

WÖHLER

**Operating manual
Video Endoscope**

Wöhler VE 200



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1 General Information

1.1 Operation Manual Information

This operation manual allows you to work safely with the Wöhler VE 200 Video Endoscope. Please keep this manual for your information.

The Wöhler VE 200 Video Endoscope should be employed by professionals for its intended use only.

Liability is void for any damages caused by not following this manual.

1.2 Notes



WARNING!

Not following this warning can cause injury or death.



ATTENTION!

Not following this note can cause permanent damage to the device.



NOTE!

Useful information

1.3 Intended Use

The Wöhler VE 200 Video Endoscope is used for the inspection of small cavities from Ø 20 mm on. The Wöhler VE 200 transfers the images by WLAN to a Laptop, tablet PC or a smartphone.

1.4 Scope of supply

Device	Scope of supply
VE 200 Video Endoscope	Video Endoscope
	Probe (1,2 m) with mini camera head
	4 AA batteries
	Plastic case
	Smartphone Support

1.5 Storage and transport

! ATTENTION!

Improper transport can harm the instrument.

Always transport the Video Endoscope in the provided carrying case in order to prevent damage.

! ATTENTION!

When rolling up the probe, take care that the diameter is not smaller than the diameter of the probe section in the case.

1.6 Information on disposal



Electronic equipment does not belong into domestic waste, but must be disposed in accordance with the applicable statutory provisions.

You may hand in any defective batteries taken out of the unit to our company as well as to recycling places of public disposal systems or to selling points of new batteries or storage batteries.



1.7 Direction

2 Technical Data

Description	Data
WLAN	
Network Standard	IEEE 802.11 b/g/n
Antenna	Built-in IPEX antenna
Operating Frequency	2.4 GHz
Data Rate (802.11 a/b/g/n)	up to 150 Mb per second
Camera head	8,5 mm Ø
Resolution	2,0 Mega pixel CMOS
Depth of Field	60 mm to 100 mm
Resolution	800x600 pixel 1024x768 pixel 1280x720 pixel
Viewing angle	60°
Probe length	1,2 m
Files	photos: jpg
	videos: AVI
Light source	6 LEDs
Additional Light	1 W LED flash light
Current supply	4 AA batteries or NiMh batteries
Encapsulation camera head	IP 67
Working temperature	0 -45 °C

3 Component explanation

3.1 Components

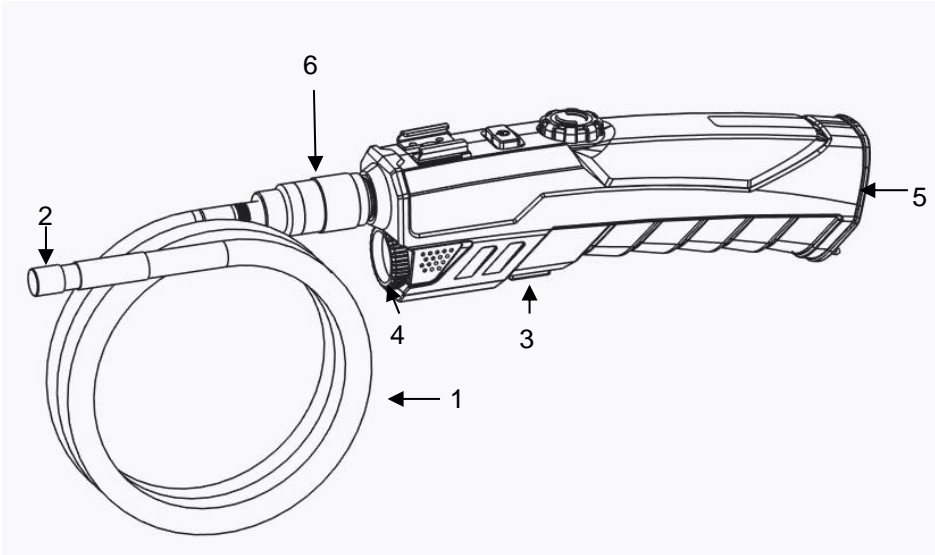
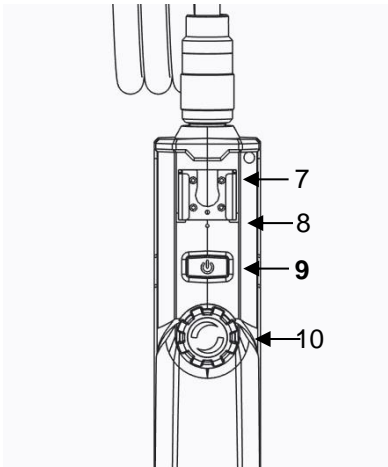


Fig. 1: Components, side view

Explanation

- 1 Camera probe
- 2 Camera head
- 3 Flash Light ON/OFF
- 4 Flash Light
- 5 Battery compartment
- 6 Union nut

Component explanation



- 7 Support for smartphone or iPhone
- 8 Reset hole
- 9 ON/OFF-key**
- 10 LED Adjust Wheel

Fig. 2: Components, Front view

3.2 Inspection

- Do not expose the optics to sudden temperature changes.

