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# XENTRY Scope – Product Information

GSP/ORE  
Mercedes-Benz AG  
Stuttgart, December 2021



Mercedes-Benz

# Agenda

## 1. Overview

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## 2. Product advantages

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## 3. Product presentation: Hardware | Software

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## 4. Scope of supply & available accessories

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## 5. Training & support



# XENTRY Scope replaces the previous XENTRY measurement technology HMS 990 USB.



## NEW

- Simple and intuitive operation.
- Extended basic package at a reduced price:  
The 100 A current clamp is included in the basic package.
- Four fast channels with visual display.
- Previous measurement technology functions will continue to be supported and further measurement options will be added.
  - **Highlight:** Noise, Vibration and Harshness measurements\*: NVH)

\* Additional hardware required, can be ordered as accessories.

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2. **Product advantages**

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3. Product presentation: Hardware | Software

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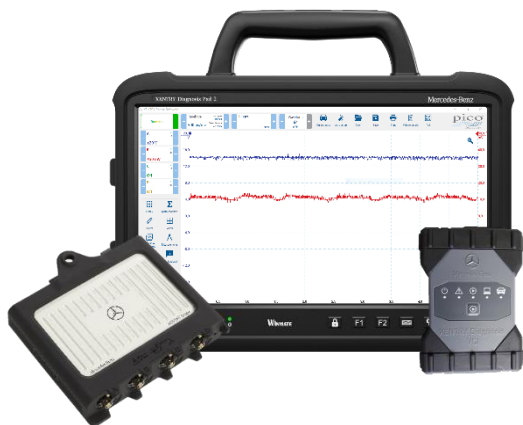
4. Scope of supply & available accessories

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# Overview of advantages of new XENTRY Scope measurement technology.



**XENTRY Scope** measurement technology  
in combination with  
**XENTRY Diagnosis Kit 3 | Kit 4**

## Measurements

- Voltage measurement of sensors
- Quiescent current measurement
- FlexRay measurements\*
- NVH measurements\*
- Temperature measurements\*
- Pressure measurements\*

\*Accessories required

## Compatibility

- Usable in **cars, vans, buses** and **trucks** up to 200 volts
- XENTRY Scope measurement technology is compatible with the XENTRY Diagnosis Kit 3 | Kit 4 diagnostic systems

## Wide range of accessories

**Further accessories** can be ordered in addition to the standard package, e.g:

- XENTRY Scope NVH for noise and vibration measurements
- 2000 A current clamp
- Pressure sensor
- Coil and signal sensor
- Temperature sensor

## Software

- **Simple operation**
- Optimized for **touchscreen operation**
- **Automatic detection** of sensors and adapters
- Preset measurements with **pass images**
- **Regular updates** through XENTRY Diagnosis Kit 3 | Kit 4 release updates

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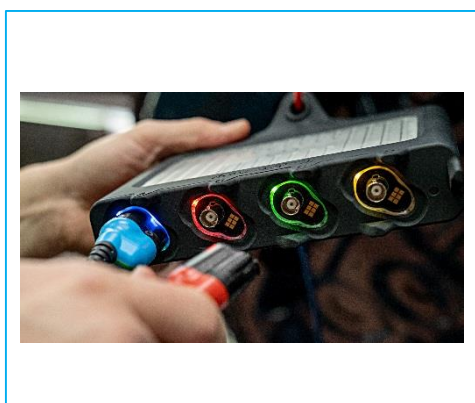


# Overview of hardware I: XENTRY Scope connections and LED displays.



## Main features

- Compact design.
- Power is supplied via the USB connection.
- Four channels can be actuated individually.
- The housing is shock-proof due to its rubber lining.
- Connections are protected by rubber caps.



## Status display directly on the measurement technology

- » Activation of LEDs corresponding to color of inserted cable.
- » Additional activation of LED according to color of channel within the software.

