



VWR



INSTRUCTION MANUAL

Model	European Catalogue Number
VisiCamB5	630-2957
VisiCamP6	630-2958
OPTKC-P20CC	630-2959
OPTKC-PF	630-2960

Version: 1.0
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Legal Address of Manufacturer

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1. Warning

This device is a scientific precision instrument designed to last for many years with a minimum of maintenance. It is built to high optical and mechanical standards and to withstand daily use.

We remind you that this manual contains important information on safety and maintenance, and that it must therefore be made accessible to the instrument users.

We decline any responsibility deriving from incorrect instrument use uses that does not comply with this manual

2. Safety Information



Avoiding Electrical Shock

Before plugging in the power supply, make sure that the supplying voltage of your region matches with the operation voltage of the equipment and that the lamp switch is in off-position.

Users should observe all safety regulations of the region. The equipment has acquired the CE safety label. However, users do have full responsibility to use this equipment safely.

Please follow the guidelines below, and read this manual in its entirety to ensure safe operation of the unit.

3. Package Contents

VisiCamB5

DESCRIPTION	QUANTITY
Camera	1
USB2.0 cable	1
0,5X projection lens	1
Reduction ring 30 mm	1
Reduction ring 30.5 mm	1
Micrometric slide	1

VisiCamP6 / OPTKC-PF

DESCRIPTION	QUANTITY
Camera	1
USB3.0 cable	1
Micrometric slide	1

OPTKC-P20CC

DESCRIPTION	QUANTITY
Camera	1
USB3.0 cable	1
Draining tube	1
Power supply	1
Schuko power cord	1
UK power cord	1
Swiss power cord	1
Micrometric slide	1

4. Unpacking

The camera is housed in a moulded Styrofoam container. Remove the tape from the edge of the container and lift the top half of the container. Take some care to avoid that the optical items fall out and get damaged.

5. Intended use

For research use only. Not intended for any animal or human therapeutic or diagnostic use.

6. Symbols and conventions

The following chart is an illustrated glossary of the symbols that are used in this manual.