! Attention!

If the lens have heated while working, there is the danger of bursting when it comes into contact with cold water.

On/Off-key

- Press the ON/OFF key to switch the Video Endoscope on and off.

When the Wöhler VE 200 is switched on, the ON/OFF LED will shine blue.

If the battery voltage is low, the ON/OFF LED will shine red.

Switching on the Flash light

For an inspection in a dark environment the flash light should be switched on.

- Switch the flash light on and off by pressing the flash light key.

Assembling the Probe

- The probe can be removed for transport and storage.
- Loosen the union nut and remove the probe.
- To assemble the probe again, proceed as follows:

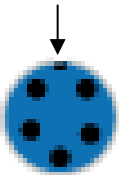


Fig. 3: Probe Connection

! ATTENTION!

The probe connection has a small notch. Take care to plug the notch on the small nose piece of the plug connector.

- After that tighten the union nut.

4 Functions



Fig. 4: Wifi devices that can be used with the Wöhler VE 200.

The Wöhler VE 200 Video Endoscope has a powerful wireless module that provides a stable wifi connection to iPhones, iPads, Android Smartphones and PCs. Photos are stored as .jpg. Videos are stored as .avi.

5 Transferring images to an Android Smartphone, iPhone or iPad

5.1 Installing the App on an Android Device



Fig. 5: Icon of the "VE 200 Wifi Endoscope" App

- Search "VE 200 Wifi Endoscope" in the Google Play market or in the iTunes Store and install the app.

- Switch on the Wöhler VE 200.
- Search "wifi endoscope" wifi connection name and connect your iPhone, iPad or Android device to it with default password **0000000**.
- Run the application to see the video stream.

Transferring images to an Android Smartphone, iPhone or iPad

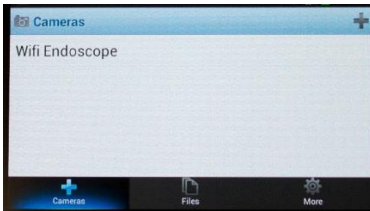


Fig. 6: Installation of the application

- Select **Wifi Endoscope**.

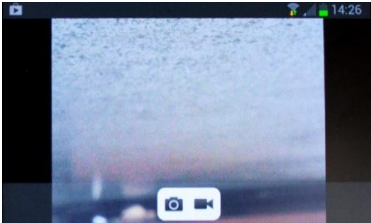


Fig. 7: Video stream with menu

The video of the Wöhler VE 200 is displayed on the smartphone.

- Press the photo icon to save a photo as a jpg on your smartphone. The message "save succeed" will be displayed.
- Press the video icon to start the video record. The message "record start" will be displayed. The video icon will flash during the record.
- Press the video icon again to stop the video record.

The message "record stop" will be displayed. The video is stored on your smartphone as an avi-file.

5.2 Installing the App on iPhone or iPad



- In the display of your iPhone or iPad, tap on the Icon „App Store“.



- In the App Store tap on the search function.
- Enter „wifi endoscope“.
- Install the app „Wifi Endoscope“ on your iPhone or iPad.
- The WiFi Endoscope Icon will appear in the display.



- Switch on the Wöhler VE 200 ein.
- In the display of your mobile device tap on the settings icon.
- Tap on WiFi WLAN.
- Select „Wifi Endoscope“ .
- The password is 00000000.

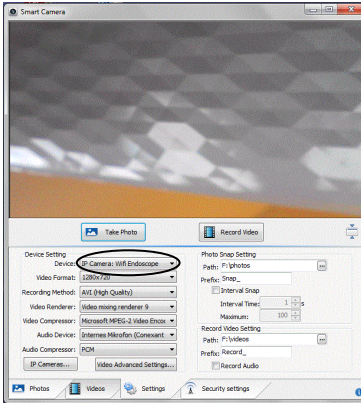
6 Transferring the images to a PC

- Start the software-file "Smart Camera.exe" on your PC.

