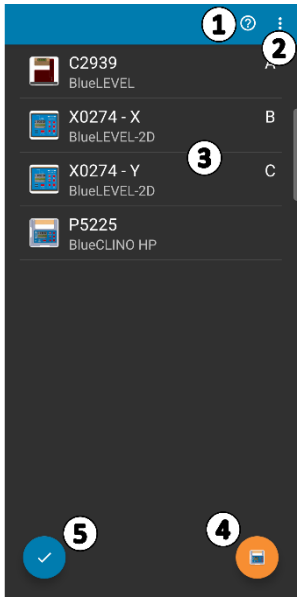
A maximum of 4 measuring channels can be connected to the APP wylerUNIVERSAL. Most measuring devices have one measuring channel, exceptions are the BlueLEVEL-2D with 2 measuring channels and the wylerACCESS, which also has several measuring channels. The various devices can also be combined with each other.

3.3 Page overview

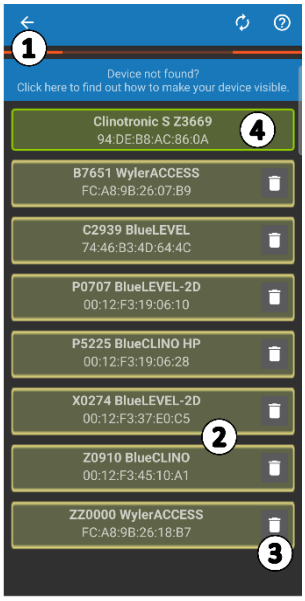
The various pages of the APP wylerUNIVERSAL are described below:



Live value page	
1	Change measuring mode
2	Back to the device selection page
3	Change unit of measurement/display type
4	Save reference level for relative measurement
5	Reversal measurement
6	Measured value
7	**Inclination direction:** ± positive inclination ⊏ negative inclination
8	Measuring channel
9	Serial number
10	Currently set unit of measurement



Device selection page	
1	Instructions for connecting the app to measuring devices/sensors
2	Advanced settings
3	List of stored devices
4	Device search button
5	Confirmation button



Device connection side

1	Back to the device selection page
2	List of stored devices
3	Delete saved device
4	Available new devices

CSV page

1	Back to the device selection page
2	Open settings
3	List with all saved measured values
4	Add measured value to the list
5	Remove measured value from the list
6	Export list as CSV file
7	Start new list (delete all measured values)

4. Device Management

Measuring devices can only be connected to the app via Bluetooth.

To connect ZEROTRONIC to the app, the wylerACCESS is required, which forwards the measured values to the APP wylerUNIVERSAL via Bluetooth.

4.1 Save new devices

To connect new devices to the APP wylerUNIVERSAL, they must first be saved in the app.

Start the search for available devices using the device search button. The device connection page appears, and the desired device can be selected. The saved device is now displayed on the device selection page and can be connected for measurements.

NOTE

If devices are connected via an interface (e.g. a wylerACCESS), the app initially only displays the interface on the device connection page, not the individual devices. These will only be displayed later on the device selection page.

Repeat the same process to add more devices. The devices remain saved until they are deleted manually.

4.2 Connect devices

After saving one or more devices in the app, they can now be connected to the app. Up to four devices can be connected to the app at the same time.

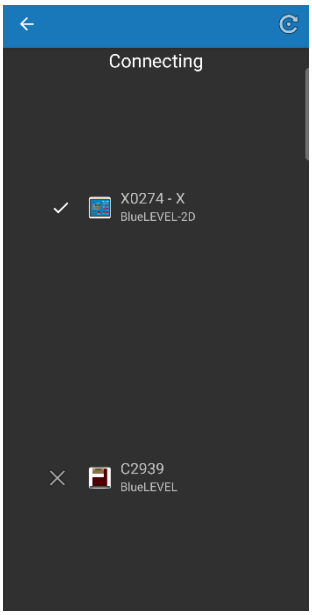
Make sure that the device to be connected is switched on. You can then select the desired device on the device selection page and start the connection with the confirmation button.

If there are several devices, the measuring channels are assigned according to the order of selection. The device selected first is assigned to measuring channel "A", the second to measuring channel "B" and so on. Once you have selected all devices, you can start the connection with the confirmation button.

If the connection is successful, the live value page appears. The measured values of the selected measuring channels are displayed there.

4.3 Connection problems

If there are connection problems, an error message will appear on the display.



