Operating instructions (Translated)

Gas detection device with vibration alarm

TONI GasTest CH4 [EN]

version 09/2025 as of SW-version 11

Item no. 303001

Translated: 09/2025

Content

Safety aspects and notes on using the device

In order to ensure maximum safety and prevent malfunctions, you should be absolutely certain to

FOLLOW the operating instructions!

Symbols used in these operating instructions

Caution: Individual situation-related and work-related safety instructions for the safe use of the device.

Note: Notes contain useful additional information and application tips that must be observed for safe use of the device.

1. Safety and operating personnel

1.1 Where may the device be used?

The **TONI** is a portable, highly sensitive measurement device and is used for the quick detection of the smallest leaks in the gas installation.

For this device the following safety instructions and requirements to the area of use shall apply:

The **TONI GasTest** CH4 0 - 10.000 ppm measurement device is only calibrated for methane and only provides correct display datas for this gas.

The use is limited to the detection of gas leaks and the qualified categorisation of leaks.

- The device is designed for use in gas installations.
- This device is not approved for usage in in Ex-Zones.
- This device is not for usage with explosive substances or mixtures.

Ensure you keep within the specified measurement range limits.

1.2 Requirements to be met by the personnel

All work on gas pipelines may only be carried out by specialist expertise, professional instructed and skilled personnel. Therefore, the requirements for specialised personnel and experts are professional training and sufficient practical experience as well as relevant expertise:

- in the TRGI G-600 regulations,
- in measurement technology and the safety and occupational safety regulations
- as well as certificates of regularly attended training courses / seminars.

Special expertise professionals must also be verified in text form by the entrepreneur / service provider.

1.3 Protection category IP 64

The Device is dustproof and protected against splashing water from all sides.
If the device has been exposed to the conditions of this protection class, it can lead to incorrect measurements. We therefore recommend drying the device, replacing the filter and carrying out a calibration and adjustment if necessary. If necessary, the device must be sent to the factory for further inspection.

The sensor head is excluded from protection category IP 64.

2. Device guidance

2.1 Initial commissioning/ recommissioning

The device is delivered fully calibrated from the factory. No special measures are required for initial operation.
After switching on the device by pressing the **Enter key** (On/Off), data/information about the device and a note about device registration in **Esders Connect** appear on the display.

For information and advantages of device registration, please refer to chapter 2.3 Registration.

Please note the following when using the probe:

- no contamination, no mechanical damage
- Gooseneck of the connection probe/ air concentration probe:
  - Do not overbend the goose neck with a radius < 40 mm
  - Do not carry the device by the probe head or goose neck
  - Do not bend the probe with tools, e.g. pliers
  - Protect the probe from drops and moisture
  - Do not expose the probe to lighter gas etc.

Attention!
The battery should be fully charged if the device is not used for a long time after delivery or if it is not used for a long time.
Before use, the device should be left to run in fresh air for some time. The measurement device should be calibrated/adjusted at regular intervals. At least once a year.

