

9. Technical Specification

Image Sensor	• 1/3" CMOS solid state colour image sensor.
Number of pixels	• 1600Hx1200V pixel (~ 2.0 MP)
Pixel Size	• 2.8µm(H)×2.8 µm (V)
Interface	• USB2.0 serial bus
Drivers	• MS-windows Direct Show compatible
Frame Rate	• 10 fps at maximum resolution, 25 fps at 800x600.
Scan Mode	• Progressive
Camera software controls	• Contrast, Gamma, Exposure (Auto and manual gain & time), White balance.
Illumination	• Built-in RingLight with dimmer, white LEDs.
Optics	• 8 -80x varifocal lens. 100x, 170x and 250x and 500x fixed focal length lenses.
Storage Environment	• -20° – +60° C, Max 98% RH, non-condensing
Operating Environment	• 0° – +45° C, Max 95% RH, non-condensing
Power Source	• 5.0 VDC, 450 mA minimum powered via USB port
Size (w/o lens)	• 100x55x36 mm (LxHxW).
Size (with varifocal lens)	• 145x55x36 mm (LxHxW).
Weight (w/o lens)	• 180 gr. Max.
Weight (with varifocal lens)	• 250 gr. Max.

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Instructions Manual, Video Inspection Microscope

Flexia D1 ESD Flexia D1



This manual describes how to setup and use Flexia D1 (ESD and Blue)

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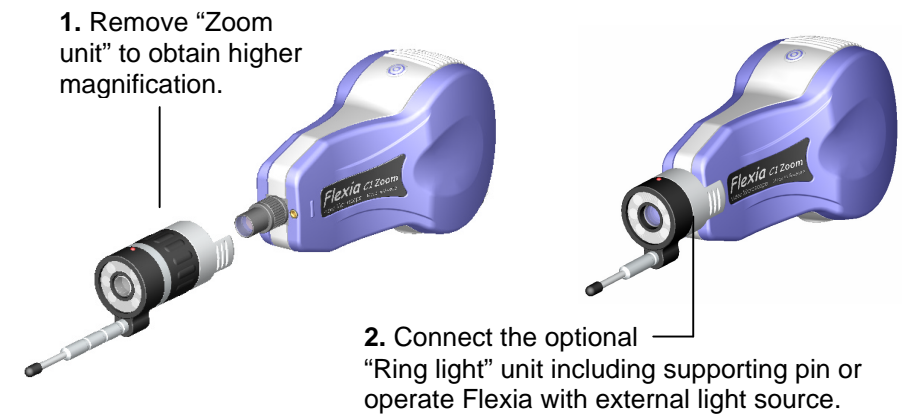
7. Object Illumination

A white LED source of illumination (Ring Light) is integrated with “Zoom unit”. “Ring Light” is switched on automatically when Flexia is turned on. Pull out the “Zoom unit” and put it on at 180 deg. rotated position if you wish to operate Flexia without “Ring Light” illumination.



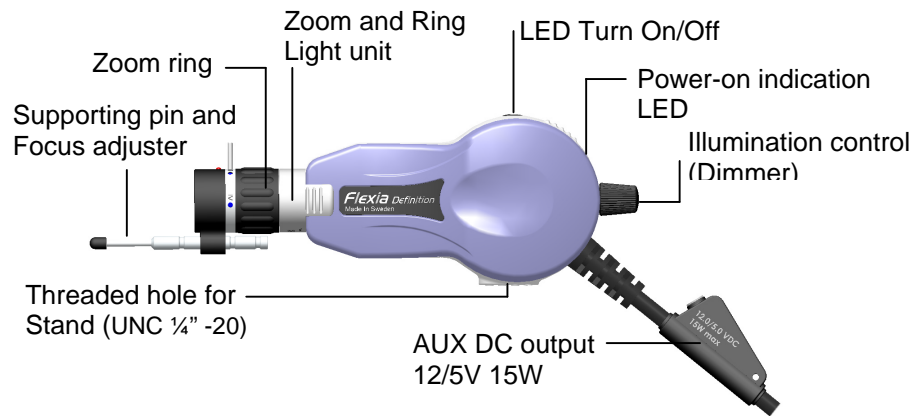
8. Operating Flexia without “Zoom unit”

It is Possible to operate Flexia at fixed 100x magnification (without zoom) by removing the “Zoom unit”. Simply pull back the “Zoom unit” and remove it from Flexia. You may connect the optional “Ring Light” unit (optional) to Flexia or use an external light source for object illumination.



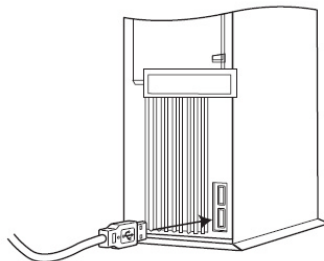
2. About “Flexia D1”

Flexia D1 is a compact Video Microscope with digital image sensor designed for visual inspections, real time process monitor and digital image recording of any object in the field and factory plants as well as in laboratories and for R&D.



