EXPERT PLUS

Instruction manual for the PIKO Analyst - Software Version V1.07

as of 2026-02-01

PIKO Spielwaren GmbH • 96515 Sonneberg, GERMANY • Tel.: +49 3675 / 8972-55 • Fax: +49 3675 / 8972-50 • E-Mail: hotline@piko.de

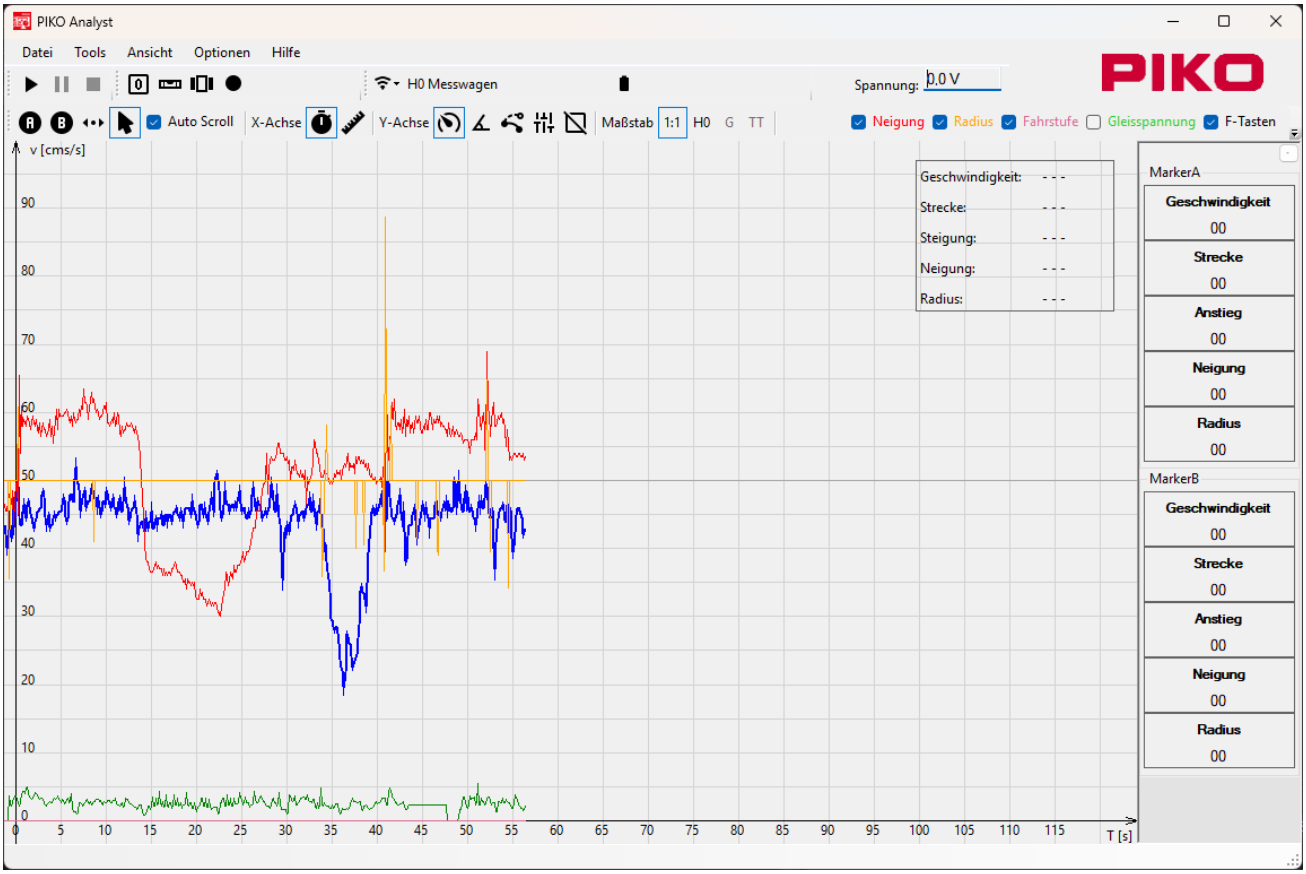
1 Foreword

Congratulations on your purchase of PIKO Analyst, the analysis program for graphical evaluation of your test results with the innovative PIKO measuring cars for the track sizes H0 (#55050 ff), TT (#47770 ff) and G (#37841).

This instruction manual wants to illustrate the productive use of the PIKO Analyst software and is divided into two parts.

The first part describes the first steps in the handling of the software and the functions of the different measuring areas.

The second part deals with the practical application of the software. There you can find information about the usage possibilities during test runs (e. g. the location of voltage problems on the track).



PIKO Spielwaren GmbH • 96515 Sonneberg, GERMANY • Tel.: +49 3675 / 8972-55 • Fax: +49 3675 / 8972-50 • E-Mail: hotline@piko.de

2 Index

PIKO Spielwaren GmbH • 96515 Sonneberg, GERMANY • Tel.: +49 3675 / 8972-55 • Fax: +49 3675 / 8972-50 • E-Mail: hotline@piko.de

3 License terms

This is a legally valid software license agreement between you as a natural or legal person (hereinafter called “user”) and the company PIKO Spielwaren GmbH, Luther St. 30, 96515 Sonneberg, Germany (hereinafter called “licensor”). By opening/using the software the user declares as being legally bound by the conditions of this agreement. The software, the data carrier, the manual and all associated documents as well as copies or parts of those documents and all symbols used in the documents are products of the licensor. All copyrights, names, patents and other intellectual property rights are exclusively entitled to the licensor.