Check the following points and then try to reconnect the measuring devices using the button :

1. Check whether the measuring device displaying the error message is outside the connection range. If the measuring devices are out of range, no connection can be established.

2. Make sure that the measuring device is switched on and Bluetooth is activated. If the "BT Discoverable" function is available on the measuring device, this must also be switched on.

3. Make sure that a compatible firm version is installed on the measuring device. Refer to the chapter 3.2 Configuration.

4.4 Display versions

When selecting the measuring devices, you must specify how the measured values of the connected measuring devices/sensors are to be displayed.

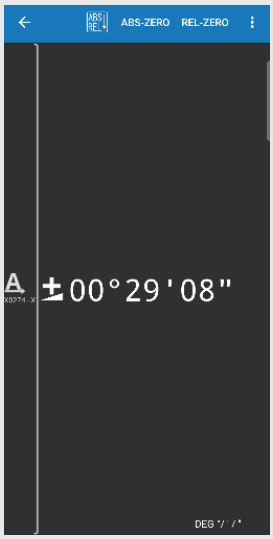
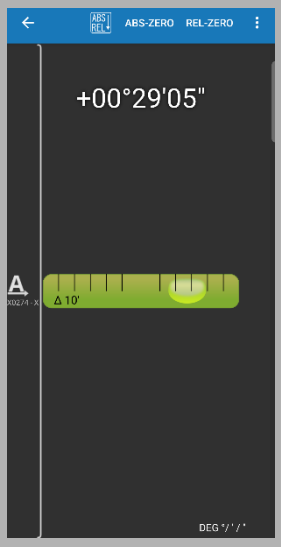
On the one hand, there is the individual display: The measured values of all connected devices are shown individually on the smartphone display.

Secondly, there is the difference display: The difference between the measured values of two devices is then calculated and displayed in the app by swipping to the right.

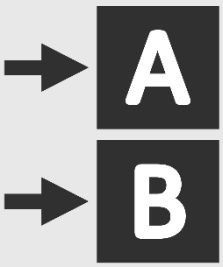
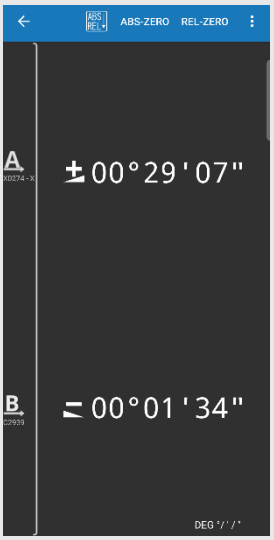
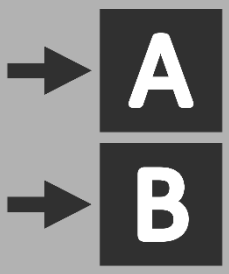
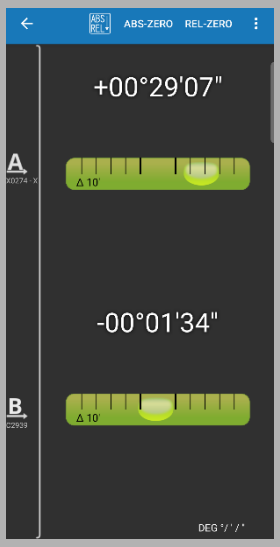
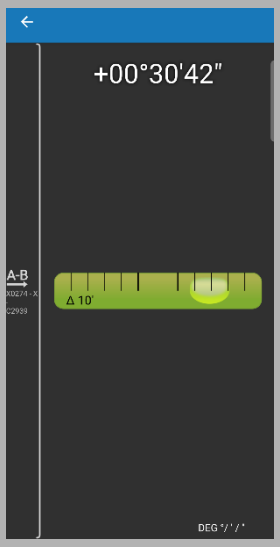
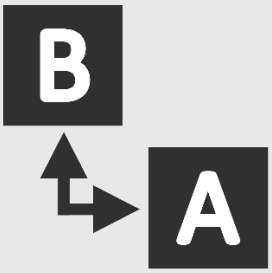
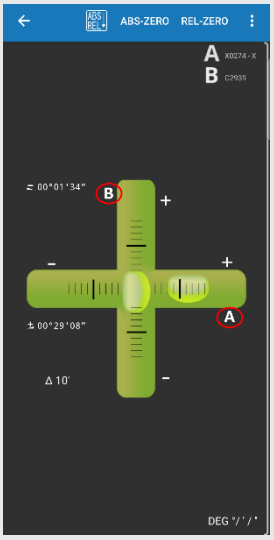
You can also switch between the "numerical", "simple level" and "cross level" display types.

