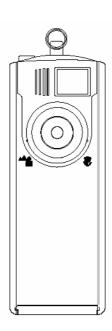
# DIGITAL CAMERA



MANUAL

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## Content:

SAFETY AND SERVICE	1
Safety notes Operating safety Set-up location Ambient temperature Electro-magnetic compatibility Connecting Repair Cleaning Data security	
INTRODUCTION	5
Notes on these instructions Concept Quality Service Contents System requirements Technical data	
SETTING UP	9
Inserting batteries Fitting the pod Controls LCD Display Switching the camera on/off Operating modes Setting the focal width Use as a still image camera	
Taking pictures Use as a video camera	13
Further functions	

Automatic shutter  Deleting stored pictures/videos  Delete last picture  Delete all  Setting the picture resolution  Transferring pictures and videos to the PC  Installing Mega Camera Manager	16 16 16 17
Connecting the digital camera to the PC	19 20 20
Live mode	22 22 22 23
INSTALLING THE OTHER PROGRAMS	25
General notes	
This is how to install your software:	
This is how to install your software:	26
This is how to install your software:	26 27 27 27 28 28 28 29

## SAFETY AND SERVICE

#### **SAFETY NOTES**

Please read this chapter carefully and follow all of the instructions given. This ensures reliable operation and a long service life for your camera.

Keep these instructions close to your camera where they are readily available.

Keep these instructions and give them to the new owner if you sell or give away your camera.

#### **OPERATING SAFETY**



- **Never open the housing** of the camera! This could lead to an electrical short-circuit or even a fire resulting in damage to your camera.
- Never allow children to play with electrical appliances without supervision.
   They cannot always correctly recognize possible hazards.
- The camera is not designed for operation in an heavy industrial company.

#### **SET-UP LOCATION**

- Keep your camera and all connected equipment away from moisture and avoid dust, heat and direct radiation from the sun in order to avoid malfunctions.
- Set up and operate all components on a stable, level and vibration-free surface to prevent the camera from falling.
- Provide for a suitable ambient temperature:

#### TEMPERATURE/HUMIDITY

The camera can **be operated** at an ambient temperature of **32° F to 104° F** and a relative humidity of **20% - 80%** (not condensing).

When switched off the camera can be stored at temperature from - 4 °F to 158 °F at a relative humidity of 20 % - 90 % (not condensing).



After **transporting** your camera wait until it has assumed the ambient temperature before putting into operation. Major variations in the temperature or humidity condensation can form on the inside of the camera which can cause an **electrical short-circuit**.

#### **ELECTRO-MAGNETIC COMPATIBILITY**

- When connecting the camera observe the guidelines for electro-magnetic compatibility (EMC).
- Please use only the USB cable supplied.
- Maintain a distance of at least one meter from sources of high frequency and magnetic interference (television sets, loudspeakers, mobile telephones, etc.), in order to avoid malfunctions and data loss.

#### **CONNECTING**

Observe the following instructions to connect your camera properly:

- Route the cable so that no one can step on it or stumble over it.
- Placing objects or furniture can cause damage to the cables.

#### REPAIR

Please contact our service center if you have problems with your camera. Have repairs made only by our authorized service dealers.

Contact your service dealer if ...

- Liquid has gotten into the inside of the camera
- The camera does not operate properly
- The camera falls and the housing is damaged.

#### **CLEANING**

- Ensure that the camera, particularly the lenses, are not dirty.
- Clean the camera with a moist cloth.
- Do not use any type of solvents, caustic or gaseous cleaning agents.



If you remove the batteries while the camera is not connected to a powered-up computer as described in the following, all pictures stored in the camera will be lost.

#### **DATA SECURITY**



Every time you update your data make back-up copies on an external storage medium. We cannot assume an liability for data loss or associated subsequent damage.

#### INTRODUCTION

#### **N**OTES ON THESE INSTRUCTIONS

We have arranged these instructions so that you can quickly find the subject related information in the table of contents. The purpose of these instructions is to help you operate your camera quickly and easily.

Comprehensive help functions are available for control of the applications programs and the operating system. These are offered by the programs by pressing a key (usually F1) or clicking with the mouse. These help texts are provided to you while using the Microsoft Windows® operating system or the specific application program.

#### **CONCEPT**

We thank you for your confidence in our products and are pleased to greet you as a new customer.

These instructions are intended for initial users as well as advanced users. Regardless of the possible professional utilization, this camera is designed for operation in private households. The multiplicity of application possibilities are available to the entire family.

#### **QUALITY**

In manufacturing your camera, we focused on great features, ease of use, safety and reliability. The balanced hardware and software concept has allowed to offer you an advanced camera design which will provide you an great deal of pleasure for your work and recreation.

#### **SERVICE**

We will be with you every time you use your camera. Contact us, we will be glad to help. This manual contains a separate chapter on the subject of service and support.