# Overview of hardware II: The technical details of XENTRY Scope.



## Technical details

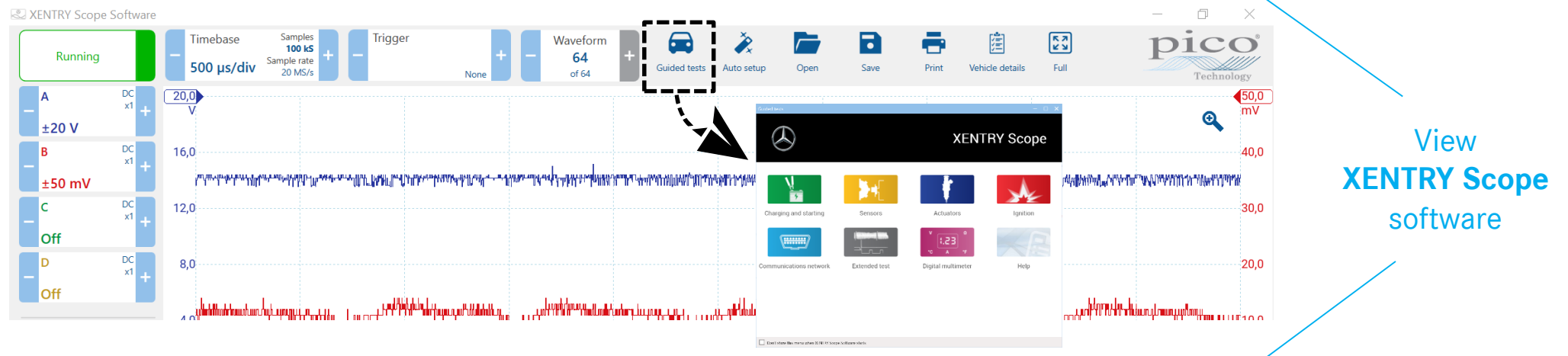
- Analog bandwidth (-3dB) 20MHz
- Vertical resolution 12 bit (16 bit extended mode)
- Input type Floating (ungrounded) Single-End, BNC
- Input properties 1 M $\Omega$   $\pm$ 1%, simultaneously with < 20 pF
- Input sensitivity 10 mV/DIV up to 40 V/DIV
- Input range  $\pm$ 50 mV to  $\pm$ 200 V in 12 ranges
- Accuracy (DC) - 10kHz  $\pm$  1% fs  $\pm$  200  $\mu$ V  $\pm$  1 LSB
- Overvoltage protection  $\pm$  500 V transient
- Scan rate (real time) 1 channel (400MS/s), 4 channels (100MS/s)



