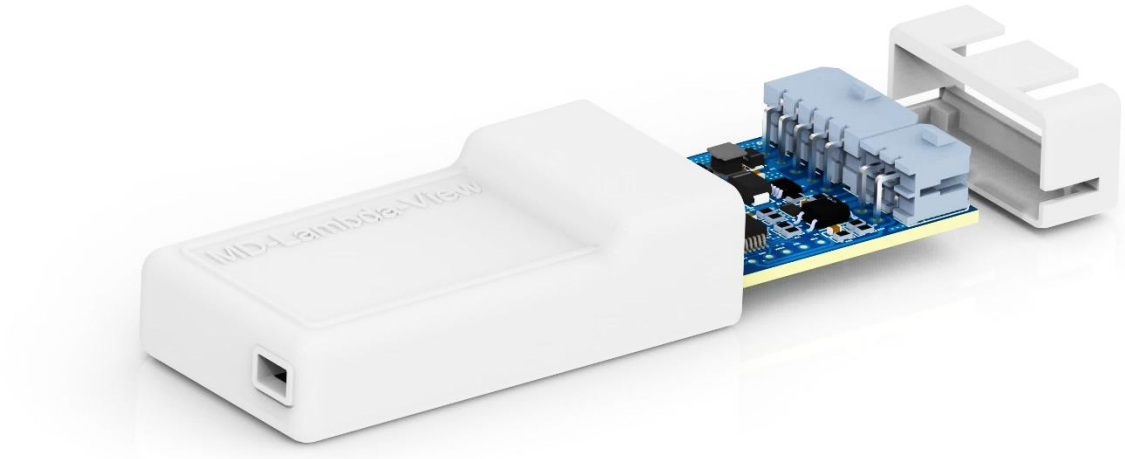
Manual

„MD-Lambda-View“

English

V 2.4



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Thank you for choosing MD-Lambda-View. This product was developed by me because there is currently nothing comparable at an affordable price on the market. My goal is to provide the user with a tool for determining all the necessary data for setting and monitoring the combustion process of his combustion engine with carburettor or injection system*, as a complete package, as inconspicuous and as simple as possible.

The product was developed, tested and assembled by me with the greatest care in Germany.

Please read this document carefully and familiarize yourself with the installation and operation. No warranty claims can be made for damages caused by non-compliance with this document and MD-Lambda-View assumes no liability for them.

*Setting up an injection system requires additional software to influence the injection data. MD-Lambda-View determines only the most necessary data on the basis of which the necessary settings can be made!

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1. Check your delivery

Components of the delivery depend on the scope of the order.

Minimum scope:

- MD-Lambda-View Box
- Connection cable for supply voltage and lambda sensor Fuse holder (not shown)

Optional accessories:

- Connection cable for throttle body sensor and ignition signal
- RGB LED with connection cable
- LED socket 5mm inner reflector
- LED socket 5mm external reflector

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2. Disclaimer

UNDER NO CIRCUMSTANCES SHOULD THE DEVICE BE OPENED. WHEN OPENED, ANY WARRANTY CLAIM TO MD-LAMBDA-VIEW EXPIRES. A WARRANTY CAN ONLY BE GIVEN IF IT IS PROPERLY ATTACHED TO THE VEHICLE. MD-LAMBDA-VIEW DOES NOT ASSUME ANY WARRANTY FOR ANY DIRECT OR INDIRECT CONSEQUENTIAL DAMAGE ARISING FROM THE USE OF MD-LAMBDA-VIEW, THE CONNECTION OF MD-LAMBDA-VIEW TO THE VEHICLE OR THE USE OF THE SENSORS OR ACCESSORIES SUPPLIED. IN PARTICULAR, NO WARRANTY CAN BE ASSUMED FOR RESULTING DAMAGE TO PERSONS, PROPERTY DAMAGE OR DAMAGE OF A FINANCIAL NATURE. THE USE OF MD-LAMBDA-VIEW INCLUDING SUPPLIED SENSORS OR OTHER ACCESSORIES ON PUBLIC ROADS IS AT YOUR OWN RISK!

3. Specs and Features

Supplay Voltage:	9V -15V
Max. Current:	0,8A - 4A (abh. vom Heizstrom der Lambdasonde)
Connection Protocol:	WIFI, Passwort 8 Zeichen
Inputs:	Drehzahl, Drosselklappenposition, Lambdasonde
Outputs:	RGB-LED, Webserver
Operation and Adjustment:	Webserver
Dimensions:	70mm x 35mm x 17mm

Controller for lambda sensor is based on:
SLCFree from 14point7

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Funktions:

Lambda Measurement	0,68 – 1,36
Engine Speed	0 U/min – 12.000U/min
On board voltage	9V – 15V
RGB-LED	Visualization of the lambda value with 4 colors in adjustable limits
Throttle/Carburetor Slider	0% -100%
Data-Logger	10Hz
	Lambda, speed, on-board voltage throttle valve/carburettor slider via WIFI-enabled terminal with browser

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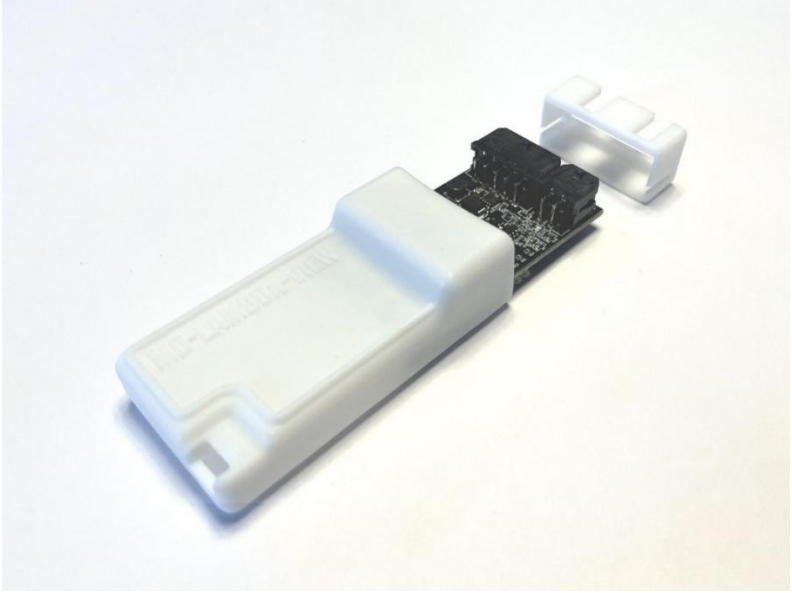
4. Connection an Usage

4.1 MD-Lambda-View Box



MD-Lambda-View Box consists of three components, the housing, the circuit board and the lid. The lid is glued to the housing. The board has a protective coating to protect it from environmental influences in addition to the housing. MD-Lambda-View is not watertight and should be positioned in the vehicle in a splash-proof place.

The board has two large sockets, which are led outwards at the front. The large 10-pin. Socket is for connecting the lambda sensor and the supply voltage.

The small 4-pole. Socket is for connecting the throttle body sensor and the ignition signal.

On the opposite front side (flat end) there is a small socket for connecting the RGB LED. There are two red LEDs on the board. One for the indication of the power supply and one for the indication of the ignition pulses. If you short-circuit the yellow cable for the connection of the ignition coil terminal 1 to ground, the LED for the ignition pulses must light up.

4.2 Lambda Probe

The part of MD-Lambda-View for the lambda sensor is based on the proven concept of SLCFree from 14point7. SCLFree is available under a public license (GPL V3 license) and can be used freely. The SLCFree system impresses with its high accuracy and it does not need to be calibrated.

MD-Lambda-View is designed for a Bosch LSU 4.9 broadband lambda sensor. No guarantee can be given for identical replicas, although it cannot be ruled out that they will work. MD-Lambda-View comes with a connection wiring harness that includes the connector for the lambda sensor.

THE LAMBDA SENSOR MUST NEVER BE CONNECTED OR DISCONNECTED WHEN MD-LAMBDA-VIEW IS SWITCHED ON, I.E. WHEN IT IS POWERED!

To attach a lambda sensor to the vehicle, a hole must be drilled in a manifold and a weld-in socket with the appropriate thread of M18x1.5 must be welded in. The exact instructions for this can be found on the associated Bosch website, or in the download area of https://www.md-lambda-view.com/downloads.