The correspondent software-CD is part of the delivery.

- Switch on the Wöhler VE 200.
- On your PC, search "Wifi Endoscope" wifi connection name and connect your PC to it with default password **00000000**.

Settings



- Run the software and click on "settings".
- Click on **Device** and select **IP Camera: Wifi Endoscope**.

The video is displayed now.

Fig. 8: Connect the video endoscope to the PC.

7 Settings

- Click on **Settings** to make some adjustments.

Select the video format
800 x 600
1024 x 768,
1280 x 720

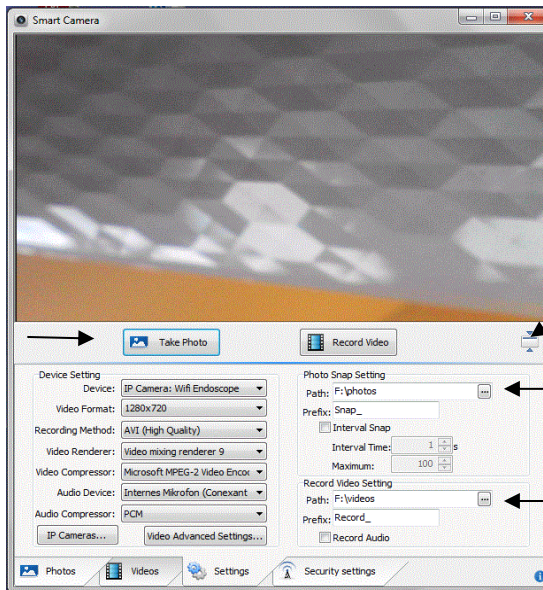


Fig. 9: Settings

8 Take photos

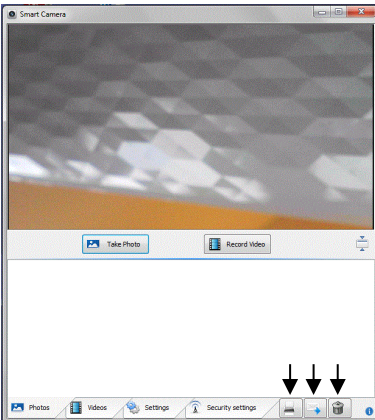


Fig. 10: Photo menu

- Click on **Photos**.
- To store a photo, click on **Take Photo**.
The image will be stored under the chosen directory.
The images will be shown as an Icon at the bottom of the screen.
- To print/send or delete the image, select the image in the gallery and click on the corresponding Icon on the right bottom of the screen.

9 Record Video

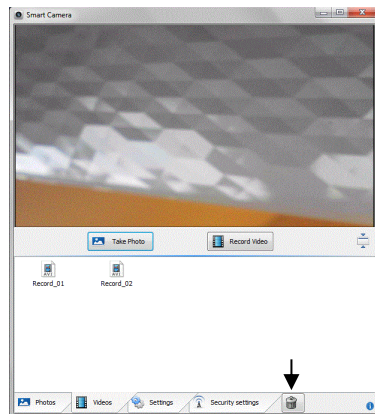


Fig. 11: Video menu

- Click on **Videos**.
- Click on **Record Video**.

The image will be stored as an avi file under the chosen directory.



NOTE!

You can play the avi file with the VLC Player.

The videos will be shown as an Icon below the screen.

- To delete the video, select the video in the gallery and click on the corresponding Icon on the right bottom of the screen.

10 Changing the batteries

- Change the batteries, when the LED of the ON/OFF button shines red.
- Open the battery compartment
- Insert 4 new AA batteries 1,5 V. Observe the right polarity.

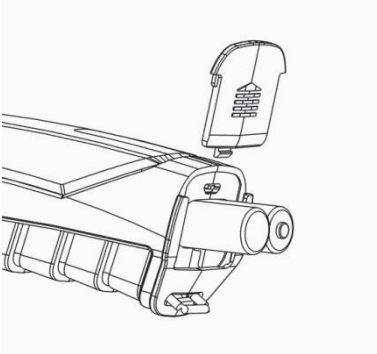


Fig. 12: Changing the batteries

11 Troubleshooting

Problem	Solution
No image	Check whether the probe is connected to the handle body correctly.
	Replace the batteries. Make sure the polarity is correct.
The LED light blinks or does not shine bright enough.	Replace the batteries.
Does not function normally.	Shutdown and turn on the device again.
Forgot password.	Use a pin to press the reset key for 7 seconds to reset the settings of the device. The default password is 00000000.