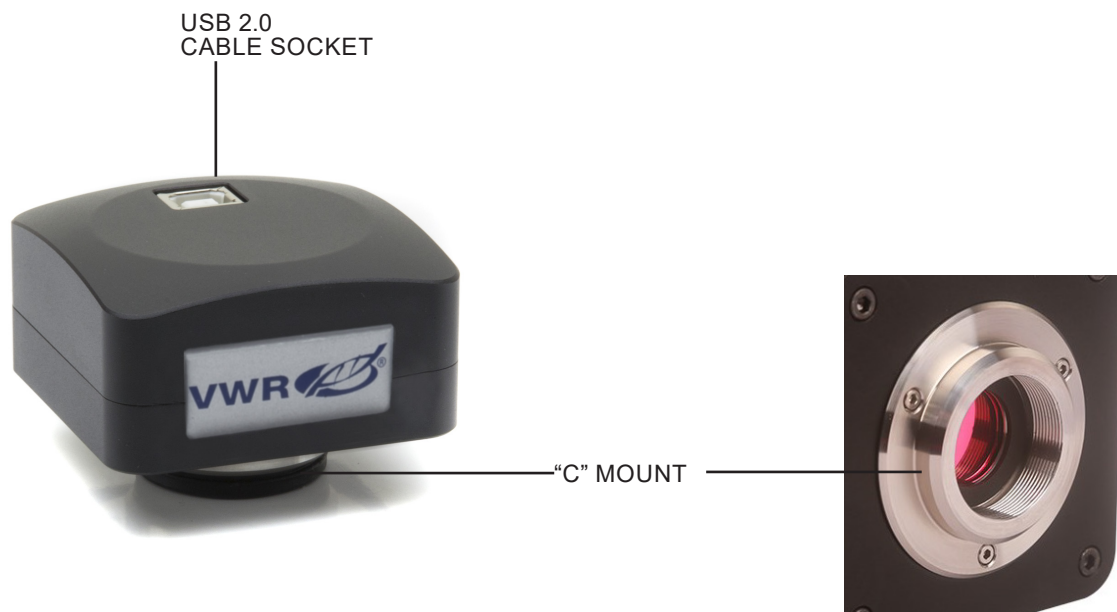


CAUTION

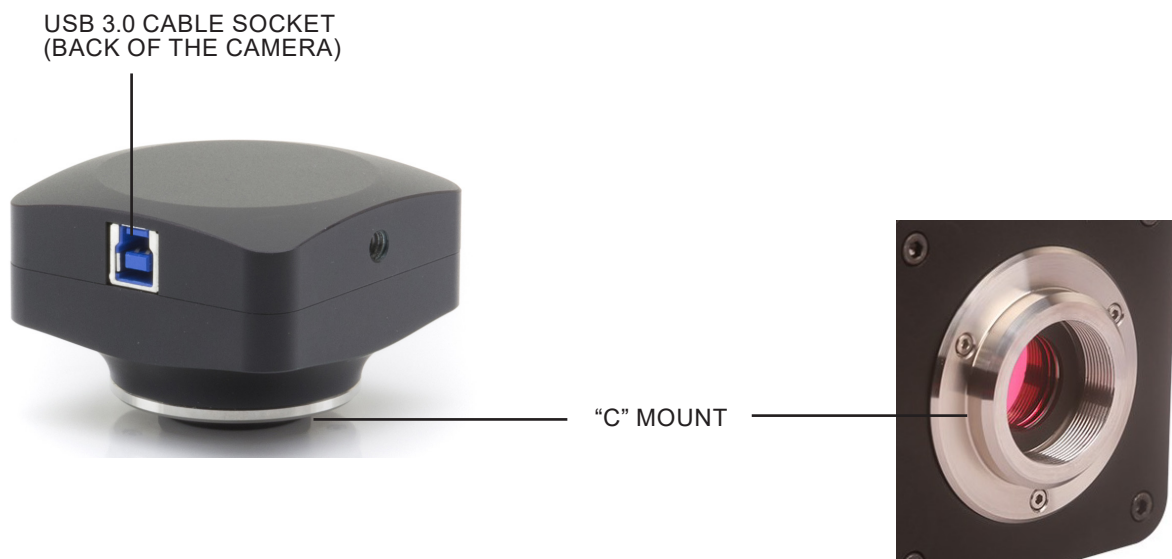
This symbol Indicates a potential risk and alerts you to proceed with caution

7. Overview

7.1 VisiCamB5



7.2 VisiCamP6 / OPTKC-PF



7.3 OPTKC-P20CC



8. Camera Installation and Settings

8.1 Assembling on microscope

8.1.1 Connection to trinocular port using focusable "C" mount adapter

1. Remove the dust cover from camera and from "C" mount adapter.
2. Screw the "C" mount adapter to the camera's thread. (Fig. 1)



Fig. 1

3. Loosen the clamping screw on the trinocular port of the microscope, remove the dust cover and install the camera "C" mount unit previously assembled. (Fig. 2)

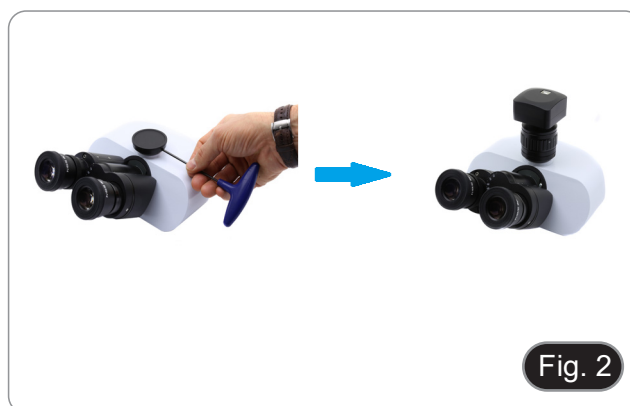


Fig. 2

4. Tighten the clamping screw firmly. (Fig. 3)



Fig. 3

8.1.2 Connection to trinocular port using projection lens

1. Remove the dust cover from camera and from projection lens.
2. Screw the projection lens to the camera's thread. (Fig. 4)