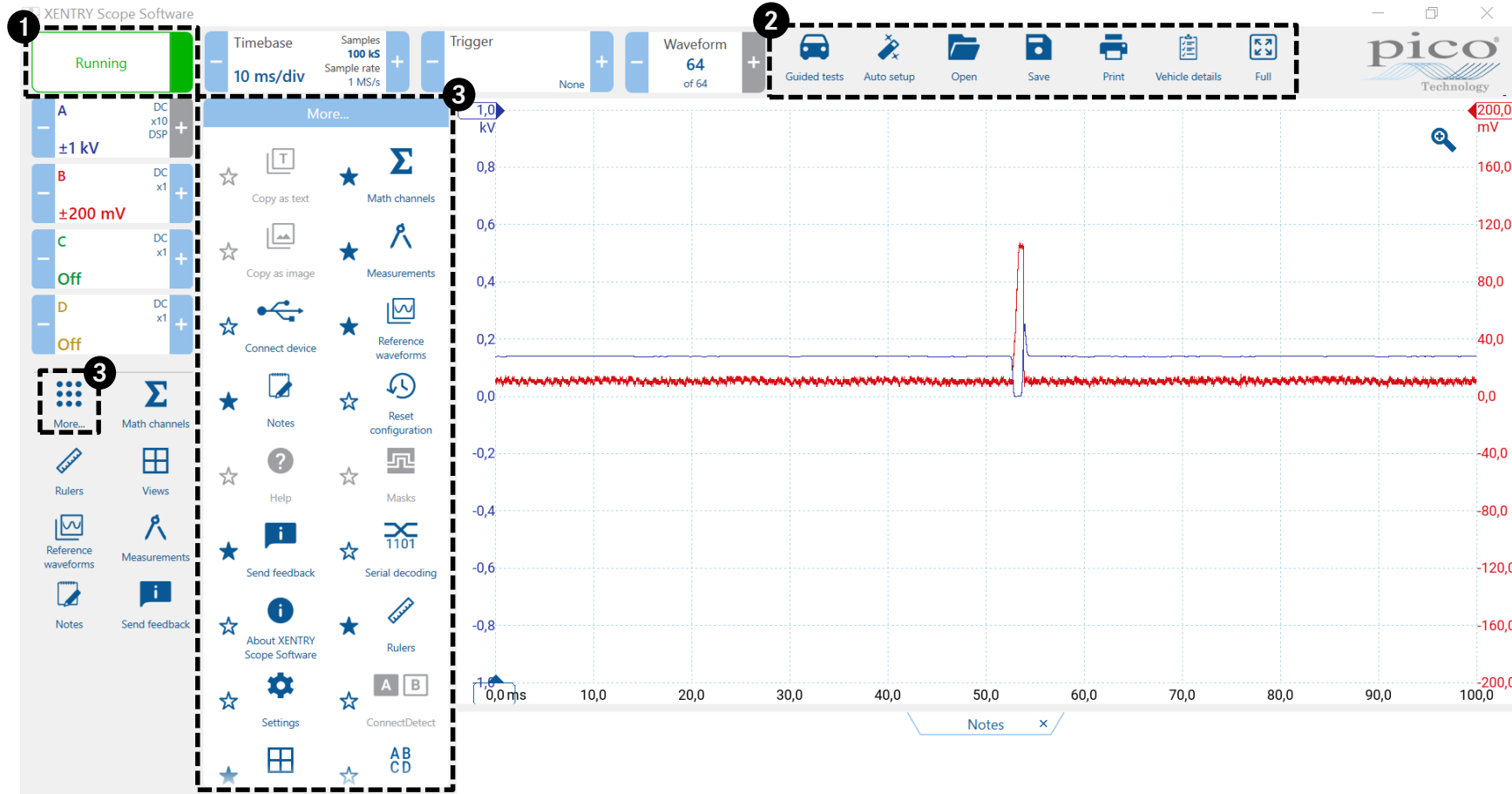
# Overview of software I: The known pass images for the most frequent measurements can be found under "Guided Tests".



- The XENTRY Scope icon on the desktop of your XENTRY Diagnosis Pad | Pad 2 can be used to start the XENTRY Scope software and perform measurements. Starting from in the XENTRY Diagnosis software during the diagnostic process is also possible.
- You can quickly and easily start a desired test procedure using the "**Guided Tests**" tool in the menu at top right.



# Overview of software II: View of the XENTRY Scope software in detail.



- 1 Start/stop measurement
- 2 Tools (favorites)
- 3 Other tools

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# The standard scope of supply also contains the accessories for the most common measurements. It even comes with a 100 A current clamp!



## SCOPE OF SUPPLY\*

- XENTRY Scope hardware
- Connection lines
- USB cable
- 100 A current clamp
- 4mm jacketed to non-jacketed adapter
- Battery clamps
- Storage case

\*The XENTRY Scope software is already installed on your XENTRY Diagnosis Pad | Pad 2.

## ORDERING OPTION

You can order the XENTRY Scope measurement technology through your usual ordering channel.

# You can optionally order additional accessories.



## 100 A current clamp

Current clamp up to max. 100 A.



## 2000 A current clamp

Current clamp up to max. 2000 A.



## Pressure sensor

-916mbar to +12.5 bar, high speed.



