



USB ENDOSCOPE



MT4095

User Manual

Application

USB ENDOSCOPE is a device for a visual inspection, volt-free, hard-to-reach places (such as pipe interiors).

Flexible neck with a camera is waterproof and suitable for use in aqueous liquids (not in acid nor basic acid). The handle itself is not waterproof and can not be exposed to moisture or immersed. Thanks to a flexible cable you can reach inaccessible places. The image

is displayed on the screen of your mobile device or PC.

USB ENDOSCOPE is not a medical equipment and can not be used on people nor animals.

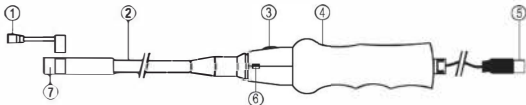
Using the product for purposes other than described above may lead to damaging the device

In addition, improper use may result in a danger such as short circuit, fire, electric shock, injury, etc.

Please read this manual carefully and keep it for future reference.

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1. Magnetic, mirror and hook tip
 2. Flexible cable
 3. Brightness adjustment for LEDs
 4. Cable remote control
 5. USB plug
 6. Snapshot button
 7. Camera with led lights

Operating Elements:



Set contains:

- Inspection camera
- CD with a PC software
- Magnetic tip
- Mirror tip
- Hook tip
- User manual

Software

If you want to use the MT4095 with your mobile device, download the free **Scopecam** app from the Google PLAY store.

If you want to use USB ENDOSCOPE on your PC, install ViewPlayCap from the attached CD.

Installation

1. During the initial installation, endoscope can not be connected to the computer.
2. Turn on the computer. Insert the CD into your CD/DVD-ROM. Administrator privileges are required for installation.

3. The installation will start automatically when you insert the CD. If it does not happen, you can instal the software manually. Double click on the "Setup.exe" file to install.

Starting

Only the camera and the flexible cable can be immersed. Remote control is not waterproof.

The USB endoscope can only be used for inspection of non-electric devices. The camera head is made of metal and can cause short circuits. For safety reasons, always remove all parts of the unit from the power supply before each inspection.

The minimum bending radius of 60 mm can not be exceeded. Otherwise, you can damage the device.

a) Connecting the endoscope and starting the app

1. Turn on your computer and connect the plug to the USB port.

2. During the first connection computer will point to the new hardware. Follow the Windows instructions to install the drivers for the endoscope.
3. Run "ViewPLayCap"
4. Go to the "Devices" tab and select "USB2.0 PC camera". Go to the "Options" tab and activate the "Preview". The camera image will be displayed

If you have previously installed another USB camera, you may receive an error message when you start the program. In the "Devices" main menu, select the "USB2.0 PC camera" driver.

b) Setting up camera lighting

By turning the brightness control (3) you can adjust the brightness of the camera:

Brighter **LED**  Dimmer

c) Main menu

File	Set Capture File...	Select where do you want to save video's (avi). ".avi" must be indicated. Next, please specify file size.
	Allocate File Space...	Setting the memory size. Available size will be displayed in the menu bar "Capture File Size" You can specify the size in megabytes (MB)
	Save Captured Video...	Saving captured video
	Exit	Exit the program
Devices	Endoscope Driver	For this product select "USB2.0 PC camera"
Options	Preview	Enables or disables image display

	Video Capture Filter...	Check "d) Picture Settings"
	Video Capture Pin	Video format: Video standard, un-manned, Image frequency, 30 images/sec non-discrete, Spectrum/compression Colors (pre-set to RGB 24, do not change), Output size (preset to 640 x 480, do not change) Compression: do not change
Capture	Start Capture	Starts video recording. To confirm press „OK“, to abort press „Cancel“.
	Stop Capture	Stop capture

	Set Frame Rate...	Setting the frequency of images for recording (Pictures/s). Leave a setting of 30 images/s. To confirm press "OK", to abort press „Cancel“.
	Set Time Limit...	Enter the maximum recording time in seconds. We recommend to do not change or activate this setting. To confirm press "OK", to abort press „Cancel“.

Under the main image, the status bar displays the number of saved images.

The included driver is "TWAIN32 compatible", which makes the camera possible to operate with any Windows-based program that supports this interface.

d) Picture settings

Stream Property (To confirm settings press "OK" to abort press "Cancel")	Image Control: <ul style="list-style-type: none"> • image reflection • image tilt • low light output (Brightness) • Brightness • Contrast • Gamma (color contrast setting) • Hue • Saturation • Sharpness • VGA • Snap Size (set the image size, leave setting 640 x 480) • Zoom (size setting in %)
	Automatic mode control: Leave selected settings to achieve the best image quality
	Standard (standard settings): <ul style="list-style-type: none"> • Undo • Save • Restore
	Inside/Outside • inside (closed area) • outside (external area)
	Gleam: Screen refresh rate (50 Hz or 60 Hz)
	Additional control: <ul style="list-style-type: none"> • Backlight compensation • Black/white image mode

Effect Frame (To confirm settings press "OK" to abort press "Cancel")	Effect: <ul style="list-style-type: none"> • deactivation, • reversal, • black/white • mono green • Gray levels • Mono blue • Mono red • Relief • Find edge • Mosaic • Wind • Solarisation • Sepia • Bathroom • Drawing • Oil painting • Horizontal curvature • Vertical curl • Monitor (monitor screen view)
	Frame: <ul style="list-style-type: none"> • Deactivation • flowers • paper (newspaper) • optical viewfinder • Snowman

e) Snapshot

To set the snapshot press the snapshot button (6), the following window will appear with a snapshot image:

File (F)	Save as „bmp“ or „jpg“
Exit (X)	Exit
Rotate Orientation	Rotate the image counterclockwise (0°, 90°, 180°, 270°)
Help (H)	View "help"

You can only use the snapshot function with administrator privileges. Please contact your system administrator.

f) Tips

In order to install the tips (1), carefully open the clamping ring and attach it to the narrow recess beneath the camera. Do not bend excessively during the opening (fracture risk).

- The magnetic tip is used to lift metal objects.
- The mirror tip can extend the field of view of the endoscope in areas inaccessible for the camera.
- The hook tip is used to capture small objects.

Maintenance and cleaning

This product is maintenance-free, except for occasional cleaning. For cleaning use a soft, antistatic, lint-free cloth. Rinse the elastic neck of the endoscope with clean water after each use in liquids and dry it completely before packing.

The device can only be immersed in the cleaning liquid to determine the maximum water level. The handle can not be immersed or wetted.



Ochrana životního prostředí: Evropská směrnice 2002/96/EU stanovuje: Elektrické a elektronické přístroje se nesmí vyhazovat do domácího odpadu. Elektrické a elektronické přístroje musí být zlikvidovány podle zákona na místech k tomu určených. Recyklací nebo jiným způsobem zpracování výrazně přispíváte k ochraně našeho životního prostředí!

Ochrana životného prostredia: Európska smernica 2002/96/EU stanovuje: Elektrické a elektronické zariadenia sa nesmú vyhadzovať do domáceho odpadu. Spotrebiteľ je zo zákona povinný zlikvidovať elektrické a elektronické zariadenia na miesta k tomu určené. Symbolizuje to obrázok v návode na použitie, alebo na balení výrobku. Recykláciou, alebo inými formami využitia starých prístrojov prispievate v značnej miere k ochrane vášho životného prostredia.