Depending on the number of connected devices, the following display types are possible:

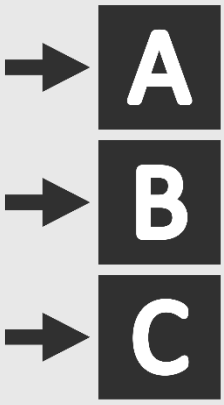
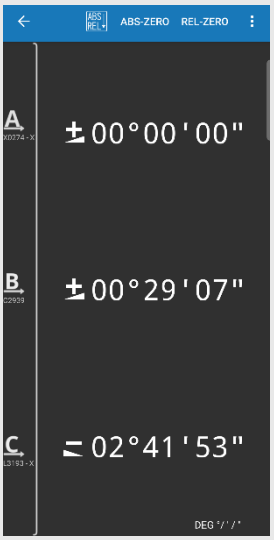
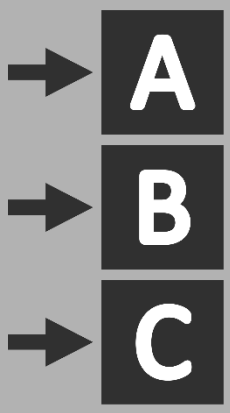
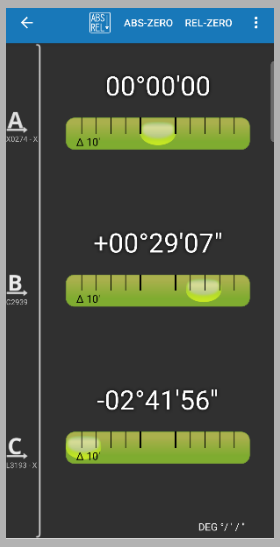
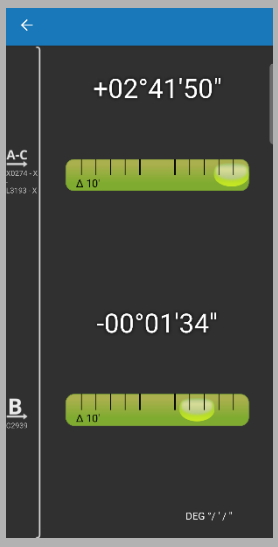
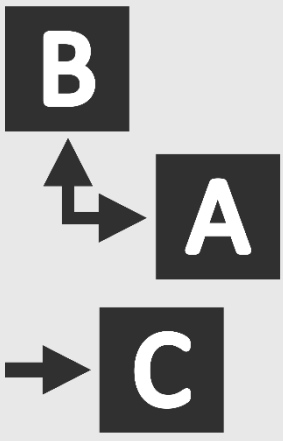
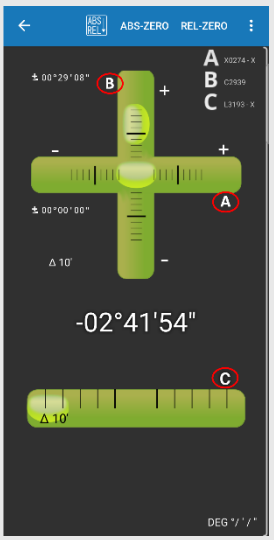
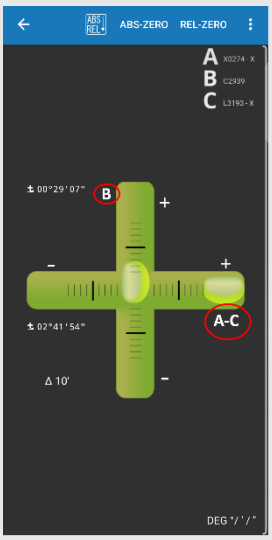
One measuring channel

Measuring direction	Individual mode	Differential mode
		Not possible
		Not possible