PIKO Spielwaren GmbH • 96515 Sonneberg, GERMANY • Tel.: +49 3675 / 8972-55 • Fax: +49 3675 / 8972-50 • E-Mail: hotline@piko.de

4 First steps

4.1 Installation via Microsoft Store

You can install the software via the Microsoft Store.
Start the Microsoft Store application on your Windows PC.

Search for ***PIKO*** in the Microsoft Store.
There you will find the adjacent installation for PIKO Analyst.

Alternatively, you can purchase via our webshop www.piko-shop.de
→Important links
→ About PIKO Analyst software
to call up the link to the Microsoft Store.

In the Microsoft Store app on the PIKO Analyst product page, select the [Download] / [Install] button

The application is offered for free download in the Microsoft Store. A paid license is required to use the application. You can purchase this from your model railroad dealer or via the PIKO Shop.

PIKO Spielwaren GmbH • 96515 Sonneberg, GERMANY • Tel.: +49 3675 / 8972-55 • Fax: +49 3675 / 8972-50 • E-Mail: hotline@piko.de

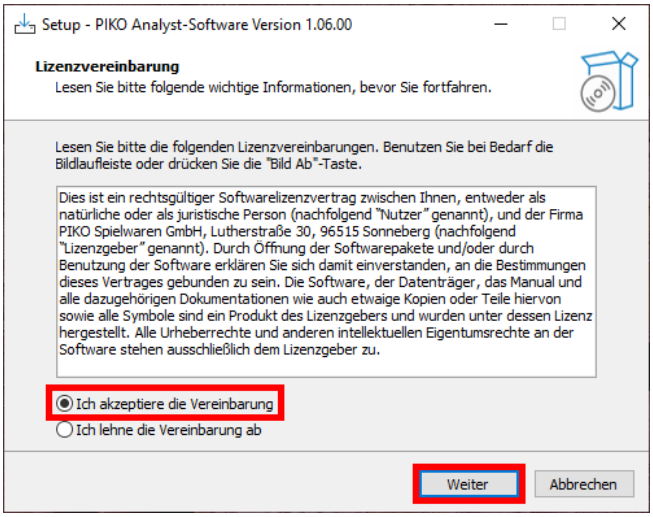
4.2 Installation via CD (2025)

Insert the product CD into the CD/DVD drive. The installation screen will appear after a few seconds.

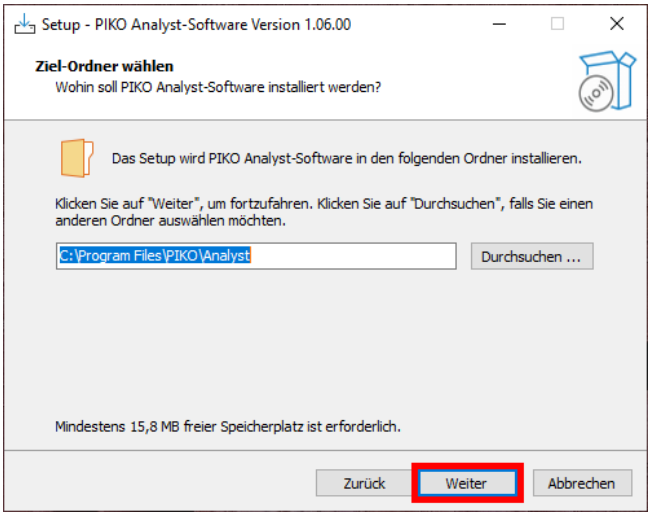
1. Run "Setup.exe"

If automatic playback does not start, open the CD drive in Explorer and double-click "Setup.exe".

2. Follow the on-screen instructions

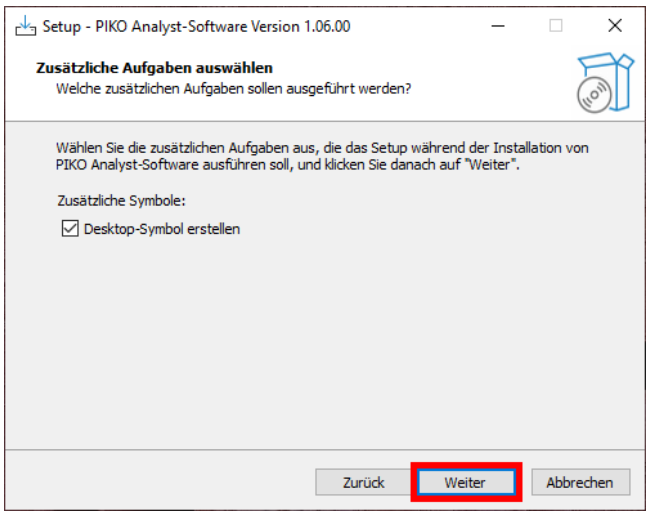


Acceptance of our license agreement is required to continue the installation via [Next].

