

User instructions

Microscope camera

KERN

ODC-86

ODC 861

Version 1.3
09/2023





KERN ODC-86

Version 1.3 09/2023

User instructions

Microscope camera

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 KERN	Resolution	Interface	Sensor	Frame rate	Colour / Monochrome	Supported operating systems
ODC 861	20 MP	USB 3.0	1" CMOS	5 - 30 fps	Colour	Win, XP, Vista, 7, 8, 10

Scope of delivery

- Microscope camera
- USB cable
- Object micrometre for calibration
- Software CD

Free download:

www.kern-sohn.com > DOWNLOADS > SOFTWARE > Microscope VIS Pro

- Eyepiece adapter (\varnothing 23,2 mm)
- Adjustment rings (\varnothing 30,0 mm + \varnothing 30,5 mm) for eyepiece adapter
- 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 must be screwed onto the C mount adapter.

Important:

The choosing of the right C mount adapter depends on the used microscope model. It must 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).

PC connection

1. Establish USB connection via USB cable.
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.



KERN ODC-86

Version 1.3 09/2023

User instructions Microscope camera

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 KERN	Resolution	Interface	Sensor	Frame rate	Colour / Mono- chrome	Supported operating systems
ODC 861	20 MP	USB 3.0	1" CMOS	5 - 30 fps	Colour	Win, XP, Vista, 7, 8, 10



Scope of delivery

- Microscope camera
 - USB-Kabel
 - Object micrometre for calibration
 - Software-CD
- Free download:
- www.kern-sohn.com > DOWNLOADS > SOFTWARE > Microscope VIS Pro
- Eyepiece adapter (∅ 23,2 mm)
 - Adjustment rings (∅ 30,0 mm + ∅ 30,5 mm) for eyepiece adapter
 - 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 must be screwed onto the C mount adapter.

Important:

The choosing of the right C mount adapter depends on the used microscope model. It must 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).

PC connection

1. Establish USB connection via USB cable.
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.



KERN ODC-86

Version 1.3 09/2023

Betriebsanleitung Mikroskopkamera

Hinweise vor Gebrauch

Man sollte es vermeiden das Gerät direktem Sonnenlicht, hohen oder zu niedrigen Temperaturen, Erschütterungen, Staub und hoher Luftfeuchtigkeit auszusetzen.

Der geeignete Temperaturbereich beträgt 0 - 40° C und eine relative Luftfeuchtigkeit von 85 % sollte nicht überschritten werden.

Es muss stets sichergestellt sein, dass ein geprüftes Stromkabel verwendet wird, um so mögliche Schäden durch die Entstehung von Überhitzung (Feuerentwicklung) oder eines elektrischen Schocks zu verhindern.

Das Gehäuse darf nicht geöffnet und interne Komponenten berührt werden. Es besteht die Gefahr diese zu beschädigen und die Funktionsfähigkeit der Kamera zu beeinträchtigen.

Für die Durchführung einer Reinigung der Kamera muss das Stromkabel immer entfernt sein.

Der Sensor sollte stets frei von Staub gehalten und nicht berührt werden. Anderenfalls können erhebliche Beeinträchtigungen des mikroskopischen Bildes auftreten. Bei Nichtgebrauch der Kamera daher immer die Schutzabdeckungen anbringen.

Technische Daten

Modell	Auflösung	Schnittstelle	Sensor	Framerate	Farbe / Monochrom	Unterstützte Betriebssysteme
KERN ODC 861	20 MP	USB 3.0	1" CMOS	5 - 30 fps	Farbe	Win, XP, Vista, 7, 8, 10



Lieferumfang

- Mikroskopkamera
 - USB-Kabel
 - Objektmikrometer zum Kalibrieren
 - Software-CD
- Kostenloser Download:
www.kern-sohn.com > DOWNLOADS > SOFTWARE > Microscope VIS Pro
- Okularadapter (Ø 23,2 mm)
 - Anpassungsringe (Ø 30,0 mm + Ø 30,5 mm) für Okularadapter
 - Netzteil

Montage

1. Schwarzen Deckel an der Unterseite der Kamera entfernen.
2. Das Gewinde, an dem sich der Deckel befand, ist ein genormtes C-Mount-Gewinde. Somit sind für den Anschluss an ein Mikroskop spezielle C-Mount Adapter notwendig.
3. Zur Montage am Mikroskop wird der C-Mount Adapter an der Kameraanschlussstelle des Mikroskops angebracht, danach muss die Kamera an den C-Mount Adapter angeschraubt werden.

Wichtig:

Die Wahl des richtigen C-Mount Adapters hängt vom verwendeten Mikroskop-Modell ab. Es muss ein Adapter sein, der an die Bauform des Mikroskops angepasst ist und vom Hersteller für das entsprechende Gerät empfohlen wird.

4. Gegebenenfalls das Mikroskop für trinokularen Gebrauch einstellen (über Trinokular-Umschaltrad / Trinokular-Umschaltstab).

PC-Anschluss

1. USB-Verbindung über USB-Kabel herstellen.
2. Software über Software-CD / Download auf PC installieren.
3. Der softwareinterne "User Guide" enthält alle Informationen und Anweisungen zum Betrieb der Software, bzw. zur digitalen Mikroskopie.