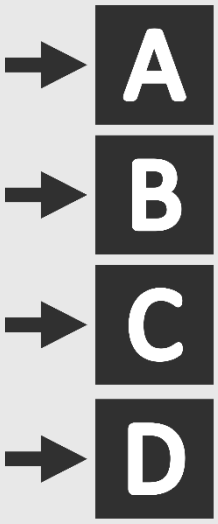
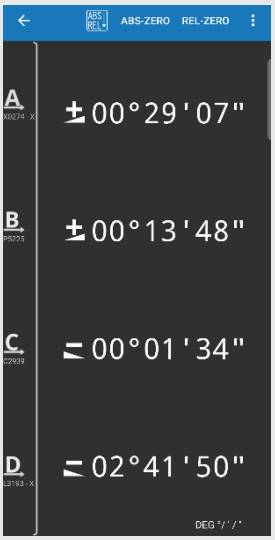
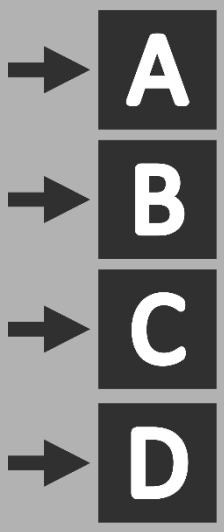
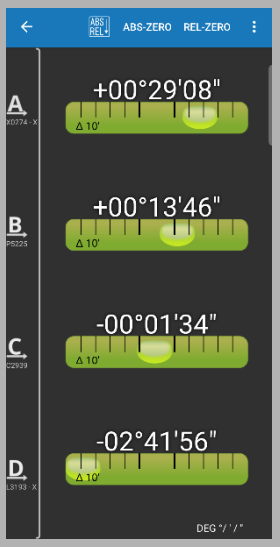
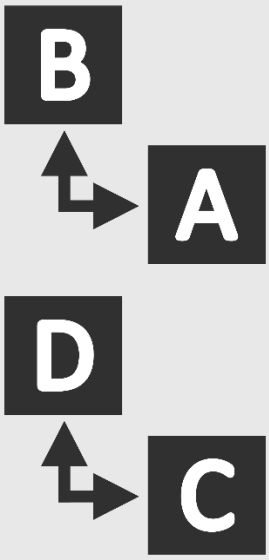
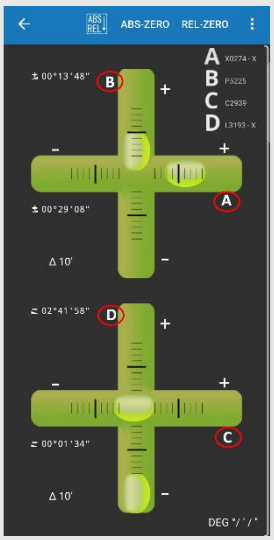
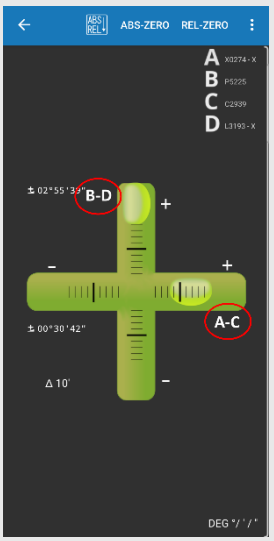
Two measuring channels

Measuring direction	Individual mode	Differential mode
		
		
		Not possible

Three measuring channels

Measuring direction	Individual mode	Differential mode
		
		
		

Four measuring channels

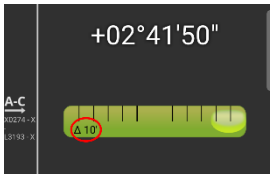
Measuring direction	Individual mode	Differential mode
		
		
		

You specify which device is assigned to which measuring channel when connecting the device. You can find more information on this in chapter 4.2 Connect devices.

On the live value page, you can switch between the different display types using the settings button .

On the live value page, you can switch between individual and differential mode by swiping to the right.

With the "simple level" and "cross level" display types, the scale division can be changed using the volume buttons. The current value of the scale division is displayed below the vial.



4.5 Delete saved devices

The devices remain stored until they are deleted manually.

On the device connection page, the devices can be deleted using the delete button .

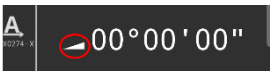
5. Functions

5.1 Settings

You can open the settings via the settings button on the device selection page.

There you can, for example, set the display to remain permanently switched on during the measurement.

You can also adjust the tilt sign so that only the symbol is displayed - without a plus or minus sign.



5.2 Reversal measurement

You can start the reversal measurement using the reversal measurement button ABS-ZERO. Measurement H and measurement H' can now be carried out. The value of the zero offset is only updated after confirmation with "Write Offsets".

The reversal measurement is carried out simultaneously with all connected devices.