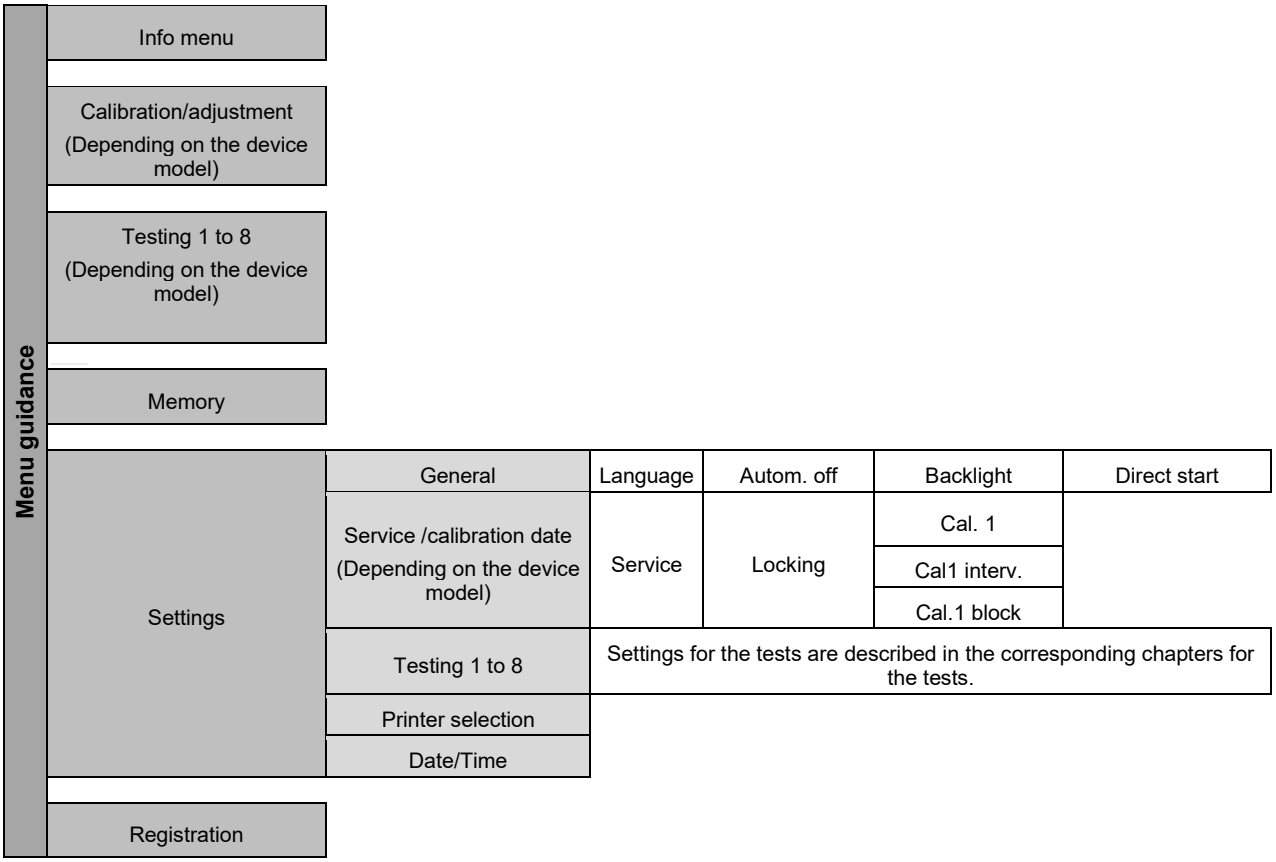
Before transport or storage, observe the following:

- Clean any dirty connections beforehand
- The device should be charged and never be allowed to deeply discharge.
- Store in dry conditions; only between -20 to +60°C

The device will be delivered in a packed state. Do not use sharp objects to open the packaging. Please dispose the packaging material in an environmentally friendly manner in accordance of the local regulations.

Check the completeness of the delivery.

2.2 Menu guidance



2.3 Registration

After the measurement device has been switched on, a QR code for registering the device in Esders Connect will appear at the beginning. Scanning the QR code takes you to the instructions for registering the measurement device.

As soon as the device registration is complete, the display in the measurement device automatically switches to the main menu and you receive a confirmation email to the email address registered in Esders Connect.

If the measurement device should not be registered in **Esders Connect**, the registration can be skipped with the **F2 key**. The device can also be registered at a later time via the menu item 2.3 Registration.

Note: If the measurement device is not registered in **Esders Connect**, the following functions are not available:

- Direct start of the set menu item after starting the device
- Sending/transmitting the measurement data in **Esders Connect**

2.4 Overview of measurement ranges & display ranges

Gas	Menu item	display range (D) measurement range (M)	Sensor
CH_4 Methane	Leak detection	0 to 10.000 ppm	SC CH4 sensor
		1 Vol. % to 2.2 %Vol (D)	

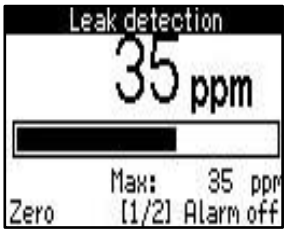
3. Leak detection

The ‘Leak detection’ menu item allows the quick and effective detection of leaks on installation lines and connection points.