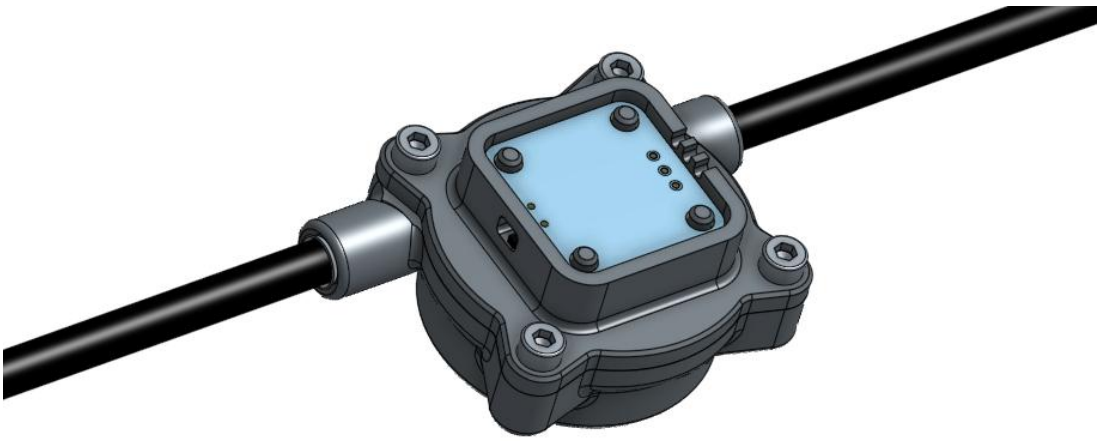
The lambda sensor is connected with the supplied 10pin connection cable. Plug – plug lambda sensor. It is important to make sure that the connection of the lambda sensor is properly seated. Most malfunctions occur due to improper connection of the lambda sensor plug.

Connection cable to the lambda sensor and the power supply

4.3 Determining the position of the throttle valve or the carburettor slider

MD-Lambda-View has an analog input for measuring a voltage of 0 – 5V, a voltage output with 5V and a ground line for connecting various sensors. The use of the MD-Lambda-View draw-wire sensor, a potentiometer or a linear Hall sensor in conjunction with a magnet is recommended.

4.3.1 MD-Lambda-View Pull-wire sensor



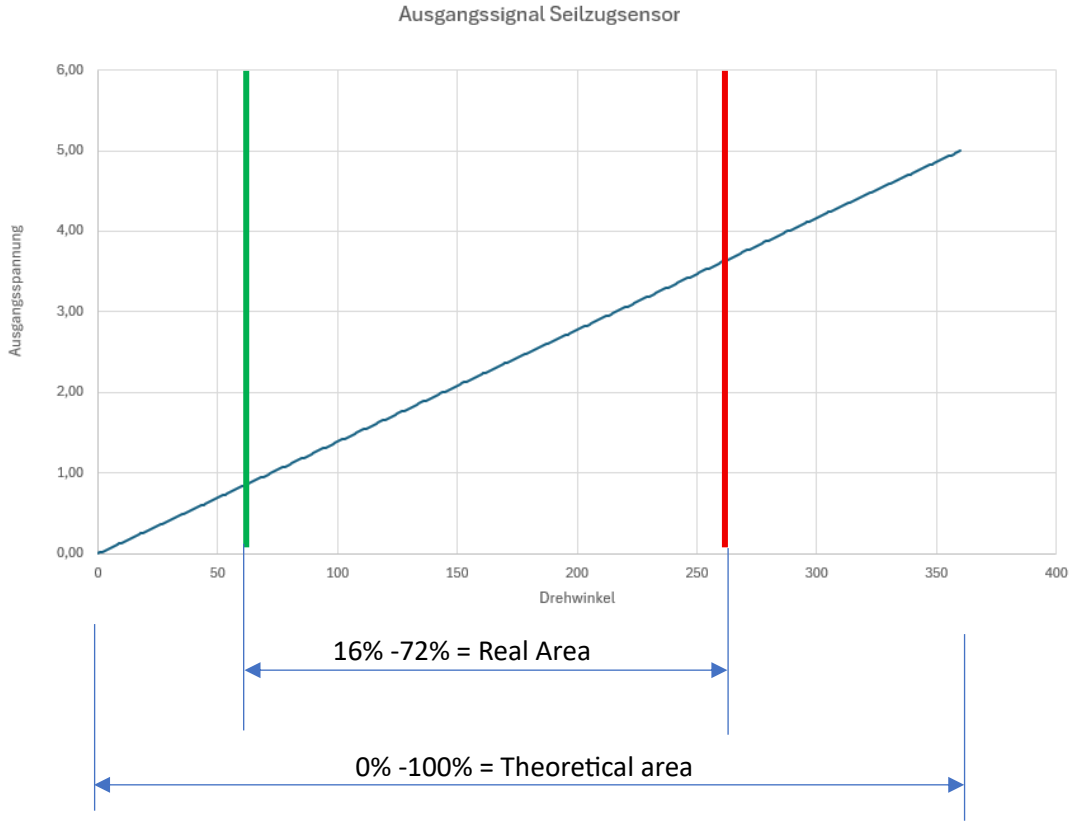
The draw-wire sensor of MD-Lambda-View has been specially developed to avoid the often complicated installation of potentiometers or throttle sensors. In addition, and this is a very big advantage, it offers the possibility to measure the carburettor slide position in conventional carburettors, as there is no possibility to connect a potentiometer or the like.

The draw-wire sensor is supplied with one cable end on each side. Both ends of the cable are bare, which means that the cable core is without nipples. Two screw nipples are included in the scope of delivery.

The draw-wire sensor behaves like a conventional throttle cable. Every action on the throttle grip is transferred to the carburettor or throttle valve and at the same time to the position sensor. The position sensor in the MD-Lambda-View draw-wire sensor works contactlessly via a Hall effect sensor. The number of cycles is therefore unlimited and there are no additional actuating forces due to e.g. a potentiometer.

The theoretical output signal of the draw-wire sensor is 0V - 5V at 0° - 360°. However, due to its limited angle of rotation, the installation on the vehicle and the different types of throttle valves and carburettor sliders, the maximum measuring range can never be fully utilized. The same applies to potentiometers. This means that the output value will be somewhere above 0% and somewhere below 100%. As an example, let's assume that the value for the closed throttle output in the web interface is 16% and the value for the fully open throttle is 72%. These two values are entered in the MD-Lambda-View settings menu as Throttlel-low and Throttle-high to use as a basis for calculation. Once this is done, the throttle position will show 0% when closed and 100% when open.

These entries are made in the settings menu of MD-Lambda-View under point 5.2.6.6. If, somehow, you have made a mistake, enter 0 again for Throttle-low and 100 for Throttle-high and start the calibration again.



MD-Lambda-View shifts the theoretical range from 0% to 100% to the real range from 16% to 72% by entering the real values for Throttle-low and Throttle-high, so that the green line becomes 0% and the red line becomes 100%. The position of the green and red lines on the chart remains. The disadvantage is that the resolution decreases. In this example, the resolution would decrease from 0.087° to 0.16°.

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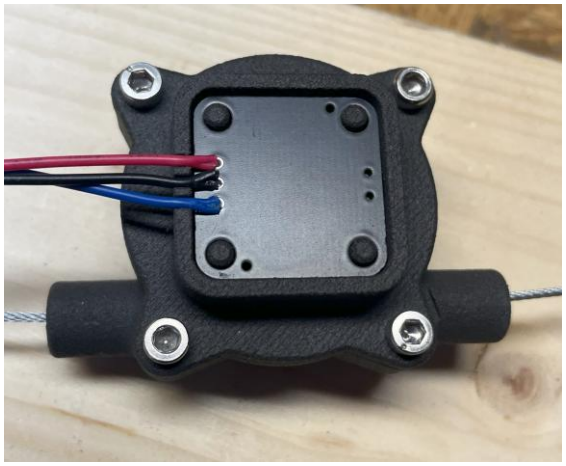
The draw-wire sensor has three connection cables. Red for the 5V power supply, black for ground and blue for the signal output. These three cables are connected to the cables of the same color from the MD-Lambda-View sensor cable.



MD-Lambda-View Pull-wire Sensor

Red wire = +5V

Black Cable = GND

Blue Cable = Output Signal (0V-5V)

On the opposite side is a small recess. There is a switch here to invert the output signal. If you have installed the pull-wire sensor on the vehicle the other way around, this is no problem.

Switch for inverting the output signal

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4.3.2 Hall-Sensor

Another very convenient solution for determining the throttle position is the use of a linear Hall sensor. For this purpose, a diametrically magnetized round magnet is glued to the center of the throttle body axis by means of a spacer. The Hall sensor is firmly connected to the carburettor housing and placed near the attached magnet. If the magnet rotates around its longitudinal axis, the change in position of the magnetic field is detected and output as a linear voltage of 0.5V – 4.5V by the Hall sensor.

Source: Homepage TDK Europe

If you want to try this out, I recommend the Honeywell SS49 Hall Sensor. This can be soldered directly to the sensor cable. The magnet is to be attached to the throttle valve shaft by means of a spacer. If it is glued directly to the shaft, the magnetic field scatters too much and the measurement results are worse.

There are various ready-made modules available on the market for attachment to the vehicle. I would like to refer here to sensor ANG-21HAW1 from ZF. This offers the possibility of fastening by means of fastening straps. The sensor emits two opposing signals. This allows both clockwise and counterclockwise direction of rotation to be detected.

