

# User instructions

## Microscope camera

**KERN**

**ODC-85**

ODC 851, ODC 852

Version 1.2  
03/2020





# KERN ODC-85

Version 1.2 03/2020

## User instructions

### Microscope camera

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#### Before use

You should ensure that the device is not exposed to direct sunlight, temperatures which are too high or too low, vibrations, dust or a high level of humidity.

The ideal temperature range is between 0 and 40°C and a relative humidity of 85% should not be exceeded.

Always make sure that you use an approved power cable. Thus possible damages by reason of the development of overheating (fire hazard) or an electric shock can be prevented.

Do not open the housing and touch the internal component. There is the risk of damaging them and affecting the functionality of the camera.

In order to carry out cleanings always disconnect the power cable from the camera.

Always keep the sensor clear from dust and do not touch it. Otherwise there is the risk of affecting the microscopic image. In case of non-use always attach the protective covers.

#### Technical data

| Model<br>KERN | Resolution | Interface                     | Sensor      | Frame rate  | Colour /<br>Monochrome | Supported operating<br>systems |
|---------------|------------|-------------------------------|-------------|-------------|------------------------|--------------------------------|
| ODC 851       | 2 MP       | HDMI,<br>USB 2.0,<br>SD       | 1/2,8" CMOS | 30 - 60 fps | Colour                 | Win, XP, Vista, 7, 8, 10       |
| ODC 852       | 5 MP       | HDMI,<br>USB 2.0,<br>SD, WiFi | 1/1,8" CMOS | 25 – 60 fps | Colour                 | Win, XP, Vista, 7, 8, 10       |

## Scope of delivery

- Microscope camera
- HDMI cable
- USB cable (ODC 851)
- SD card
- WiFi adapter (ODC 852)
- Object micrometre for calibration
- Software CD

Free download:

[www.kern-sohn.com](http://www.kern-sohn.com) > DOWNLOADS > SOFTWARE > Microscope VIS Basic / Pro

- Eyepiece adapter ( $\varnothing$  23,2 mm)
- Adjustment rings ( $\varnothing$  30,0 mm +  $\varnothing$  30,5 mm) for eyepiece adapter -  
USB mouse
- Power supply

## Mounting

1. Remove the black cover at the bottom of the camera.
2. The thread, where the cover was attached, is a standardised C mount thread. Thus there are special C mount adapters needed for the connection to a microscope.
3. For the mounting to the microscope the C mount adapter is attached to the connection point of the microscope. After that the camera has to be screwed onto the C mount adapter.

**Important:**

**The choosing of the right C mount adapter depends on the used microscope model. It has to be an adapter, which is adjusted to the construction of the microscope and recommended by the manufacturer as appropriate for the relevant microscope.**

4. If necessary, adjust the microscope according to the trinocular usage (with help of the trino toggle rod / trino toggle wheel).

The KERN ODC-85 series ensures to carry out digital microscopy either with help of an HDMI connection directly on the screen or with help of an USB 2.0/WiFi connection (via software).

### **Screen connection (HDMI)**

1. Establish HDMI connection via HDMI cable and switch on the camera by the power button.
2. Stick SD card into SD port on the camera.
3. Connect USB mouse to USB port of the camera.
4. As soon as the image transmission has been launched, the cursor appears on the screen. When moved to the edge of the screen, it folds out some editing menus and further control elements (e. g. for data storage).
5. Short function explanations are integrated to each of the selectable control elements (in English).

### **PC connection ODC 851 (USB 2.0)**

1. Establish USB connection via USB cable and switch on the camera by the power button.
2. Installing the software with help of the CD / download.
3. The software-internal "User Guide" includes all information and instructions about the operation of the software or of digital microscopy.

### **PC connection ODC 851 (WiFi)**

1. Plug in the WiFi adapter to the USB port of the camera and switch on the camera by the power button.
2. With activated WiFi antenna of the PC, the hotspot of the camera is shown in the network settings:

**„XFCAM1080PHB\_#“      Key: 12345678**

3. Installing the software with help of the CD / download.
4. The software-internal "User Guide" includes all information and instructions about the operation of the software or of digital microscopy.