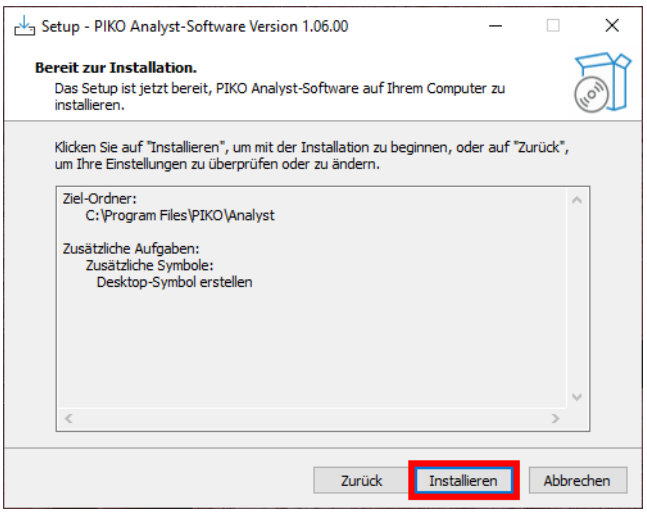


You can select the folder for the installation.

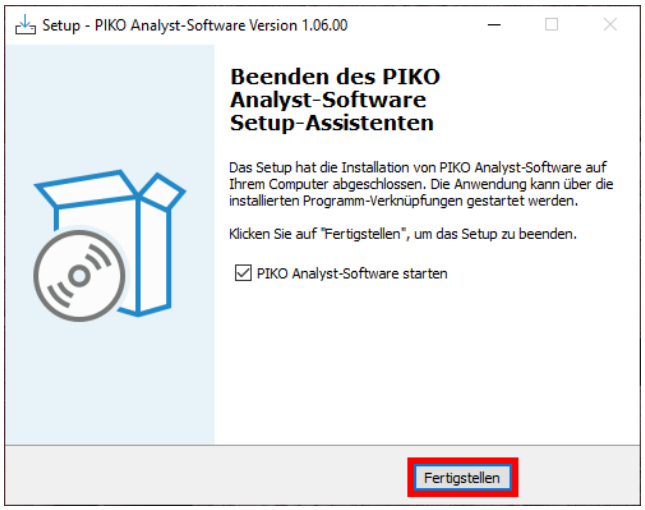
PIKO Spielwaren GmbH • 96515 Sonneberg, GERMANY • Tel.: +49 3675 / 8972-55 • Fax: +49 3675 / 8972-50 • E-Mail: hotline@piko.de



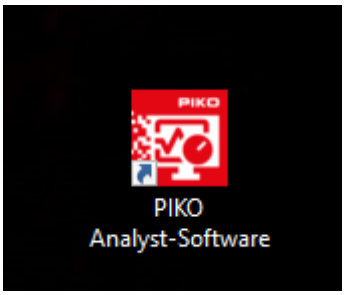
An icon is created on the desktop by default; you can deselect this option.



A summary of the selected options is displayed.



You can start the program directly at the end of the installation process.

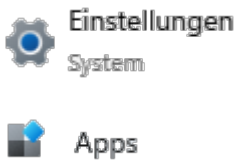


If you have selected the "Desktop icon" option, this icon will be added to your desktop

PIKO Spielwaren GmbH • 96515 Sonneberg, GERMANY • Tel.: +49 3675 / 8972-55 • Fax: +49 3675 / 8972-50 • E-Mail: hotline@piko.de