Datenblatt Sensor: Datasheet_ANG_Letter_EN_2024-08-01.pdf

A magnet with holder is also required for position detection. This is also described in the data sheet. The sensor can be ordered with magnet, e.g. from Conrad.

4.3.2 Potentiometer

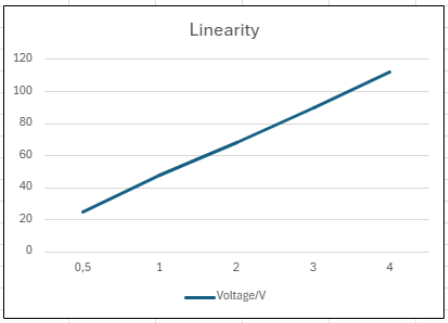
When using a potentiometer, the axis of rotation of the potentiometer is connected to the throttle shaft. The base body of the potentiometer should be rigidly connected to the throttle body. When the throttle valve is closed, the axis of rotation of the potentiometer should be close to but not quite at the stop of the potentiometer, whose connection is connected to the ground line (black). The 5V supply line (red) of the MD lambda view is connected to the opposite end of the potentiometer (full throttle). The test lead (blue) of the MD-Lambda-View is connected to the center contact of the potentiometer. If the measured value for the throttle position becomes smaller when the throttle grip is pressed, then the red and black cables on the potentiometer must be swapped. The center tap (blue cable) remains unaffected.

There are ready-made throttle body sensors in countless designs in the automotive sector. Most of them can be used with MD-Lambda-View. It is important that they have a linear characteristic curve and a not too low resistance. Too little resistance would put too much strain on the voltage regulator of the MD Lambda View. A resistance of approx. 5kOhm should not be undercut.

In the following, two commercially available sensors will be discussed.

TPS Suzuki SV650

Angle/°	Voltage/V
0	0,5
25	1
48	2
68	3
90	4
112	4,8



Resistance: 4,9kOhm
Dimension: 80mmx60mmx40mm

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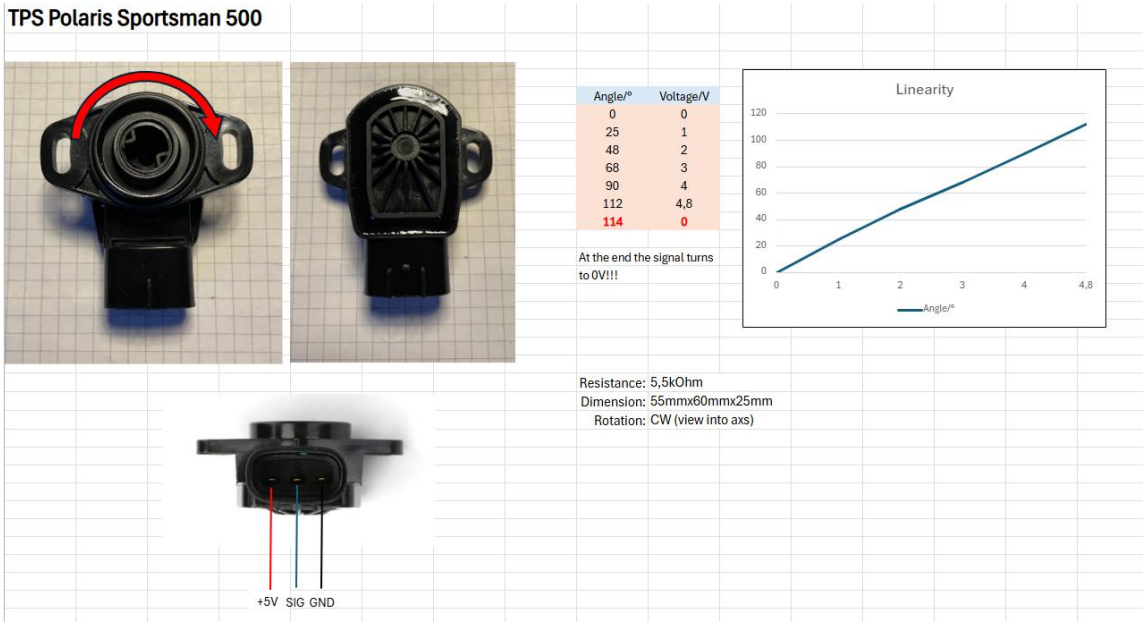

Unfortunately, no uniform adapter can be offered for the connection of the sensor to the throttle shaft, as the differences from carburettor to carburettor and from sensor to sensor are too great. Here you have to help yourself.

Of course, any conventional potentiometer can also be used, which has at least 5kOhm – 10kOhm total resistance. It is important that it has a linear characteristic curve. Potentiometers from the audio sector often have a logarithmic characteristic curve, which also works, but the measured values then do not match the real throttle position. You shouldn't ignore the waterproofness here either.

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4.3.3 Tapping the 5V signal of an existing throttle sensor

Many newer machines already have a throttle body sensor installed. Should this be operated with 5V from the control unit and should it be a classic 3-pole. potentiometer, you can tap the output and use the signal for MD lambda view. **Unfortunately, the general operating license and the warranty of the vehicle expire here, as you intervene in the engine management (just for information).** This variant of signal acquisition should therefore be reserved for the brave and the experienced mechanics. The measurement input for the throttle position on the MD-Lambda-View is very high-impedance and should not have any influence on the control unit in the vehicle.

However, MD-Lambda-View cannot provide a guarantee here.

Please find out more about the linearity of the throttle potentiometer here. Some manufacturers use throttle potentiometers with different pitches. For example, the incline can be higher at a low throttle angle in order to obtain a better resolution in the lower partial load range. With larger throttle valve angles, the slope of the characteristic curve is flatter (e.g. Moto Guzzi V10).

4.4 Tachometer

4.4.1 Vehicles with TCI or interrupter ignition

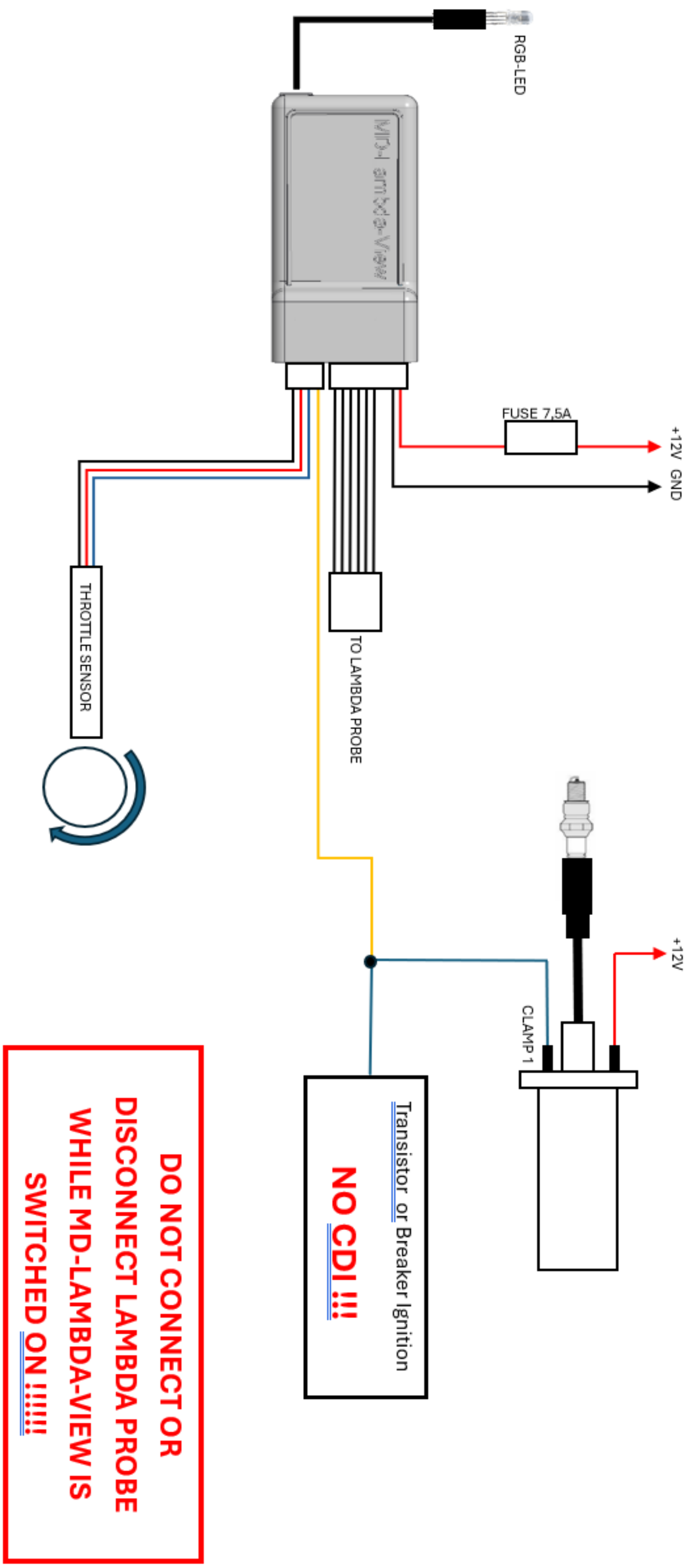
TCI = Transistor Charger Ignition

The tachometer of the MD-Lambda-View can be connected to all ignition systems with a conventional ignition coil.