#### **CONTENTS**

Please check that the contents are complete and please notify us within 14 days of purchase, if any of the following components are missing:

Camera with USB connection cable and strap

Pod with swivel mounting

Installation and application software on CD

(1 or 2 CD's according to version)

2 x AAA alkaline batteries

This user manual

Warranty documentation

- ⇒ In order to install the accompanying software serial numbers may have to be entered that are printed on the CD or on the sleeve. Keep these in a safe place.
- ⇒ Before installing the software to your PC, note the serial number or the CD will not be accessible to you during installation.

## **SYSTEM REQUIREMENTS**

Computer	PC/AT compatible computer
Processor power	Pentium 200 or higher
Operating system	Windows®98SE/ME/2000/XP
RAM	64 MB or more
Hard disk drive	1.5 GB of free space (for full installation)
Installation	CD-ROM drive (4x or higher)
Connection	USB port
Hardware	VGA color monitor
Internet access (for Internet conferences)	Modem V.34 or higher or ISDN adapter

## **TECHNICAL DATA**

Camera type	Digital camera
Sensor	CMOS Image 1280x1024
Resolution Video / Still Image Capture	304 x 240 to 1248 x 960
Colors	16.8 M (True color)
Memory	16 MB
Picture capacity in	160 pictures (low resolution)
still image mode	40 pictures (high resolution)
Focusing	Manual, 3 cm – infinity
Frame rate	320 x 240 (9 pictures / second)
	640 x 480 (3 pictures / second)
Focal length	9.8 mm
Viewing angle	± 54°
Interface	USB bus
Power supply	via USB DC +5V (through computer) mobile: 2 x 1.5 V batteries (AAA type)
Dimensions	85 x 26 x 30 mm (L x B x H)
Weight	Approx. 47.5 g (without batteries)

(Technical details subject to change without notice)

## SETTING UP

#### **INSERTING BATTERIES**

**Note:** if the batteries are removed, all stored AVI files (films) will be lost.

For mobile use the camera requires two 1.5V micro-batteries (AAA type). Open the battery compartment on the underside of the unit and insert the batteries, making sure that the polarity is correct.





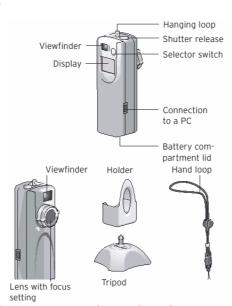
Then re-close the compartment. If you insert new batteries the camera switches on automatically. If the camera is connected to the PC, the power is supplied via the USB connection. In this case you can if necessary remove the batteries without deleting the pictures stored in the camera. A low battery level is indicated by the flashing LCD. Replace spent batteries only with a comparable type. Alkaline batteries provide longer operating times. Normal batteries are not suitable for this camera.

Please help to protect our environment by disposing used batteries properly. If necessary please contact your dealer or our Customer Services department.

#### **FITTING THE POD**

If you wish to set up the camera as a PC camera in a particular position, you should use the accompanying pod for increased stability. You can rotate the camera both forwards and backwards by 27°.

#### **CONTROLS**



The camera has two switches, the shutter release and the mode selector. On the LCD the mode selected with the mode selector, and the number of pictures taken, each appear briefly.

10

## **LCD DISPLAY**



Symbol	Function	Description
	Still image mode	Taking of still images
	AVI video mode	Taking of AVI films
8	Automatic shutter	Starts the automatic shutter after 10 seconds
*	Delete last pic- ture	Deletes the last exposure or the last film
×	Delete all	Deletes all exposures or films
Þ	Insert USB cable	Indicates that the USB cable is inserted
Н	High resolution	Still image mode (1248x960) up to 40 pictures
<b>★H</b> High resolution	Tilgii Tesolution	AVI video mode (624x480) up to 30 seconds/10fps
*L	Low resolution	Still image mode (640x480) up to 160 pictures
	Low resolution	AVI video mode (304x240) up to 120 seconds/10fps
888	Counter	Displays the number of pictures taken
Î	Battery level	Shows that the battery level is at maximum
	Low battery level	Shows that the battery level is low

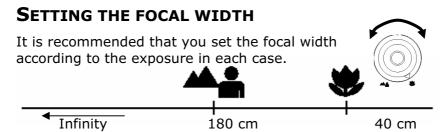
11

## **SWITCHING THE CAMERA ON/OFF**

Press the mode selector for two seconds to switch the camera on. The LCD briefly displays the resolution setting and then the number of pictures in the memory. If the camera is not used for more than 60 seconds, it automatically switches off and emits a series of tones. The camera is constantly switched on if it is receiving power via the PC.

#### **OPERATING MODES**

Your digital camera has 3 different operating modes: still image camera, video camera, PC camera (Web-Cam).



## **USE AS A STILL IMAGE CAMERA**

If no display appears in the function area, press the mode selector in order to turn on the camera. The LCD briefly shows the current resolution setting (H/L). Then the number of pictures that you have already taken is displayed. The counter increases by one after each exposure.