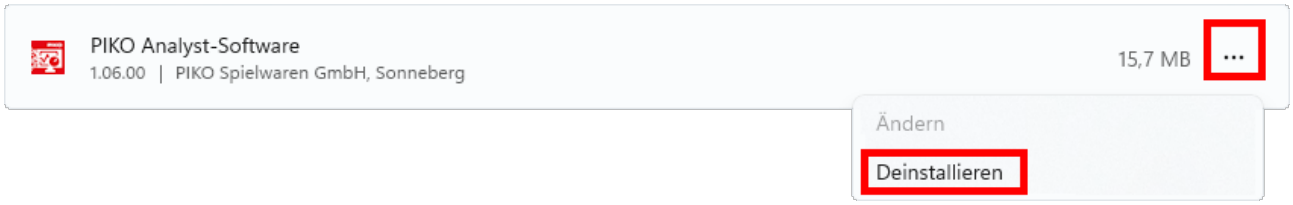
4.3 Manual uninstallation

1. Open the settings on your Windows PC



2. Select the Apps tab in the menu

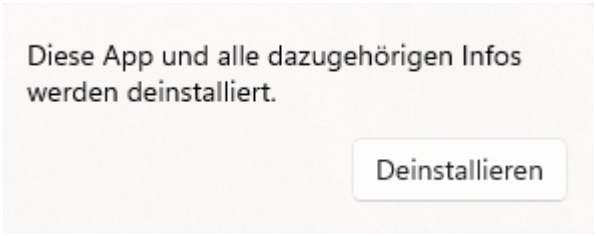
3. Search for PIKO



4. Click on the [...] button.

5. Select [Uninstall] there

6. Confirm the uninstallation of the software in the following dialog



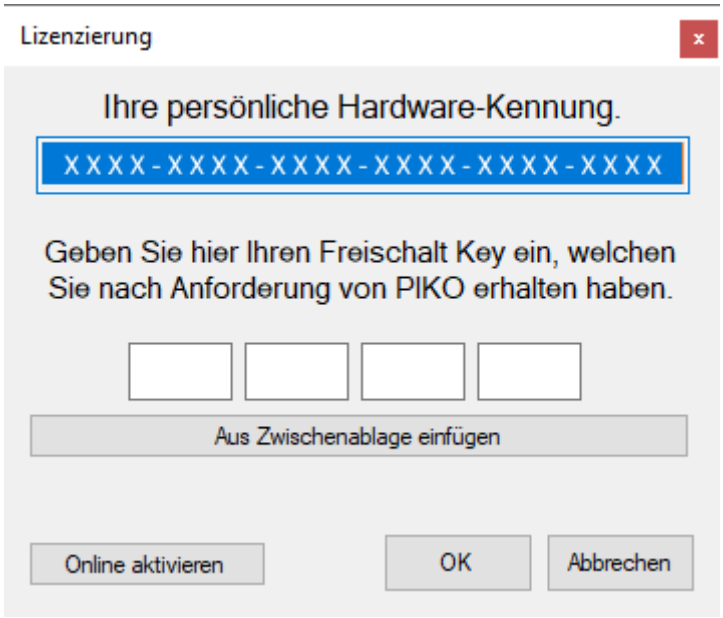
PIKO Spielwaren GmbH • 96515 Sonneberg, GERMANY • Tel.: +49 3675 / 8972-55 • Fax: +49 3675 / 8972-50 • E-Mail: hotline@piko.de

4.4 Licensing

The PIKO Analyst app cannot be used without a valid activation key.

To activate the app, you need an activation key, which you can purchase from your model railway dealer or via the PIKO Shop.

The software displays the necessary dialogue box when it starts up.



A window opens in which six groups of digits are displayed, this is the hardware identification of your PC.

4.4.1 Online activation

Select the [Activate online] button. In the following dialog, enter the "**Registration number**" that is printed on the inside of the CD cover or that you purchased from PIKO. If the online activation is not successful, please use the option to request the activation key by e-mail.

PIKO Spielwaren GmbH • 96515 Sonneberg, GERMANY • Tel.: +49 3675 / 8972-55 • Fax: +49 3675 / 8972-50 • E-Mail: hotline@piko.de

4.4.2 Request activation key by e-mail

Please send us an e-mail to our hotline: hotline@piko.de
Use as subject: Activation Analyst Software

In the text area, please enter the "**Hardware ID**" displayed in the window and the "**Registration number**" printed on the inside of the CD cover or purchased from PIKO.

You will then receive a 16-digit activation key from us.

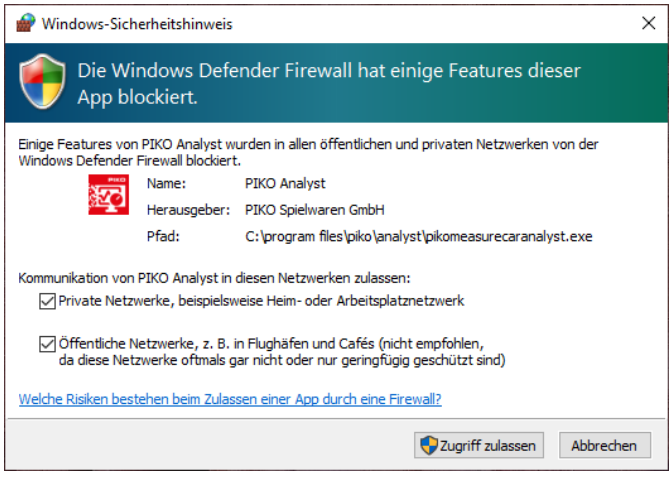
Please note that you will not receive an automatic response from our servers, but that we will have to take care of your activation personally. Please understand that this is only possible during office hours from Monday to Friday.

After you have entered the activation key in the appropriate fields, please click OK. Once the activation key has been accepted and a license file has been created, restart PIKO Analyst. All functions are then enabled (full version).

4.5 Granting Analyst access to the network

The connection to the measuring trolley can be established either via USB or via the WLAN network. In order for Analyst to search for PIKO measurement trolleys in the network, the appropriate authorization must be granted in the firewall of your PC.

When you access the network for the first time, the firewall program will ask you to make a decision in the dialog shown next or similar.



Please select both **options "Private" and "Public"** networks and grant full access.

If you have clicked away the dialog (or clicked Cancel) and thus blocked network access for Analyst. The software cannot find any measurement carts. Only a connection via USB is possible. Please refer to the help for your firewall software to find out how to manually create/grant access to unrestricted full network access.

PIKO Spielwaren GmbH • 96515 Sonneberg, GERMANY • Tel.: +49 3675 / 8972-55 • Fax: +49 3675 / 8972-50 • E-Mail: hotline@piko.de

Congratulations! You have made it and now have the final version of the PIKO Analyst software! Now you can start the first measurement runs of your measurement trolley in combination with the graphical evaluation!

We would first like to familiarize you with the basic functions of the software.