The yellow connection cable is connected to terminal 1 (clocked ground of the ECU or breaker) of any ignition coil. The connection to CDI ignitions (some scooters, quads, enduros) is possible with a separate adapter, e.g. motogadget ignition signal pickup (article 9000001). For the speed display to function correctly, the ignition system must be suppressed. Please note the information in Chapter 5.2.5.6. If there are problems in determining the speed, the motogadget ignition signal pickup (4.4.2) can also be used for conventional ignition systems.

ATTENTION! THE YELLOW WIRE IS CONNECTED TO THE PRIMARY CIRCUIT OF THE IGNITION COIL. IT MUST NEVER COME INTO CONTACT WITH THE HIGH-VOLTAGE CIRCUIT (IGNITION CABLE)!

MD-Lambda-View Wiring Diagram for Transistor or Breaker Ignition System



4.4.2 Vehicles with CDI

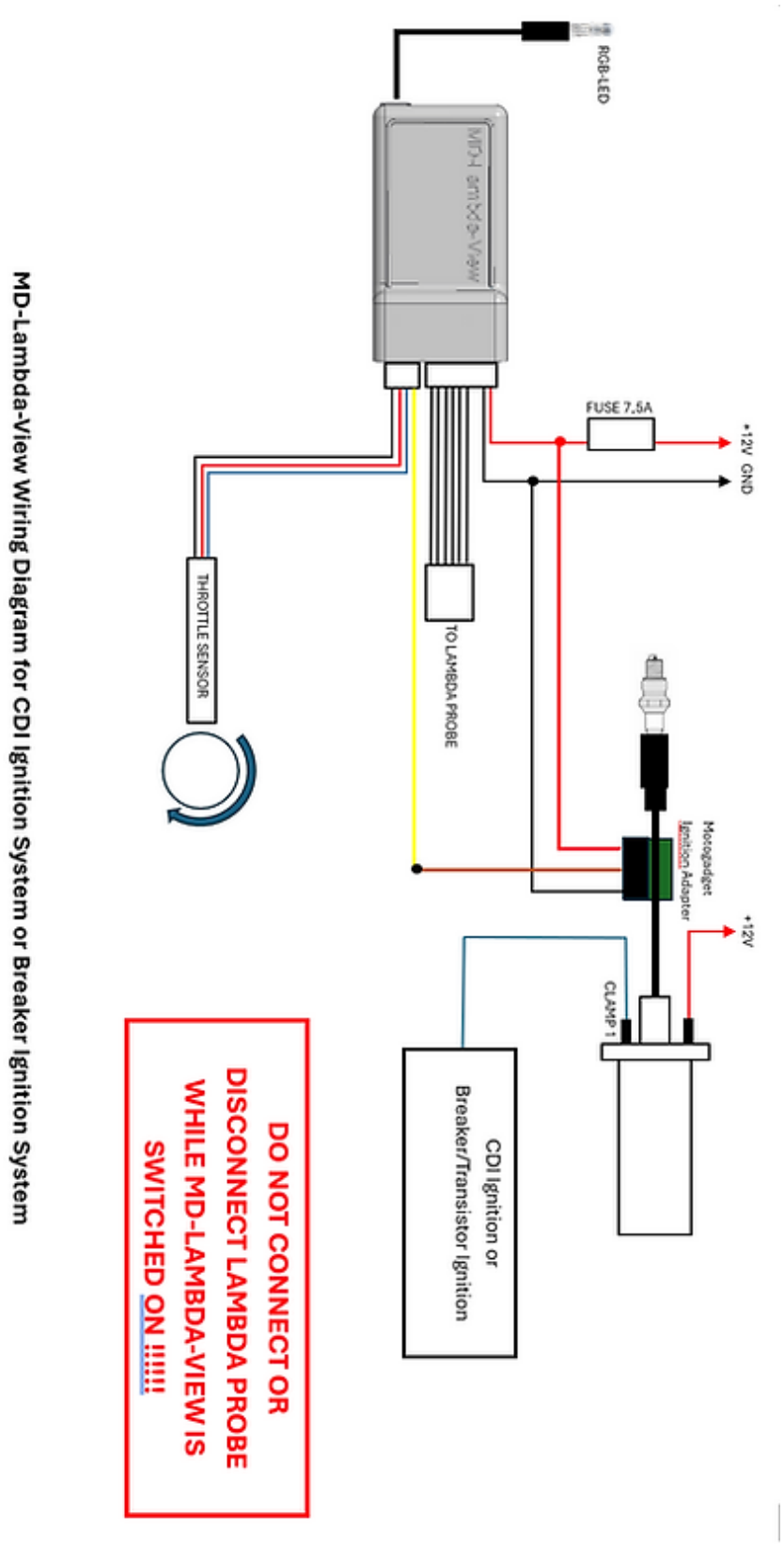
CDI = Capacitor Discharge Ignition.

In vehicles with a CDI ignition system, a separate ignition pickup is required for the ignition cable. A compatible ignition pickup is sold by the company motogadget® Berlin, for example.

Image source: motogadget®

Link to the motgadget® online shop: [Ignition signal pickups | motogadget GmbH]

(Article no. 9000001)



MD-Lambda-View Wiring Diagram for CDI Ignition System or Breaker Ignition System

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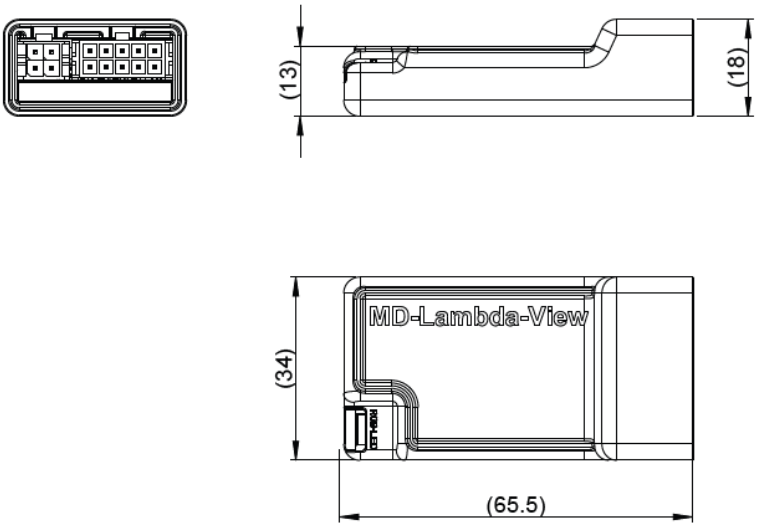
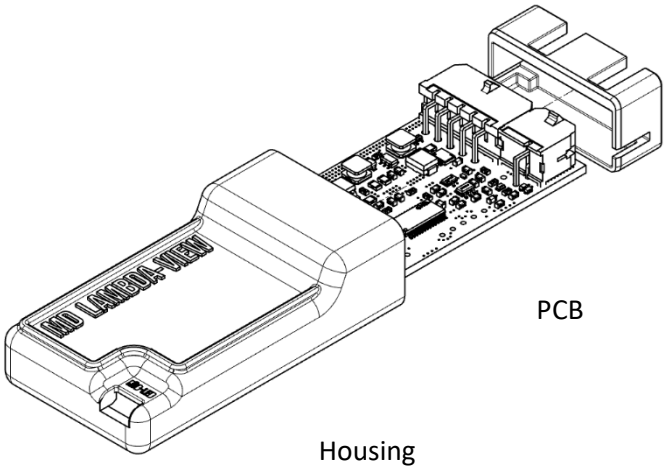
4.5 MD-Lambda-View Dimensions

MD-Lambda-View contains a double-sided 2-layer PCB. The connection cables are connected via three power strips. The dimensions can be found in the figure.





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5. Connection to a Wi-Fi-enabled device

5.1. Connecting to the MD-Lambda-View Wi-Fi

As soon as it is switched on, MD-Lambda-View establishes a WLAN with the same name. Connect to this Wi-Fi network with your device. During the first connection, the stored start password "12345678" is requested. Please enter this in the password prompt of your device. You can change the password at any time in the web interface on your device according to your wishes. The password requirements are 8 characters. Nothing more, nothing less!