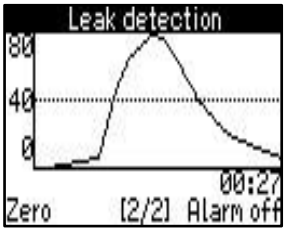
After selecting the menu item, the sensor initialisation phase begins. This must be carried out in fresh ambient air! The sensor initialisation phase is the period of time required for the sensor and the device to be fully functional.

As soon as the “save” symbol appears in the first line of the display, the current measurement data is displayed and saved.

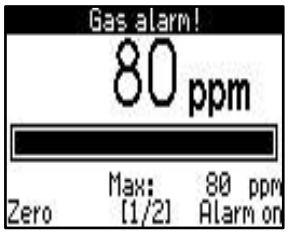
By using the **F1 key**, a zero point correction can be performed once within certain limits.



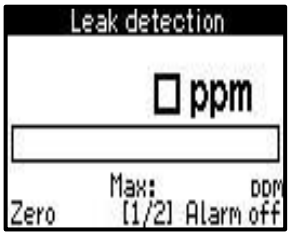
Using the **Enter key**, you can scroll through the menu items to display a ppm graph showing the measured concentration over time.



As soon as the measured gas value reaches or exceeds the set alarm threshold, an acoustic, visual and vibration alarm is triggered. In addition, ‘Gas alarm!’ is displayed alternately with the measured value in the second line of the display, flashing by inversion. The test is ended with the **ESC key**. With configured MDE data, you can access the measurement summary and then return to the main menu with the **ESC key**.



If the box shown in the figure is displayed when performing the leak detection, a calibration must be performed.



In the Settings menu item, individual settings for the menu item can be made, such as the alarm threshold, resolution in unit sets (according to the table listed) and displaying the menu item.

Set settings					
Set	ppm		Vol.%		
	Max.	Resolution	Min.	Resolution	Max.
1	1.000	1 ppm	0,1 %	0,1%	2,2 %
2	1.000	5 ppm	0,1 %	0,1%	2,2 %
3	10.000	10 ppm	1%	0,1%	2,2 %
4	22.000	50 ppm			

4. Power supply

The measuring device is powered by an internal rechargeable battery. The current battery level is always shown in the top line of the display.

If the display shows **'Battery empty'**, the measuring device should be charged. Only the charging cable provided by **Esders GmbH** should be used to charge the measuring device.

5. Firmware updates (firmware, menu items, functions)

You can use the **Esders Connect** app to update the device's firmware without sending it in. Firmware updates are required, for example, if regulations and therefore test procedures change (update).

We, **Esders GmbH**, continuously update the test procedures in the event of changes (to standards). Firmware updates are also required if you purchase additional menu items (upgrade). If you need help with an update, please contact Esders Service department.

Prerequisite:

- **Esders Connect** app and smartphone/tablet with a good internet connection
- Esders device

Use the Esders Connect app

Do not switch off the device during the process. The app and wireless data transfer should also not be switched off.

1. Switch on the device.
2. Open the app on the smartphone/tablet.
3. Follow the further instructions in the app.

Info: The app connects with the device. The device switches to ‘Data mode’. You will see ‘Data mode’ on the device display.

6. Error message/ codes

If the measuring device displays an error message or error codes, please observe the following steps:

- Switch the device off and on again
- make sure that the battery is fully charged.

If the errors appear again after a restart, the device should first be connected to the **Esders Connect** app and the configurations and/or firmware should be updated. If the error persists afterwards, please contact Esders Service.