PIKO Spielwaren GmbH • 96515 Sonneberg, GERMANY • Tel.: +49 3675 / 8972-55 • Fax: +49 3675 / 8972-50 • E-Mail: hotline@piko.de

5 Basic functions of PIKO Analyst

5.1 Menu control

The PIKO Analyst user interface allows you to work almost intuitively with the functions, which are deliberately based on familiar interfaces.

In the first line you will find the items [File], [Tools], [View], [Options] and [Help].

In the **[File]** folder, you can easily save the data obtained from measurement runs as a .csv file in a freely selectable directory on your computer and load it again at a later time to continue analyzing your model railroad.

This menu also includes the [Exit] function for PIKO Analyst.

In the **[Tools]** folder, you can use **[Configuration]** to conveniently change the display on your measuring carriage and redesign it to suit your own requirements.

In addition, you can read in the recorded values from your PIKO H0 and TT measuring car via a USB cable under [**Read in measurement data]**. With the G measuring car, you can import the stored measurement runs via USB or Wi-Fi. This is necessary, for example, if you have made a measurement run without a connection to your PC or laptop and want to analyze the data later.

Under **[View]** you will find the sub-items [Real-time display], which shows the display of a smartphone or tablet on the screen, and [Measuring car display]. Here, for example, the display on the measuring trolley can be switched on or off or switched forward or backward.

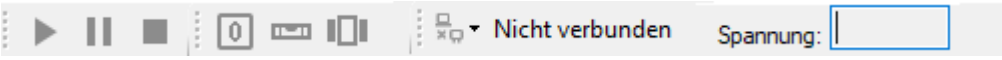
PIKO Spielwaren GmbH • 96515 Sonneberg, GERMANY • Tel.: +49 3675 / 8972-55 • Fax: +49 3675 / 8972-50 • E-Mail: hotline@piko.de

The **[Options]** area is dedicated to the design of the measurement curves. The color, line thickness and interpolation of the individual measurement lines can be changed here.

A manual connection to the measuring carriage can be established under **[Search for measuring carriage].**

Finally, the **[Help]** area is also available. Here you can enter the activation key to activate the full version, find information on the software and the operating instructions and update the software to the latest version via [Check for update]. We recommend that you check your software version regularly so that you can use any further developments of PIKO Analyst at any time.

The next command line includes the menu items "Start"(1), "Pause"(2), "Stop"(3), "Reset distance counter"(4), "Calibrate"(5) and "Section analysis"(6).



(1) (2) (3) (4) (5) (6) (7) (8)

The existing connection options between the measuring trolley and PC/laptop via USB cable or WLAN (7) and the track voltage applied in volts (8) are also displayed here (only possible in DC mode).

It may be necessary to recalibrate the trolley. This is particularly necessary if you use your measuring trolley on different layouts, for example on the home and club layout. Use the "Calibrate" selection button (5) to adjust the basic settings of the PIKO measuring trolley to the respective layout conditions. To do this, select a point on the layout that is as horizontal as possible and place the measuring carriage on this section. The carriage can now be calibrated so that all further measurement results are based on this section of the layout.

The third command line contains elements for practical analysis. Here, the scaling and display can be further adjusted and recorded data can be analyzed graphically . These points are explained in more detail in the next chapter using an evaluation of an initial measurement run.

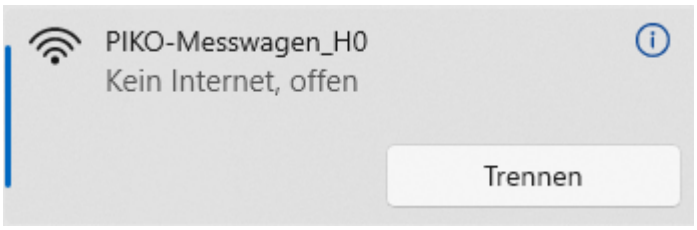
PIKO Spielwaren GmbH • 96515 Sonneberg, GERMANY • Tel.: +49 3675 / 8972-55 • Fax: +49 3675 / 8972-50 • E-Mail: hotline@piko.de

5.2 Establishing a WLAN connection

Please establish a connection between the trolley and the PC/laptop now! To do this, switch on the trolley (this happens automatically on a DC track section with an active power supply), the welcome screen appears on the trolley display. The "Speed" measuring range is then shown on the trolley display! Please make sure that the WLAN symbol  appears on the display of the PIKO H0 measuring trolley! If this symbol does not appear, you can also activate the WLAN manually using the WLAN button on the back of the trolley. On the TT measuring trolley, you can recognize the active WLAN by the blue LED in the brakeman's cab. The WLAN is activated/deactivated by pressing the button at the bottom for one second. On the G measuring trolley, an active WLAN signal is indicated by a symbol at the bottom or top of the screen. You can activate the WLAN in the settings menu.
For more information, please refer to the manual supplied with the measuring trolley.

The WLAN of your measuring trolley now appears on your desktop under the possible connections. By default, it starts with **"PIKO Measuring car_XX"**. 
Where XX is the track size of your model. Here you can establish a connection between the trolley and the PC/laptop with a mouse click. If you regularly use the PIKO measuring trolley, we recommend the option "Establish connection automatically".