Network Menu iPhone

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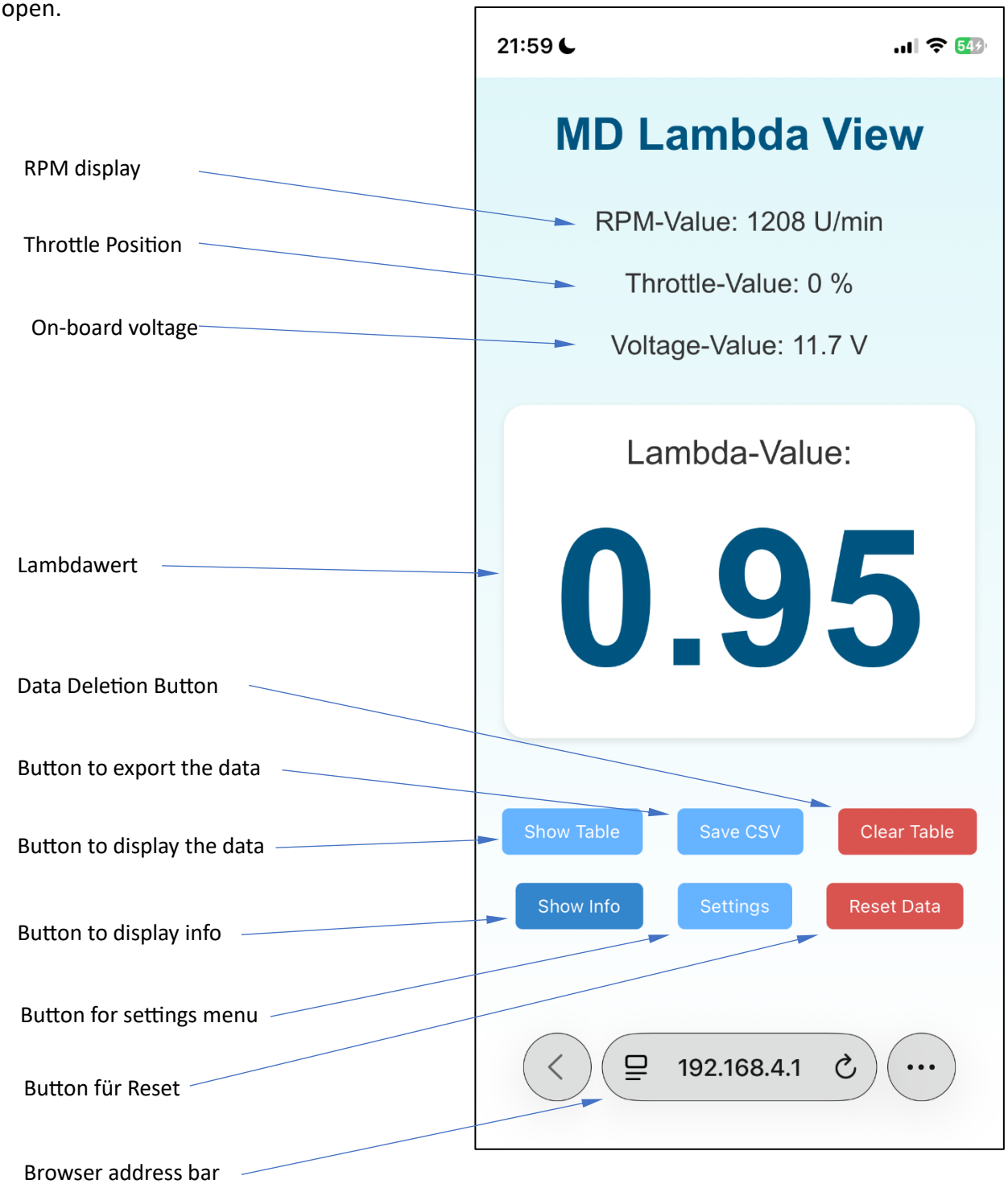
5.2 Open MD-Lambda-View Web Interface

After successfully connecting to the "MD-Lambda-View" Wi-Fi network, open your browser and call up the address 192.168.4.1. Now the web interface of your MD Lambda view should open.



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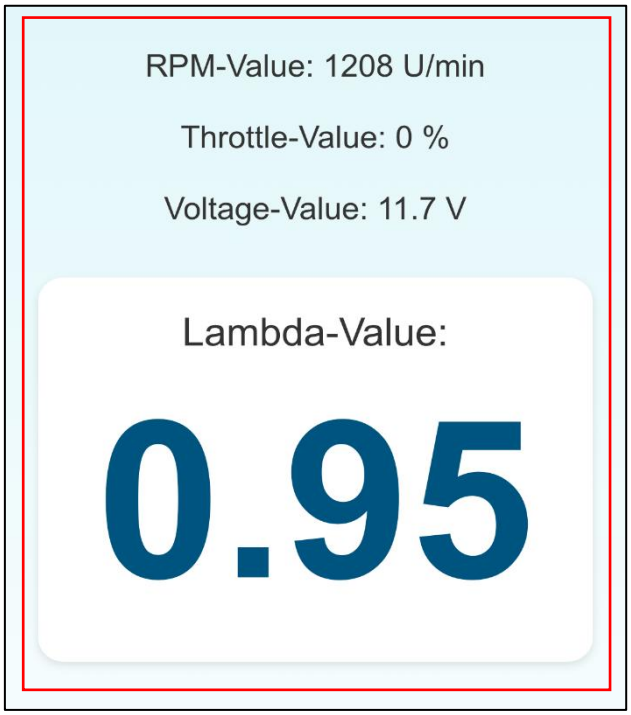
5.2.1 Displaying the Current Measured Values in the Web Interface



The web interface includes an area for displaying the current measured values. The speed, throttle position, on-board voltage and lambda value are displayed. The refresh rate is 10Hz, which is at intervals of 0.1s. The lambda value is displayed as the main value extra large, so that it is easy to read while riding, should you decide to attach the mobile phone to the tank or handlebars.

You can also turn the digital device horizontally, then the display can be enlarged so that the lambda value fills the entire screen. This can be very useful in the workshop or in the car, for example.

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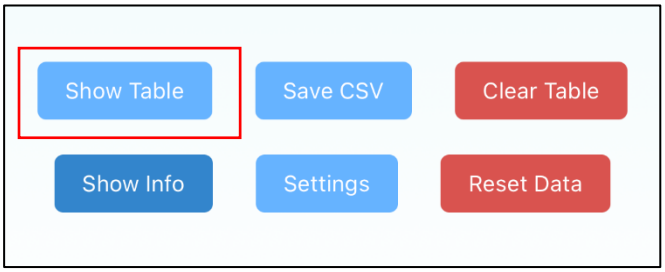
5.2.2 Displaying the Data Table



The "Show Table" button is used to show or hide the data table. MD-Lambda-View permanently logs all four measured values (RPM, throttle position, on-board voltage and lambda value) and writes a line to the data table every 0.1s. The data table is stored in the internal memory of the web browser on the digital device until the browser cache is cleared or the "Clear Table" button (see section 5.2.4) is pressed. For this purpose, please follow the instructions for cleaning the browser cache of the respective device. If MD Lambda View is terminated or the vehicle is switched off, the data table remains in memory. When the vehicle is started again, MD-Lambda-View continues the data table. The timestamps of the new entries start again from the beginning. Please don't get confused here. The time column is for orientation only. The time column is not relevant for the evaluation of the data with MD-Lambda-View 3D-Surface. When evaluating the data with e.g. Excel, the time column can also be removed.

IMPORTANT: Conditions must be met for logging to start. See Section 5.2.6.9. In case of implausible values, logging is suspended. So the timestamps can be incomplete. That's normal.

An implausible value could be, for example, a lambda value of 1.36 at higher revs and with the throttle valve open. Such a state can occur if you accelerate abruptly. In the process, the mixture becomes very thin for a short time. Such values would greatly distort the evaluation of the logged data and are therefore ignored.

Time (s)	RPM (U/min)	Throttle (%)	Voltage (V)	λ
0.0	7943	45	12.3	0.82
0.1	2228	49	12.4	0.81
0.2	7881	46	12.4	0.84

Displaying the Data Table

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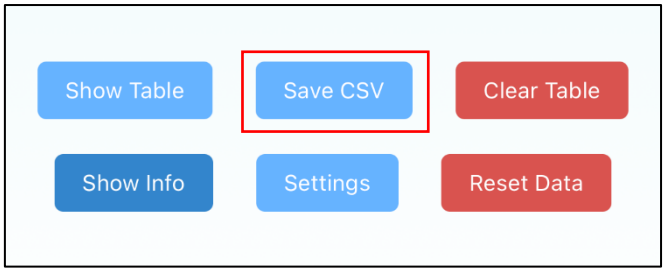
5.2.3 Exporting and Saving the Data Table



The "Save as CSV" button starts the export of the data table as "Logdaten.csv" The number is counted up continuously if there is already a saved CSV file with the same name in the download folder of the end device.