## Temperature sensor

The measuring range of the probe is -40 °C to +125 °C.



## High-frequency testing and measuring range probe

For use with higher voltage signals up to 500 volts and for the measurement of FlexRay signals.



## Measuring line for resistance measurement

Test line for resistance measurement.



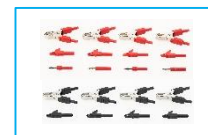
## Coil and signal sensor

You can use the coil and signal sensor to check ignition coils and electric valves.



## Secondary ignition pickup

A capacitive pickup for measuring the secondary ignition voltage at the ignition cable.



## Small parts set (clamps & adapters)

Consisting of battery clamps, small alligator clips and 4 mm adapters.



## NVH kit (Noise, Vibration and Harshness)

For noise and vibration measurements.



## Optical balancing set

Aid for the balancing of rotating components.



The accessories for the XENTRY Scope measurement technology can be obtained via your usual ordering channel.

# XENTRY Scope NVH, which is available as an accessory, can also be used for noise and vibration measurements.



NVH in combination with XENTRY Diagnosis Kit 3 | Kit 4 & XENTRY Scope

## Main features

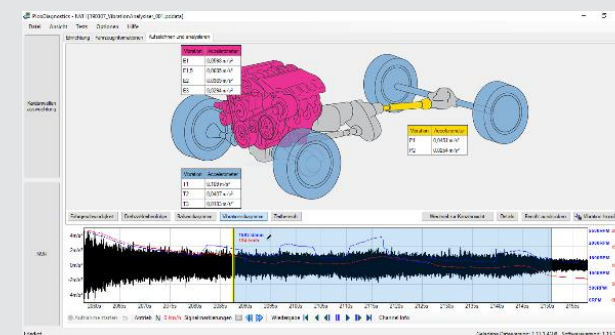
**NVH: Noise, Vibration und Harshness** = Undesired noise.

- Customer complaints involving **noise** and **vibrations** are analyzed with the aid of the NVH accessories.
- XENTRY Scope NVH consisting of hardware and software.
- NVH can only be used in combination with **XENTRY Diagnosis Kit 3 | Kit 4 & XENTRY Scope**.

**NVH provides real-time diagnostics**

**in the form of:**

- vehicle speed,
- rpm sequence,
- bar graph,
- vibration diagram
- and time range.



View of NVH software: Vibration diagram

# Overview: XENTRY Scope NVH accessories package.

The NVH software is already integrated into the XENTRY Scope software.



## SCOPE OF SUPPLY

- 2 NVH interfaces with three outputs each
- 4 connecting cables (red, green, blue, yellow)
- 2 microphones with cable
- 2 XYZ sensors
- 2 holding magnets for the XYZ sensors
- 1 case

## ORDERING OPTION

You can order XENTRY Scope NVH through your usual ordering channel.



**XENTRY Scope NVH** can only be used in combination with **XENTRY Scope** and **XENTRY Diagnosis Kit 3 | Kit 4!**

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# Our extensive training range helps you to profit optimally from the many measuring possibilities provided by XENTRY Scope.

## GT APP



- Learning content
- Downloads
- Forum for discussions

## AKUBIS short videos



- Scope of supply
- Measurement possibilities/ software operation
- DMM: Quiescent current measurement, voltage and resistance measurement
- Camshaft, crankshaft
- CAN measurement
- NVH

## F2F training



**XENTRY Scope and NVH**  
Learning contents are integrated into existing diagnosis training courses.

## TRAINING CONCEPT FOR XENTRY SCOPE

Along with the training course options, we also offer you **accompanying media** for support in the form of Help Cards and brochures.

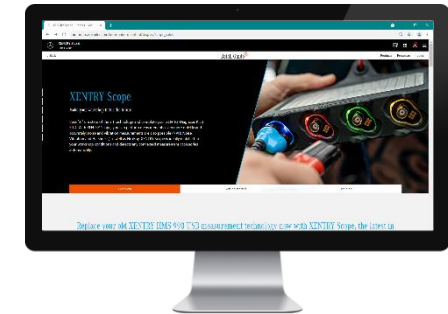
# Further helpful information material on XENTRY Scope is also available.