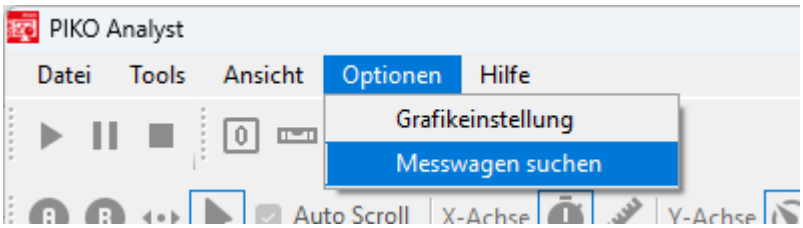
The active connection is then confirmed:



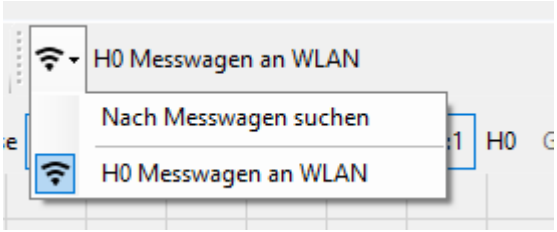
The "No Internet" label is correct.

Now the trolley just needs to be connected to the PIKO Analyst program in the [Options] tab→ [Search for measuring trolley]:

PIKO Spielwaren GmbH • 96515 Sonneberg, GERMANY • Tel.: +49 3675 / 8972-55 • Fax: +49 3675 / 8972-50 • E-Mail: hotline@piko.de



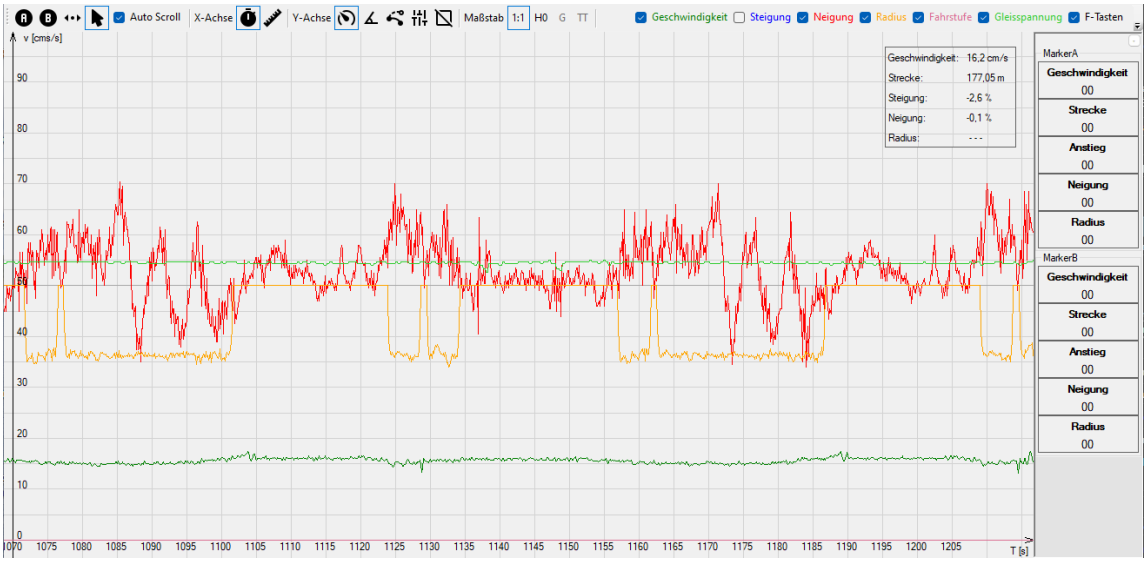
Now the time has come: the wagon is on the tracks, is switched on and the connection to the PC/laptop via WLAN and PIKO Analyst is established:



The first measurement run can begin!

5.3 The first measuring run

Now press the play symbol (1) . If the trolley is ▶ then moved, the x-axis starts to move via the activated AutoScroll function. The first ☑ Auto Scroll graphical representations of the measurement results will appear:



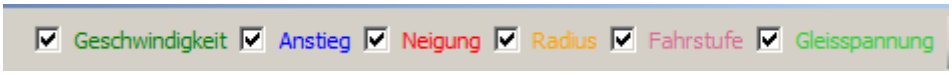
PIKO Spielwaren GmbH • 96515 Sonneberg, GERMANY • Tel.: +49 3675 / 8972-55 • Fax: +49 3675 / 8972-50 • E-Mail: hotline@piko.de

As the time (10) is the default setting on the x-axis, the axis continues to scroll regardless of whether the measuring trolley is moving or not.

(10) (11)

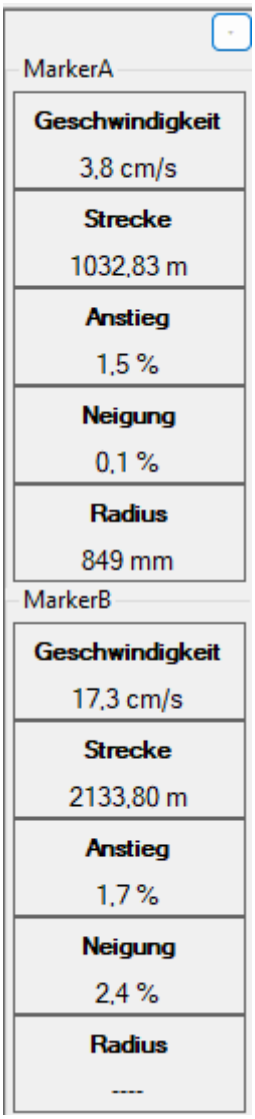
The x-axis can be used to measure the system to the nearest centimeter using the ruler symbol (11).