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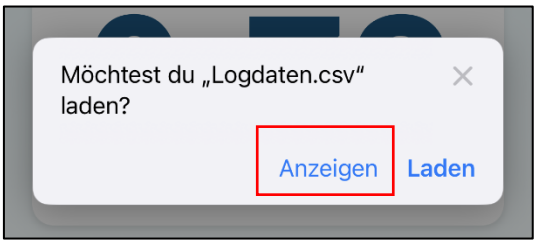
info@md-lambda-view.com
www.md-lambda-view.com

Clicking on "Show" opens a window and shows you the data table on your device.



09:22 LTE 37

Zeit (s)	Drehzahl (U/min)	Drosselklappe (%)	Spannung (V)	Lambdawert
0,0	3570	41	11,50	0,96
0,1	3578	41	11,50	0,96
0,2	3552	41	11,40	0,96
0,3	3557	41	11,50	0,96
0,4	3568	41	11,50	0,96
0,5	3552	41	11,50	0,96
0,6	3565	41	11,50	0,96
0,7	3564	41	11,50	0,96
0,8	3557	41	11,50	0,96
0,9	3568	41	11,50	0,96
1,0	3562	41	11,50	0,96
1,1	3572	41	11,50	0,96
1,2	3572	41	11,50	0,96
1,3	3581	41	11,50	0,96
1,4	3561	41	11,50	0,96
1,5	3569	41	11,50	0,96
1,6	3571	41	11,50	0,96
1,7	3559	41	11,50	0,96
1,8	3574	41	11,50	0,96
1,9	3563	41	11,50	0,96
2,0	3565	41	11,50	0,96
2,1	3572	41	11,50	0,96

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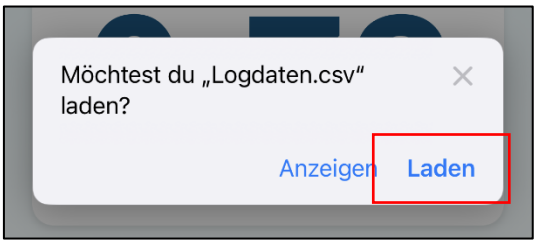
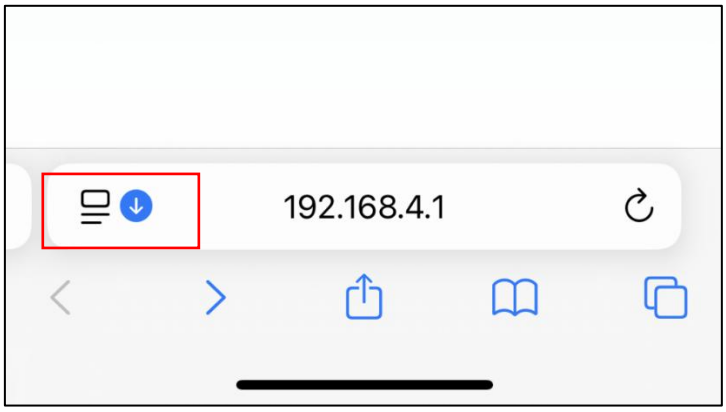
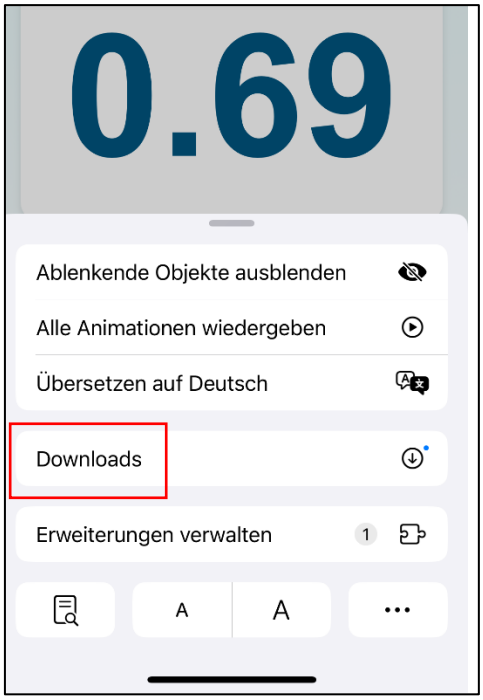
A tap on "Load" downloads the CSV file and makes it available for saving.







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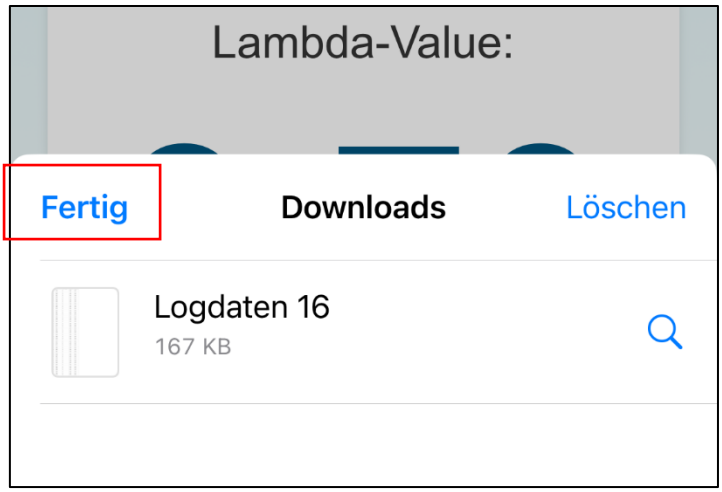
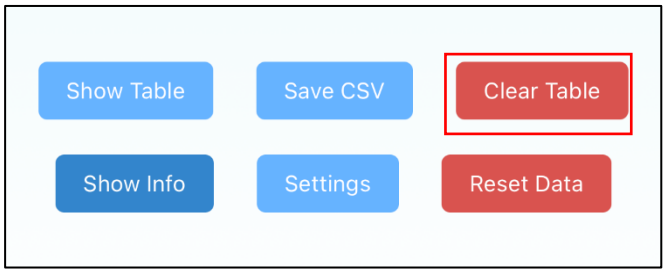


After selecting "Done", the CSV file can be saved in a folder.

5.2.4 Datentabelle (Loggingdaten) löschen



When "Clear Table" is pressed, all logged data in the memory of the digital device is deleted. Before the final deletion, a security prompt appears asking if you are really sure to delete all data.

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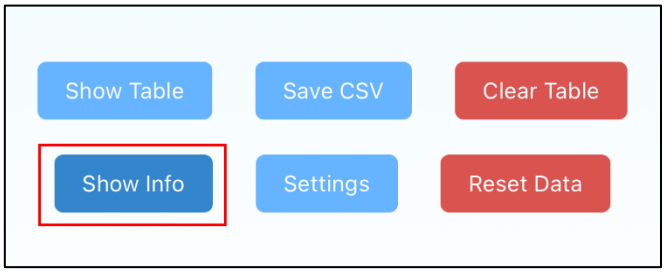
5.2.5 Displaying Additional Information

The "Show Info" button shows the web and e-mail address of MD-Lambda-View, the current software version and the hardware version. Pressing the button repeatedly makes the infobox disappear again.