3. Installation

Flexia D1 is directly connected to USB2.0 port of PC or Laptop with MS-Windows OS. Insert the provided installation CD onto your computer. Connect camera to a free USB2.0 port of your computer, driver installation menu displays. Follow on screen instructions and install camera drivers.



Connect to free USB2.0 port

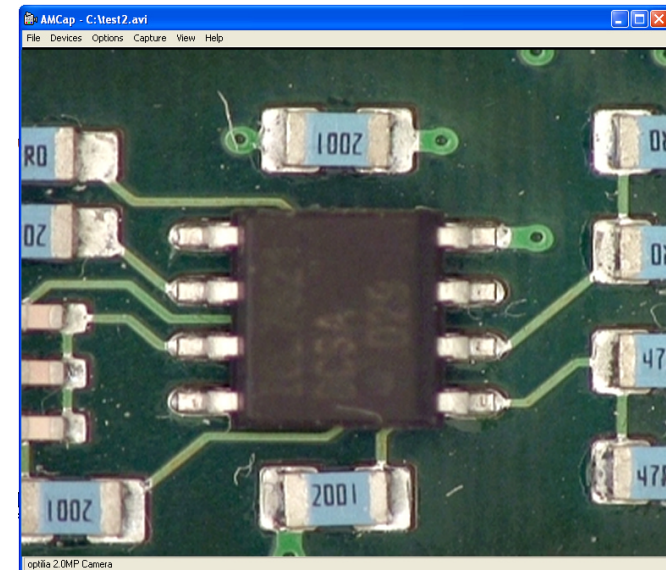
4. Optilia AMCap Image viewing & Capture software

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Optilia AMCap is an easy-to-use Windows software (Direct show compatible) for viewing live picture and capturing still pictures or video.

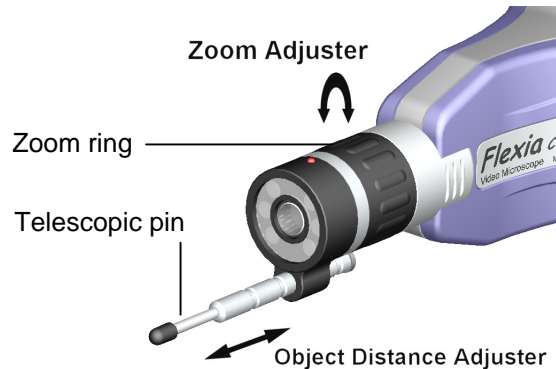
- Install DirectX 9 or later version if you don't have it already in your Windows.
- Install Optilia AMCap from the provided installation CD
- Start Optilia AMCap. Select your *Device*. Select *Options->Preview*. Live image will be viewed on your monitor now.
- Select *View->VMR9->Enable*.
- Select *Option->Video Capture Filter* for adjusting the camera.
- Select *Option->Video Capture Pin* for adjusting image resolution.
- Select *Capture->Still->Enable* and choose *Folder* and *Format* for saved pictures.
- Freeze the live picture by pushing “Space bar” key of your PC keyboard.
- Snap* and *Save* a picture by pushing “Enter” key your PC keyboard.

For more information refer to Quick help of Optilia AMCap.



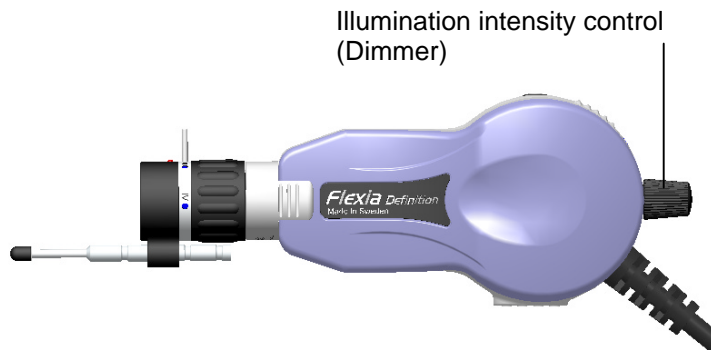
5. Object Distance and Focus adjustment

Image magnification (as well as the object distance) is changed by rotating the “zoom ring” as illustrated below. Move Flexia slightly forward/backward and rotate the Zoom adjuster to get into the best focus.



6. Object Illumination

Flexia lenses are equipped with 4 high intensity white light emitting diodes. Illumination intensity of the device can be adjusted via the control knob at the rear of Flexia.



1. Safety and maintenance Instructions

- Only use DC Power Sources provided or approved by Optilia.
- Only use accessories provided or approved by Optilia.
- Keep Flexia clean. Use Lens Cleaning Tissue and Pure Ethanol or Isopropanol for cleaning the lenses.
- Do not use Acetone or other similar solvents for cleaning Flexia.
- Do not knock or drop the Microscope.
- Keep the Video Microscope away from direct sun-light, heat and extreme humidity.
- Store Video Microscope inside case when not used.
- Protect the Objective and Ring Light by the supported Rubber Cap when the Microscope is not in operation.