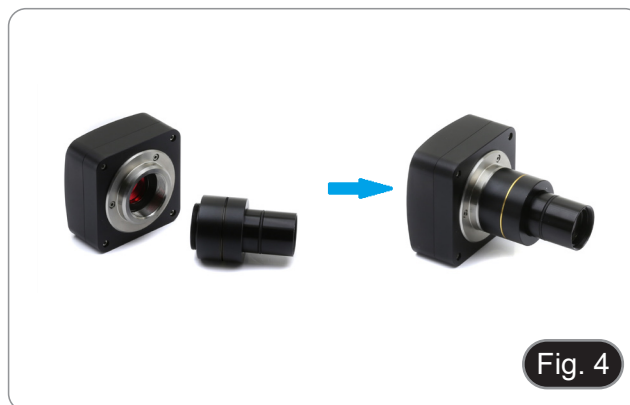


Fig. 4

- **Installing on biological microscopes**

3. Insert the final part of the projection lens into the empty hole of the photo tube. (Fig. 5)



Fig. 5

- **Installing on stereomicroscopes**

4. Insert the final part of the projection lens into the empty hole of the photo tube. (Fig. 6)



Fig. 6

8.1.3 Connection to binocular or monocular head

- Any monocular or binocular microscope / stereomicroscope.
1. Remove the dust cover from camera and from projection lens.
 2. Screw the projection lens to the camera's thread. (Fig. 7)

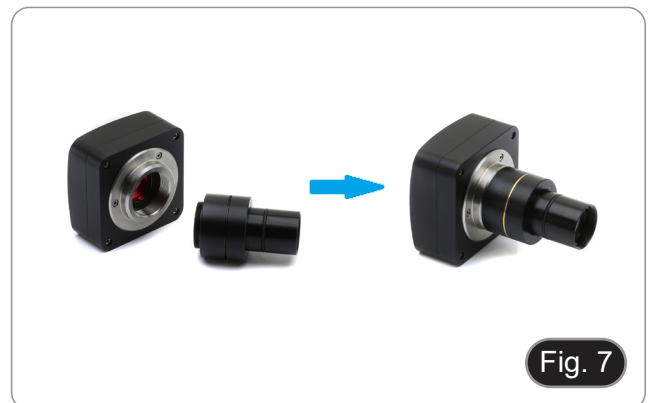


Fig. 7

3. Remove one eyepiece from the observation head. (Fig. 8)



Fig. 8

4. Insert the final part of the projection lens into the empty eyepiece sleeve. (Fig. 9)



5. In case of eyepiece sleeve with diameter 30 or 30.5 mm use the adapter rings. (Fig. 10)



8.2 Parfocality adjustment

In order to have the same focus when observing the specimen through the eyepieces and on the screen/monitor, please check that the microscope is properly installed and follow the instructions below.

8.2.1 Using a biological microscope

1. Use a low power objective and focus the specimen.
2. Switch to the highest dry objective available on the microscope (40x or 60x) and focus the specimen again.
3. Turn on the live-view on the camera, without changing the focus on the microscope.
4. While observing the image on the screen/monitor, adjust the focus by turning the knurled knob on the C-mount adapter. (Fig. 11)



8.2.2 Using a stereomicroscope with “C” mount adapter

1. Use a low power magnification and focus the specimen.
2. Reach the highest magnification available using the zoom knob and then focus the specimen again.
3. Turn on the live-view on the camera, without changing the focus on the microscope.
4. While observing the image on the screen/monitor, adjust the focus by turning the knurled knob on the C-mount adapter. (Fig. 11)