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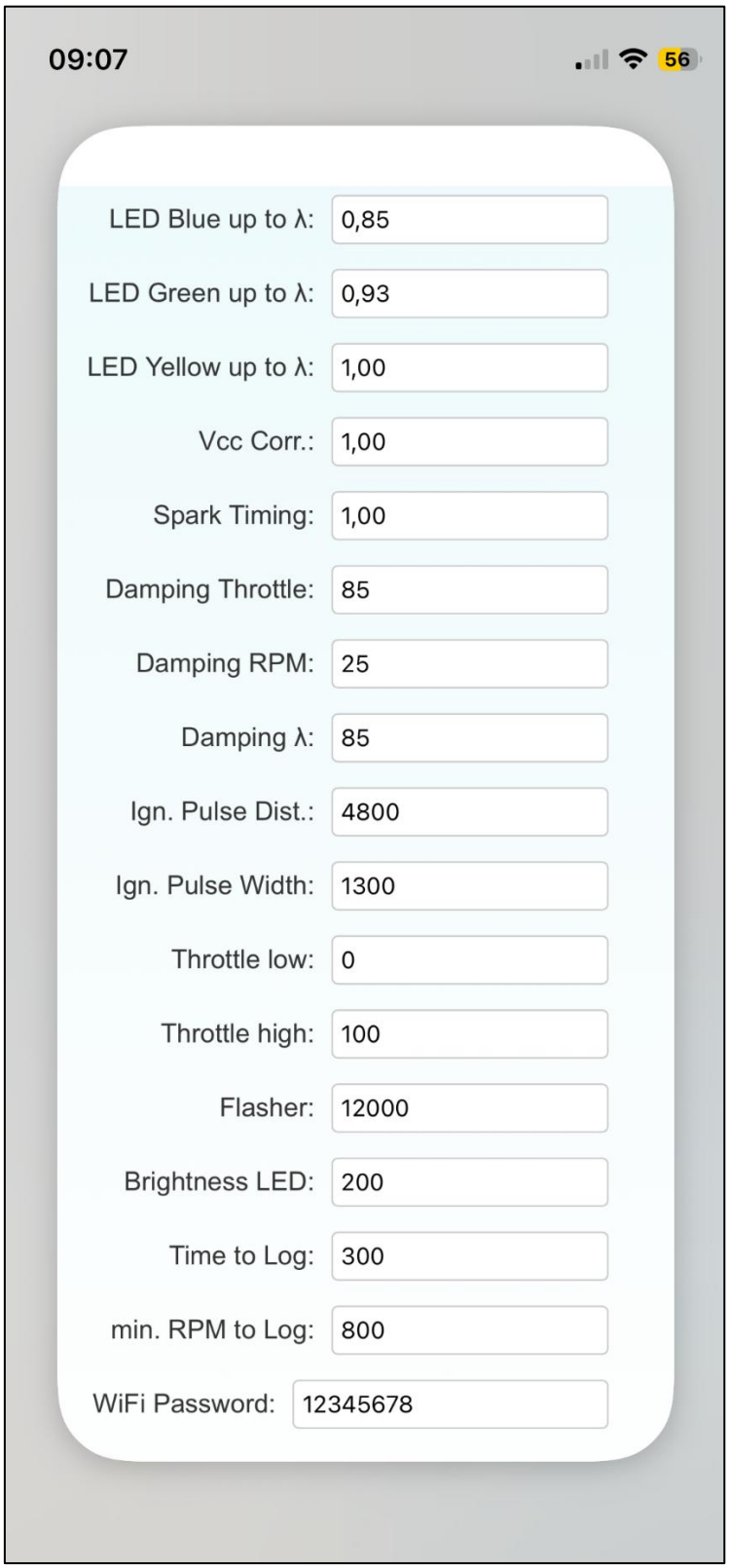
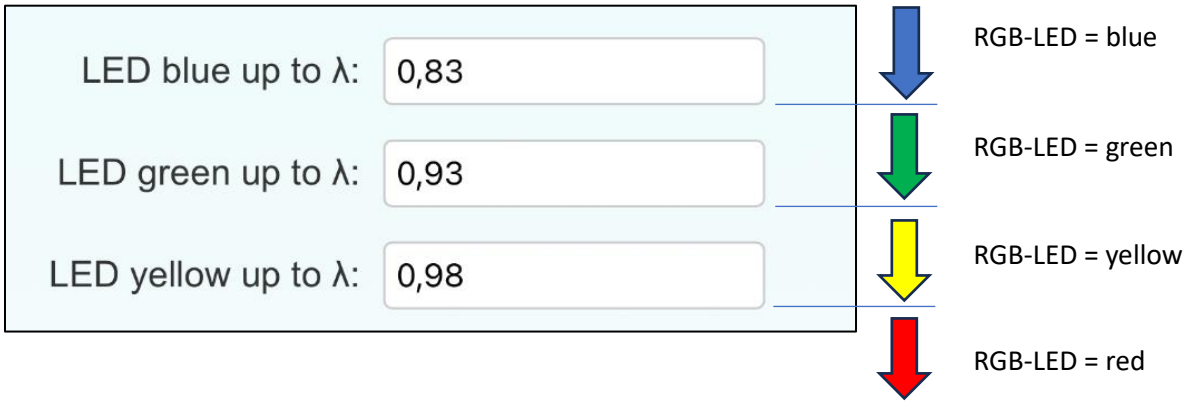
5.2.6 Settings Menü



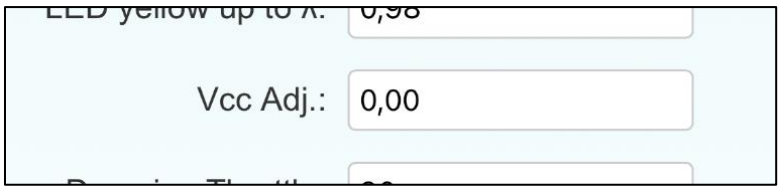
5.2.6.1 RGB LED Settings



These three values can be used to adjust the behavior of the RGB LED. Below "LED blue up to λ", the RGB LED always lights up blue. Above "LED yellow up to λ", the RGB LED always lights up red.

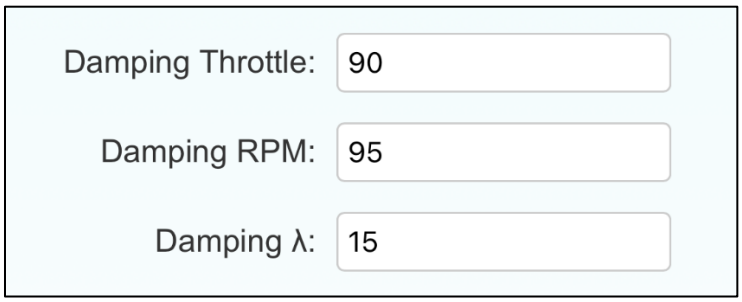
The input fields only accept values in a range of 0.67 – 1.25!

5.2.6.2 Setting Vcc Adjust



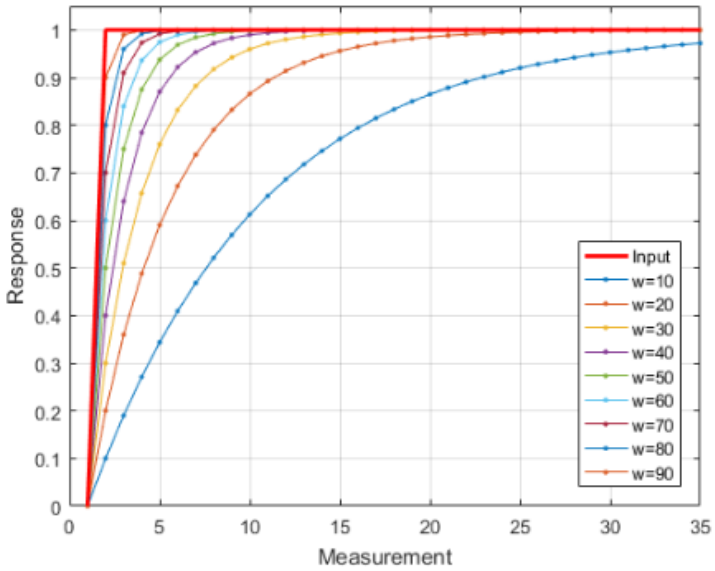
MD-Lambda-View permanently measures the current on-board voltage. Due to tolerances of the components, resistors, etc., there may be minimal deviations from the real on-board voltage. If you want to be very precise, you can check the current on-board voltage with a multimeter and enter a correction factor in volts in this menu item. The entered correction factor may be in a range of -3.0 to +3.0.

5.2.6.3 Attenuation Values



The measured values for speed, throttle position and lambda value are damped in the software. This means that values that have already been measured and new values are weighted against each other. The value for the filter describes how the new data is included in the calculation of the mean. High values favor new measurement data over the old measurement data. Low values prefer old measurement data to the new measurement data. **In the end, this means that the smaller the values entered, the greater the attenuation.**

The following diagram illustrates this in a more understandable way. The red graph describes the measured value. This is 1 here and is scored directly as 1 without damping. The smaller the set value for the filter, the greater the attenuation. This means that it takes more measurement data until the measured value of 1 is also output as 1.



Source: www.megunolink.com

5.2.6.4 Speed Measurement Settings

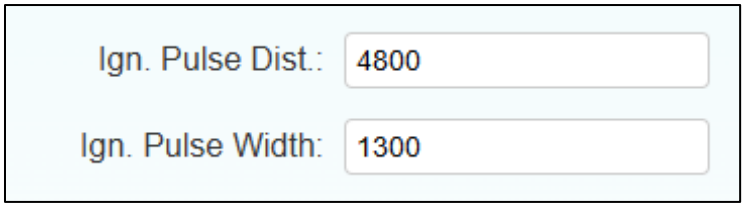
The value for Spark Timing adjusts the speed measurement to the ignition behavior of the engine. For engines with so-called "blind fire", the value must remain at 1. This means that it is ignited per crankshaft revolution, even in the exhaust stroke.

For engines that only ignite in the working stroke, the value must be set to 2, otherwise MD-Lambda-View will only show half the crankshaft speed. For multi-cylinder engines with ignition distributor, a value less than 1 can be entered.

Example:

The engine has 8 cylinders and an ignition distributor. This means that it is ignited 4x per crankshaft revolution. A value of 0.25 must be entered here.