The boxes on the right-hand side of the display can now be used to deactivate and reactivate individual curves with a click of the mouse. This makes it possible, for example, to concentrate on one measuring range!



PIKO Spielwaren GmbH • 96515 Sonneberg, GERMANY • Tel.: +49 3675 / 8972-55 • Fax: +49 3675 / 8972-50 • E-Mail: hotline@piko.de

Fig. shows selection box



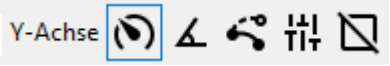
Of course, individual areas can also be marked and analyzed separately. To do this, the marking symbols at the beginning Ⓐ and at the end of the section Ⓑ with the mouse. These are displayed on the graph as a vertical line marked A and B respectively.

The "Section analysis" is displayed to the right of the graph. And can be shown/hidden using the [+] / [-] button.

The Marker A and Marker B displays do not show the average values in the selected area, but rather precise information on the values determined.

It is also possible to change the scaling on the y-axis.

The symbols "Speed" (14), "Angle" (15), "Radius" (16), "Speed level" (17) can be used to generate different values. The "No labeling" item removes all divisions.

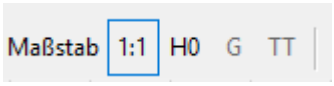


(14)(15)(16)(17)(18)

In this case, the "Angle" (15) was selected to display the gradient as a percentage and scaling in the single-digit range appears, as gradients in the two-digit percentage range hardly make sense for model railroads.

PIKO Spielwaren GmbH • 96515 Sonneberg, GERMANY • Tel.: +49 3675 / 8972-55 • Fax: +49 3675 / 8972-50 • E-Mail: hotline@piko.de

The "1:1" (19) and "H0 / G / TT" (20) options can be used to display measured values in 1:1 or 1:87 / 1:25 / 1:120.



(19) (20)

5.4 An example analysis

Finally, we would like to analyze a measurement run with you in more detail:

For this we have activated the measurement curves "Speed", "Rise" for gradient and "Track voltage" in the PIKO Analyst.

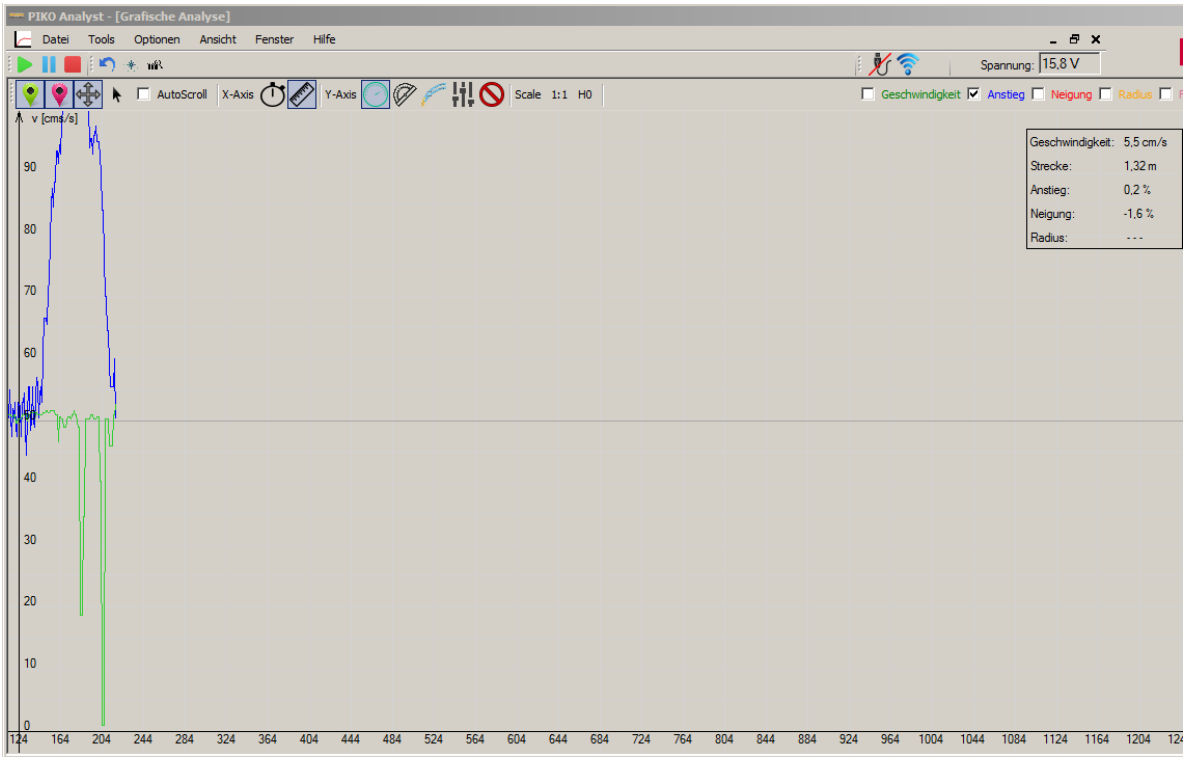
The distance over the ruler is set on the x-axis and the angle on the y-axis. Overall, the display should be in 1:1:

To analyze the selected section, a zero point is first selected for the measurement on the layout and marked with a pin.