Esders GmbH

Hammer-Tannen-Str. 26-30

D-49740 Haselünne

Tel.: 05961/ 9565-0

E-Mail: info@esders.de

7. Maintenance and service

We recommend that the device, including sensors, be fully serviced by Esders GmbH in accordance with DIN 31051 once a year:

maintenance	= Servicing, inspection, repairs, improvements
servicing	= Measures to maintain the target condition
inspection	= Measures to determine and assess the current condition
repairs	= Measures to re-establish the target condition
Improvements	= Subsequent improvements (such as software updates)

In addition, the time of the next inspection is shown on the display when the device is started (if previously set in the settings), as well as in the Esders Connect app or when the ESC key is pressed and held while the device is switched off. Only original Esders spare parts may be used.

8. Disposal

The device and its accessories must be disposed of in accordance with the statutory provisions. Please ensure that the waste is separated appropriately before disposal. We will gladly take your device back and arrange for it to be disposed of by a qualified processing company.

Old batteries do not belong in household waste. As a consumer, you are legally obliged to return used batteries. You can return your used batteries to public collection points in your local area or anywhere that sells batteries of this type.

Return the device/accessory labelled Disposal to the following address:

Esders GmbH
Key word: Disposal
Hammer-Tannen-Str. 26-30
D - 49740 Haselünne

9. Licence conditions for the operating system

Reference to firmware (open source software)

The firmware is based on open source software. The source code is provided according to the licence conditions for this open source software (GPL / LGPL). Esders GmbH points out that it is not responsible for the source code, which is not part of the services due.

The source code is available upon request for sale at cost at info@esders.de.

The complete licence conditions can be found on the internet at:
www.esders.de/Lizenzen/

10. Warranty conditions

Thank you for choosing for the Esders device. All devices are inspected thoroughly by our technicians before leaving our factory.

We provide a 12-month warranty for all devices assuming they are used as intended Opening the device may invalidate the warranty.

11. Technical data

description	:	**TONI GasTest CH4**		
Dimensions without gooseneck	:	13 cm x 6,5 cm x 3,5 cm		
Dimensions with gooseneck	:	35 cm x 6,5 cm x 3,5 cm		
Weight	:	265 g		
Display	:	LCD graphic display with 128 x 64 pixels + special characters, can be illuminated		
power supply	:	Long-lasting lithium-ion battery, rechargeable via USB-C		
Operating time	:	Display lighting off	:	approx 31 hours
		Display lighting on	:	approx 20 hours
Operating conditions	:	Temperature	:	–20°C to + 50°C
		Calibration/adjustment	:	10°C to +40°C
		Air humidity	:	0 - 95% relative humidity (non-condensating)
		Ambient pressure	:	800 - 1100 hPa
		Gas inlet	:	max. 60 hPa inlet pressure
Storage conditions	:	Temperature	:	20°C to +60°C
		Air humidity	:	0 - 95% relative humidity (non-condensating)
		Ambient pressure	:	800 - 1200 hPa
Protection	:	IP 64		
Measuring range	:	Methane 0 - 10.000 ppm		
Printout (optional)	:	Thermal printer		
Cloud memory	:	Including after Esders Connect device registration		
Alarm notifications	:	Optical, acoustic and vibration		
Alarm level	:	>95 dB (A)		

Esders

Keep the operating instructions in a safe place so that you can access them at any time if necessary. All illustrations in this document serve to clearly illustrate the technical context or explain the operating procedures. Only the facts described in the text apply to the warranted scope of performance. Unless otherwise stated in the text, the statements in this document take precedence over any other statements in the appendices or illustrations.

This document is a translation of the original operating manual in German. In the event of discrepancies or ambiguities, only the German version is authoritative and legally binding.

All data, specifications and information in this operating manual have been compiled with care and to the best of our knowledge. If you have any questions or would like to give feedback on the operating instructions, please contact your contact person at Esders.

Contact person
Your sales representative or e-mail to info@esders.com

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