5.2.6.5 Ignition pulse measurement setting



Ign. Pulse Dist describes the minimum distance between two valid ignition pulses. Disturbances in the on-board electrical system, which are quite normal in motor vehicles, can lead to voltage pulses at terminal 1 of the ignition coil. To ensure that these do not have a negative effect on the calculation when determining the speed, a time span of 4800µs = 4.8ms is specified in the basic setting, during which all pulses at terminal 1 since the last valid pulse are ignored. 4.8ms corresponds to a speed of 12500rpm when ignited at each revolution. If ignition is only carried out in the working cycle, Ign. Pulse Dist. can be set to a value of 9600µs = 9.4ms.

$$Ign.\,Pulse\ Dist. = \frac{60}{U/min} * 1000000\ \mu s$$

$$Ign.\,Pulse\ Dist. = \frac{60}{12500} * 1000000 = 4800\mu s$$

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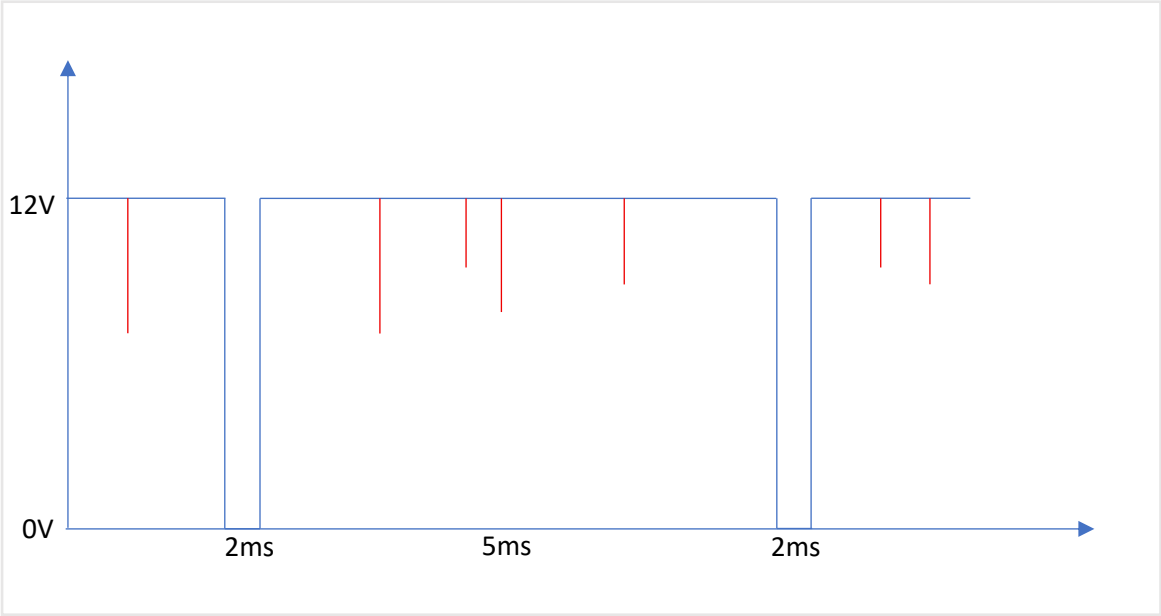
Ign. Pulse Width defines how long an ignition pulse (closing time of the breaker) must be at least to be used for speed measurement. In this way, narrow impulses, such as those that occur in the event of faults in the on-board electrical system, are ignored. In the default setting, the value is 1300µs = 1.3ms. You are welcome to experiment here if the speed output seems implausible. If the value is larger than the real pulse width, then all ignition pulses are ignored.

Electronic ignition systems usually have a constant closing time of about 2 ms, which is constant over the entire speed range, whereas breaker ignitions have a constant closing angle. This is the angle of rotation of the ignition cam in which the breaker remains closed. Here, the closing time changes with the speed. Low speed means long closing time, high speed means short closing time.

For example, the closing time at a constant closing angle of 60° at a speed of 1000rpm is 10ms. At a speed of 9000rpm only 1.1ms. Here, "Ign. Pulse Width" can be set to 1000 in order to still reliably detect the impulse.



The blue line shows a typical voltage curve measured by MD-Lambda-View. The red lines represent disruptive impulses that are ignored. For the sake of completeness, it should be said that MD-Lambda-View does not evaluate the high positive voltages at terminal 1 of the ignition coil, as is generally the case, but the moment when the supply voltage of the ignition coil drops to 0V because the breaker or the power amplifier in the ignition control unit short-circuits to ground and charges the ignition coil. (closing time or closing angle)

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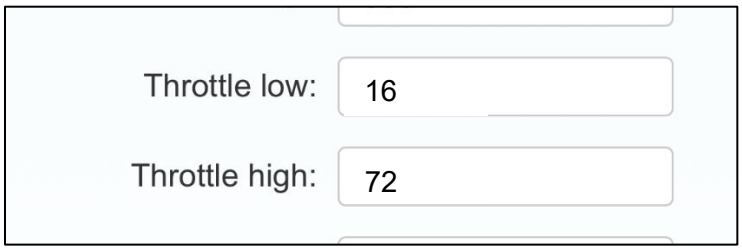
5.2.6.6 Throttle position adjustment



In this menu, the input signal is calibrated by the draw-wire sensor or a throttle potentiometer.

As an example, let's assume that the value for the closed throttle output in the web interface is 16% and the value for the fully open throttle is 72%. These two values are entered in the MD-Lambda-View settings menu as Throttlel-low and Throttle-high to use as a basis for calculation. Once this is done, the throttle position will show 0% when closed and 100% when open.

5.2.6.7 Flasher

The RGB LED can also be used as a switching flash. In the input field, the speed at which the RGB LED starts flashing white quickly is entered.

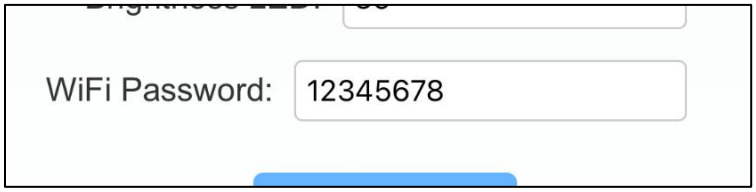
5.2.6.8 Adjusting the brightness of the RGB LED

Here the brightness of the RGB LED can be adjusted. The value can be from 255 -1, where 255 is the maximum brightness and 1 is the minimum brightness.

5.2.6.9 Conditions for Logging

In order for MD-Lambda-View to write data to the table, a minimum time must have passed after the start (ignition on) and a minimum speed must be applied. The time of 300s (default setting) is intended to ensure that the engine and lambda sensor are sufficiently warmed up to obtain plausible data for the lambda value. The time starts as soon as the ignition is switched on. Please always keep that in mind. The minimum speed ensures that no data is written when the engine is not running.

5.2.6.10 WIFI-Password



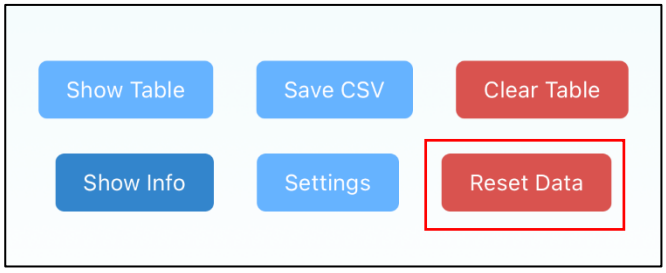
If you want to change the initial password, you can do so here. The new password only becomes active after a restart of MD-Lambda-View. The new password must be 8 ASCII characters long. Requirements such as upper and lower case letters or special characters are not necessary, but are possible. Smileys or similar are not permitted.

5.2.6.11 Save Settings

When you press the "Save Settings" button, the values in the Settings area are written to the EEprom memory of MD-Lambda-View.

The settings values are retained even when the MD Lambda View is turned off. A message box appears stating that all values have been saved and that the new password, if changed, will only be activated after a restart (ignition off –> ignition on). Then please press the "Back" button of the browser to return to the main menu. Sometimes it can happen that the browser does not show anything when you go back. In this case, please check the entry in the address bar of the browser. If it says "192.168.4.1/save", then please delete "/save". Then the display should work as usual again.

5.2.6.12 Reset



When the reset button is pressed, all settings in the Settings area are reset to the delivery state. The change takes effect after a restart of MD-Lambda-View.

Attention, of course the password will also be reset to "12345678".

6. Conformity of the product

The manufacturer Espressif has proven CE and FDD conformity for the ESP32 WIFI module used . The relevant documents are available and can be viewed and downloaded in the download folder on www.md-lambda-view.com. A conformity for the entire device is in the works.

MD-Lambda-View is RoHS compliant.

A WEEE number has been applied for at the ear-Stiftung WEEE register.

7. Tips and tricks

1. Sometimes it happens that MD-Lambda-View does not reappear when pressing "Back" in the browser. Here you should activate the input in the address bar of the browser (just type in the address bar). Only the IP address "192.168.1.4" of MD-Lambda-View is supposed to be there. If it says "192.168.1.4/save", please delete "/save" so that only the pure IP address is displayed.
2.
3. TBD

-

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