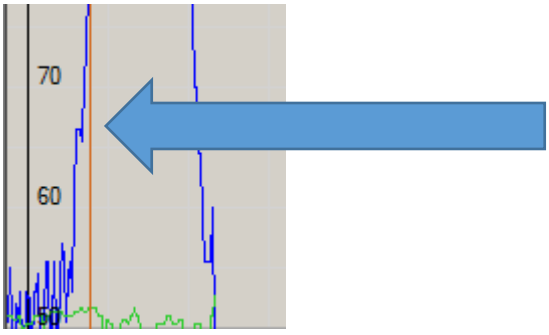
The distance counter on the carriage is also set to zero.

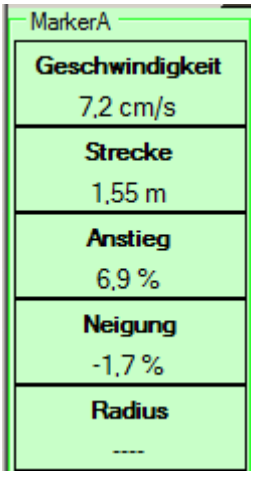
The PIKO H0 measuring car has collected the following data on its measuring run and passed it on to PIKO Analyst:

PIKO Spielwaren GmbH • 96515 Sonneberg, GERMANY • Tel.: +49 3675 / 8972-55 • Fax: +49 3675 / 8972-50 • E-Mail: hotline@piko.de



This is where the practical benefits of the PIKO Analyst become particularly apparent. There are strong irregularities in the gradient and two voltage dips are registered.



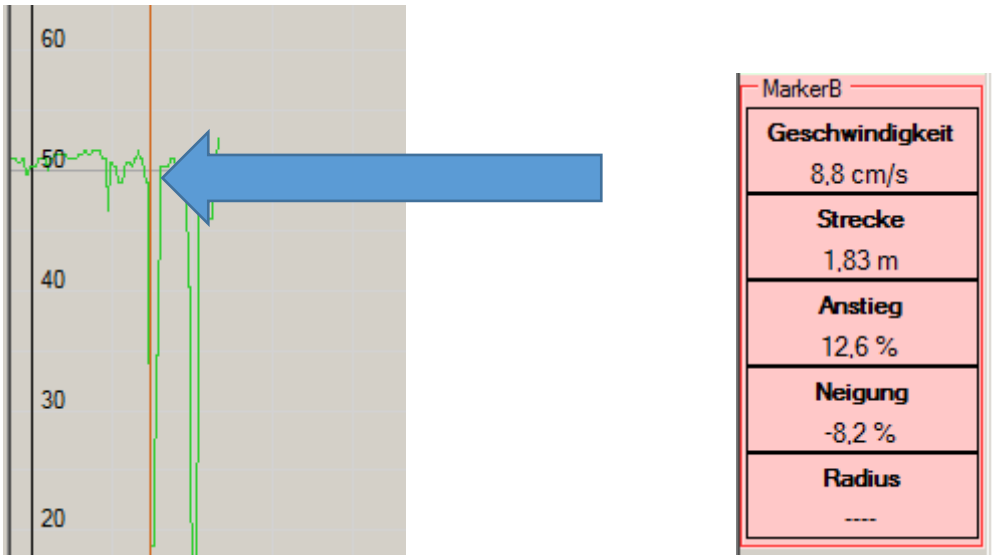


Place marker A at the location of the irregularity and read off marker A:

There is an unintentional rise of 6.9 % at meter 1.55 on the track!

PIKO Spielwaren GmbH • 96515 Sonneberg, GERMANY • Tel.: +49 3675 / 8972-55 • Fax: +49 3675 / 8972-50 • E-Mail: hotline@piko.de

Furthermore, it is determined (with the gradient curve hidden) that there were two voltage dips:



Marker B can also be used to narrow down the problem area here!

The first voltage dip is located around meter 1.83!

Now some track construction workers should be able to start leveling the slope and, with two additional power feeds, fix the construction errors with pinpoint accuracy!

Have fun with further measuring runs!

PIKO Spielwaren GmbH • 96515 Sonneberg, GERMANY • Tel.: +49 3675 / 8972-55 • Fax: +49 3675 / 8972-50 • E-Mail: hotline@piko.de

5 Hotline

If you have any further questions, please send an e-mail tohotline@piko.de
or call our technical hotline on +49 3675 8972 55.
You can reach them on Tuesdays and Thursdays between 16:00 and 18:00.

6 Notice

Errors, technical and colour modification subject to change; Measurements and images non-binding.

Any reproductions of these documents either wholly or in part require the prior written consent of the PIKO GmbH.

PIKO® is a registered trademark.

#55051 PIKO Spielwaren GmbH © 2026

PIKO Spielwaren GmbH • 96515 Sonneberg, GERMANY • Tel.: +49 3675 / 8972-55 • Fax: +49 3675 / 8972-50 • E-Mail: hotline@piko.de