8.2.3 Using a stereomicroscope with projection lens

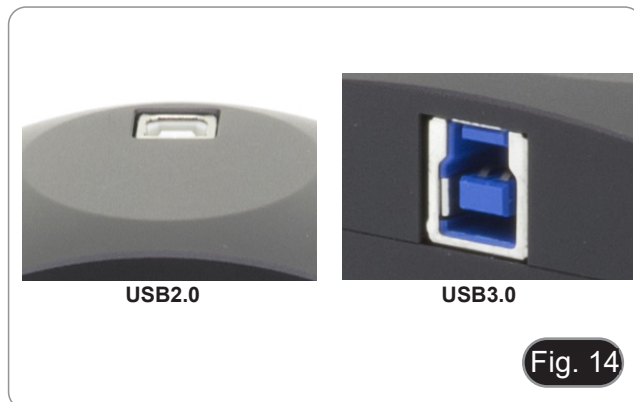
1. Use a low power magnification and focus the specimen.
2. Reach the highest magnification available using the zoom knob and then focus the specimen again.
3. Turn on the live-view on the camera, without changing the focus on the microscope.
4. While observing the image on the screen/monitor, unscrew the fixing knob ① of the trinocular port (Fig. 12) and move up or down the movable part of the adapter ② until the focus is achieved on the camera. (Fig. 13)
5. Lock the fixing knob ①. (Fig. 12)

The proper parfocality adjustment is obtained when the same focus is reached while looking into the eyepieces and on the screen/monitor.



8.3 Connecting camera to PC

1. Connect one terminal of the USB cable to the camera connector and the other terminal to a USB port on the computer. (Fig. 14)
- NOTE: USB3.0 cameras can be connected to a USB2.0 port. The camera will operate normally, with some limitations due to improper power supply to the camera.
 - The SW in any case will warn that the USB3.0 camera works in 2.0 mode indicating next to the camera name "(USB2.0)"



8.3.1 Only for cooled versions

Connect the supplied power adapter to the connector ① to power the camera cooling system. (Fig. 15)



8.4 Use of drainage tube (cooled versions)

- **NOTE: Use the drainage tube only when strictly necessary.**

Cooled cameras sometimes create condensation inside the camera body during normal use. This condensation may interfere with the correct creation of the image on the sensor.

To remove any condensation, act as follows.

1. Disconnect all cables from the camera (power supply and USB).
 2. Using a flat screwdriver, unscrew the screw ① on the left side of the camera. (Fig. 16)
 3. Immediately screw the drainage tube ② into the empty hole. (Fig. 17)
- **If the camera is connected to a USB cable or power supply during this operation, there is a risk that the electrostatic charge will attract dirt and dust that will settle on the sensor.**
 - Periodically empty the drainage tube repeating in reverse order the operations described above.

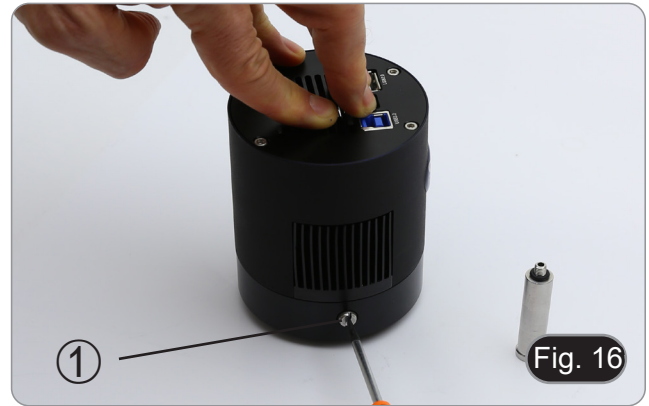


Fig. 16



Fig. 17

9. Use of camera

The camera is driven by the software PROVIEW.

You have to run the *setup.exe* file for the software installation. At the end of the installation it is possible to start the software.

- **NOTE: no driver installation is required for the cameras. The software setup procedure automatically installs all the needed drivers for the correct operation of the camera.**

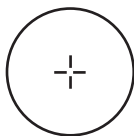
The software's User Manual is available in PDF format within the application itself and can be opened using the "F1" function key.

You must have Acrobat Reader installed to view the manual.

The manual contains all the operating instructions for using the camera and for the various functions of the software.

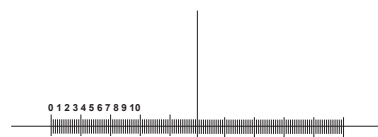
10. Micrometric Slide VWR005

Micrometric slide, 26x76mm, with 2 scales
(1mm/100div. for biological microscopes / 10mm/100div. for stereomicroscopes)



1 DIV=0.01mm

For biological microscopes calibration



1 DIV=0.1mm

For stereo microscopes calibration

11. Repair and maintenance

Microscopy environment

This microscope is recommended to be used in a clean, dry and shock free environment with a temperature of 0-40°C and a maximum relative humidity of 85 % (non condensing). Use a dehumidifier if needed.