Do not touch the measuring device during the measurement to avoid measurement errors. The measurement is completed automatically and the calculated value is displayed.

NOTE

After a waiting time of 15 seconds to stabilize the signal, the app uses the measured values of the last 3 seconds to calculate the two measuring positions H and H' to calculate the zero offset.

After each measurement, the app displays a symbol to indicate how stable the measured value was. The app evaluates the standard deviation of the measured values of the last 3 seconds.

Symbol	Meaning
	The standard deviation of the last 3 seconds is less than 1.5x the digit increment value. The measured value is ok.
	The standard deviation of the last 3 seconds is between 1.5x and 2.5x the digit increment value. The measured value is moderate.
	The standard deviation of the last 3 seconds is above 2.5x the digit increment value. The measured value determined is critical.
	An error occurred during the envelope measurement or the relevant measuring device is outside its measuring range. (overrange/underrange)
	The wylerACCESS is occupied by another software.

However, this information is only an approximate estimate of the zero offset. You must therefore assess the zero offset yourself. Only complete the reversal measurement if the value appears realistic.

If a device is in overrange/underrange, the measurement is blocked for this device. The device in question is excluded from the reversal measurement and the zero offset for this device is not updated. This does not affect the other devices.

The value of the reversal measurement is saved in the device. This means that the same measured values appear on the display of the device and on the display of the smartphone.

5.3 Measuring mode: absolute/relative measurement

The measuring mode of the device can be adapted to the respective measuring situations.

In absolute measurement, the measuring device measures on the basis of the absolute horizontal plane, i.e. the inclination of the plane to be measured is determined using the absolute zero point. The measuring device uses the last determined zero offset for zero point correction.

In relative measurement, on the other hand, the measuring device measures on the basis of a previously defined reference plane. The inclination of the reference plane is set as a relative zero point for the relative measurement and the inclination is determined using this relative zero point for subsequent measurements.

The "Rel Zero-Offset", or the inclination of the reference plane, is only saved in the app. On the device display, the measured values are still shown in absolute measurement mode. This means that the measured values on the display of the device and those on the display of the smartphone may differ.

The "Rel Zero-Offset" must be re-learned each time a new measurement is started. When leaving the live value page, the "Rel Zero Offset" is always set to "0".

To save the inclination of the reference plane, place the measuring device on the plane. The measurement can then be started using the button REL-ZERO.

Do not touch the device during the measurement to avoid measurement errors. The measurement is completed automatically and the determined value is displayed.

NOTE

After a waiting time of 15 seconds to stabilize the signal, the app uses the measured values of the last 3 seconds to calculate the "Rel Zero-Offset".

NOTE

The inclination of the reference plane is saved until you leave the live value page. The button  can be used to switch back and forth between absolute measurement and relative measurement.

5.4 Selection of the unit of measurement

The measured values can be displayed in different units of measurement. The button can be used to select between the different units. The selected unit of measurement is saved until the next change.

The unit "Relative Baselength" refers to a relative base length (in mm), which is freely selectable from 100 to 10'000. The inclination is specified in relation to the set base length.

Before this unit can be selected, the relative base length must be entered using the settings button on the device selection page.

5.5 CSV files

The measured values can be saved in a list and exported as a CSV file.

You can use the settings button to set the start value (Set Start) and the increment (Set Increment).

Use the plus button to save the current value to the list and the minus button to remove the last value from the list. Measured values can also be triggered with the wylerTRIGGER and saved in the list.

The list can be exported in CSV format using the button EXPORT.

The button NEW can be used to start a new list (all values are deleted).

6. Appendix

6.1 Manufacturers and sales partners

For inquiries from Switzerland we are at your disposal:

WYLER AG
Inclination Measuring Systems
Im Hölderli 13
8405 Winterthur
Switzerland

+41 52 233 66 66
wyler@wylerag.com
www.wylerag.com

The local contacts are available to you abroad. Further information about our partners can be found on our homepage: www.wylerag.com.

Changes

Revision	Description	Name	Date
0.3	Initial Version	N. Stalder	26.06.2025
1.0	Geprüft und freigegeben	M. Stalder	26.06.2025
1.1	Minor changes regarding the translation	N. Stalder	07.08.2025
2.0	Geprüft und freigegeben	M. Stalder	07.08.2025

WYLER AG - Inclination Measuring Systems
Im Hölderli 13, 8405 Winterthur, Switzerland
+41 52 233 66 66 | wyler@wylerag.com | www.wylerag.com

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