## XENTRY PORTAL

- General product information about XENTRY Scope.
- Documents & videos for download.

» <https://xentry.daimler.com>

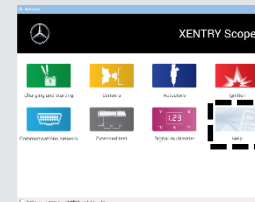
**Path:** XENTRY Portal > Diagnosis & Telematics > XENTRY Scope



## XENTRY SCOPE SOFTWARE

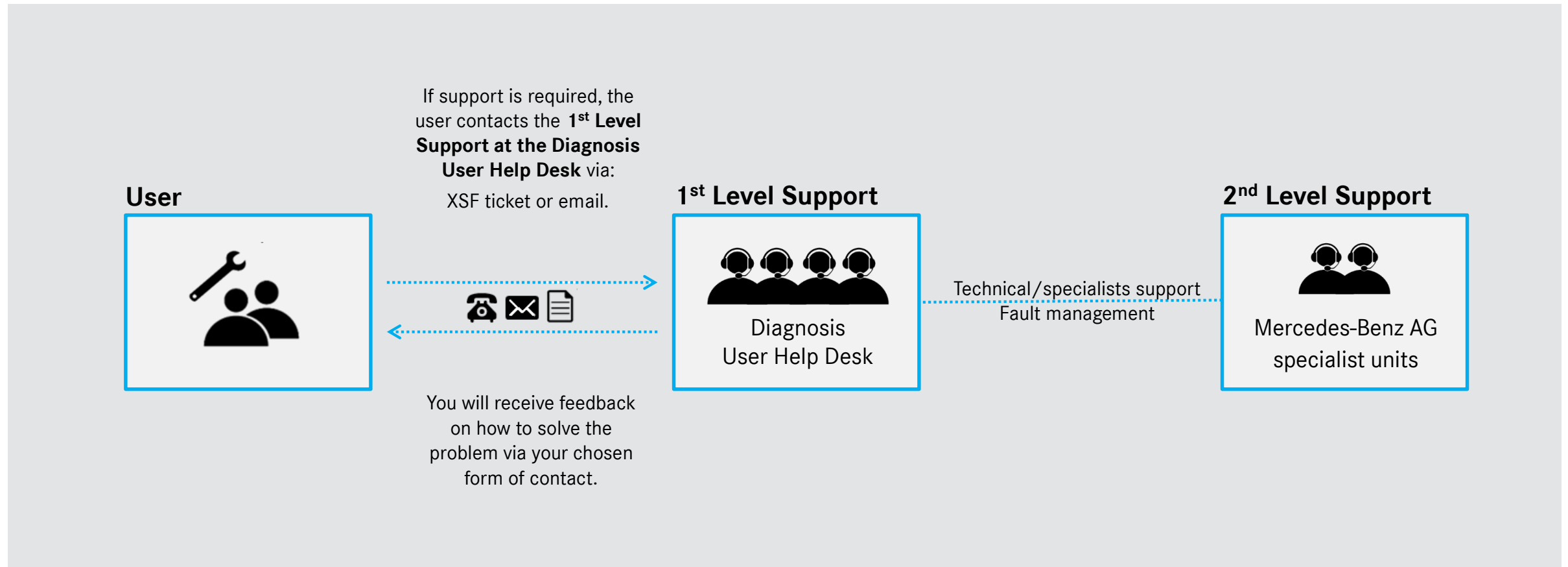
- Help in the software itself in the form of a screen capture.

» **XENTRY Scope software:**  
Guided tests > Help



# In the event of a fault, you will receive support as usual via the Diagnosis User Help Desk.

## SUPPORT CONCEPT FOR XENTRY SCOPE





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