To think about when and after using the microscope

The microscope should always be kept vertically when moving it and be careful so that no moving parts, such as the eyepieces, fall out. Never mishandle or impose unnecessary force on the microscope.

Never attempt to service the microscope yourself.

After use, turn off the light immediately, cover the microscope with the included dust-cover, and keep it in a dry and clean place.



Electrical safety precautions

Before plugging in the power supply, make sure that the supplying voltage of your region matches with the operation voltage of the equipment and that the lamp switch is in off-position.

Users should observe all safety regulations of the region. The equipment has acquired the CE safety label. However, users do have full responsibility to use this equipment safely.

Cleaning the optics

If the optical parts need to be cleaned try first to: use compressed air. If that is not sufficient: use a soft lint-free piece of cloth with water and a mild detergent. And as a final option: use the piece of cloth moistened with a 3:7 mixture of ethanol and ether.

Note: ethanol and ether are highly flammable liquids. Do not use them near a heat source, near sparks or near electric equipment. Use these chemicals in a well ventilated room.

Remember to never wipe the surface of any optical items with your hands. Fingerprints can damage the optics. Do not disassemble objectives or eyepieces in attempt to clean them.

For the best results, use the VWR cleaning kit.

If you need to send the microscope to manufacturer for maintenance, please use the original packaging.

12. Technical service

Web Resources

Visit the VWR's website at **www.vwr.com** for:

- Complete technical service contact information
- Access to VWR's Online Catalogue, and information about accessories and related products
- Additional product information and special offers

Contact us For information or technical assistance contact your local VWR representative or visit **www.vwr.com**.

13. Warranty

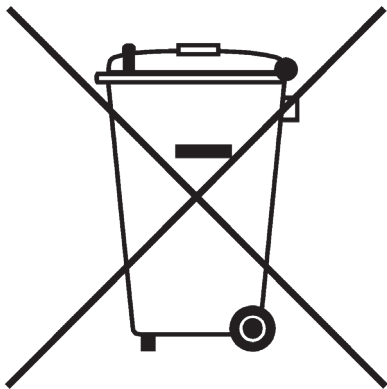
VWR International warrants that this product will be free from defects in material and workmanship for a period of five (5) years from date of delivery. If a defect is present, VWR will, at its option and cost, repair, replace, or refund the purchase price of this product to the customer, provided it is returned during the warranty period. This warranty does not apply if the product has been damaged by accident, abuse, misuse, or misapplication, or from ordinary wear and tear. If the required maintenance and inspection services are not performed according to the manuals and any local regulations, such warranty turns invalid, except to the extent, the defect of the product is not due to such non-performance.

Items being returned must be insured by the customer against possible damage or loss. This warranty shall be limited to the aforementioned remedies. IT IS EXPRESSLY AGREED THAT THIS WARRANTY WILL BE IN LIEU OF ALL WARRANTIES OF FITNESS AND IN LIEU OF THE WARRANTY OF MERCHANTABILITY.

14. Compliance with local laws and regulations

The customer is responsible for applying for and obtaining the necessary regulatory approvals or other authorizations necessary to run or use the Product in its local environment. VWR will not be held liable for any related omission or for not obtaining the required approval or authorization, unless any refusal is due to a defect of the product.

Disposal



This equipment is marked with the crossed out wheeled bin symbol to indicate that this equipment must not be disposed of with unsorted waste.

Instead it is your responsibility to correctly dispose of your equipment the end of its life cycle by handling it over to an authorized facility for separate collection and recycling. It is also your responsibility to decontaminate the equipment in case of biological, chemical and/or radiological contamination, so as to protect from health hazards the persons involved in the disposal and recycling of the equipment.

For more information about where you can drop off your waste equipment, please contact your local dealer from whom you originally purchased this equipment.

By doing so, you will help to conserve natural and environmental resources and you will ensure that your equipment is recycled in a manner that protects human health.

Thank you

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