Display	Meaning	Possible No. pictures
L	Low resolution	160
Н	High resolution	40

#### **TAKING PICTURES**

- 1. Position the camera in the way that the object to be photographed is fully visible in the viewfinder.
- 2. Press the shutter release to save the picture.
- 3. You will now hear a tone and the number in the LCD flashes. The picture saving process is complete once the number on the LCD has stopped flashing.

#### **USE AS A VIDEO CAMERA**

You can take a series of pictures by pressing the shutter release (if there is enough memory available).

The exposure capacity is dependent upon the resolution selected. If necessary clear the existing stored pictures.

Before deleting the pictures you have already taken, transfer them to your PC. In low resolution (L) you can record for approximately 4 minutes seconds and in high resolution (H) for approximately 1 minute seconds.

To do this proceed as follows:

- 2. Press the shutter release to record. Press the shutter release again to store recording. Two tone alerts with a simultaneous flashing number indicate that all the video recording capacity has been used up.
  - **Note:** During continuous recording under- and over-exposed pictures will also be recorded.

## **FURTHER FUNCTIONS**

Pressing the mode key allows you to access further functions. Each time a function is selected it is displayed on the LCD and can be activated by pressing the shutter release.

#### **AUTOMATIC SHUTTER**

- 1. Press the mode button repeatedly until the automatic shutter symbol  $\odot$  appears on the LCD.
- 2. Operate the shutter release in order to activate the automatic shutter function after 10 seconds.
- 3. An audible signal sounds every second and then two rapid tones just before exposure.
- 4. The next tone alert confirms that the picture has been taken.
  - Note: It is not possible to use the automatic shutter if the memory is full.

## **DELETING STORED PICTURES/VIDEOS**

#### DELETE LAST PICTURE

- 1. Press the mode selector until the corresponding symbol  $\times$  (delete last picture) appears on the LCD.
- 2. Press the shutter release once. A tone alert is sounded and the  $\times$  symbol flashes.
- 3. Press the shutter release within the next 5 seconds again to clear the memory and to reset the pictures remaining counter. The camera confirms the deletion process with a tone alert. Press the mode key to leave the "Delete last picture" mode.

#### DELETE ALL

- 1. Press the mode selector until the corresponding symbol ☒ (delete all) appears on the LCD.
- 2. Press the shutter release once. A tone alert us sounded and the  $\bowtie$  symbol flashes.
- 3. Press the shutter release within the next 5 seconds again to clear the memory and to reset the pictures or video files remaining counter. The camera confirms the deletion process with a tone alert. Press the mode key to leave the "Delete all" mode.

#### **SETTING THE PICTURE RESOLUTION**

- 1. To change the resolution, press the mode selector until a star symbol appears with H or L.
- 2. Press the shutter release to select "H" (high resolution) or "L" (low resolution).
- 3. A tone alert sounds and the desired resolution is set.

#### TRANSFERRING PICTURES AND VIDEOS TO THE PC

This shows you how to connect your digital camera to the PC.

**> Warning!** The instructions that follow describe installation under Windows<sup>®</sup> 98SE. Installation under Windows<sup>®</sup> ME, XP, 2000 is similar.



When programs or drivers are installed, important files may be overwritten and changed. In the event of problems, so that you can access the original files following installation, you should take a backup of your hard disk.

#### Installing Mega Camera Manager

- 1. Switch on your computer and wait until Windows has finished loading.
- 2. Insert the digital camera CD. The installation menu appears automatically (**Autostart**).

**Note:** If the automatic start does not work, the so-called "**Autorun**" function is probably deactivated. If necessary activate this function in your device manager by selecting the "**CD-ROM**" entry and ticking the "**Automatic notification on update**".

#### Manual installation without the Autorun function:

- 1) Open the "Start" menu and select "Run".
- Now enter the letter for drive where the CD-ROM is located, followed by a colon and the program name "auto". Example:

#### e:auto

3) Click "OK" to confirm.

The following window appears:

## Mega Camera Manager

- 3. Click the Mega Camera Manager symbol to start installation. The opening screen of the installation program appears. Click "Continue" or "Next".
- 4. The program installs the driver. Installation is completed by connecting the camera (see page 19).

**Note:** If your operating system is set so that the installation of drivers is only accepted if these have been signed (approved by Microsoft), a dialog appears that says "**Digital signature not found**". To install it anyway click the "**Yes**" button.

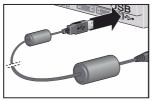
5. A dialog box appears asking you if you wish to restart the computer now or later. Click "OK" to complete the installation and to restart the PC.

#### CONNECTING THE DIGITAL CAMERA TO THE PC

- Note: You must install the driver software as described above first, if you have not already done so.
- 1. Please refer to the notes in the "Safety and service" section (pages 1 onwards).
- 2. Position the computer and the camera so that they are comfortable and safe to operate.
- 3. Switch on the computer and all the peripherals connected (monitor, printer, external modem, etc.) and wait until the operating system has fully started.
- 4. Connect the slim USB connection of the accompanying cable to the side of the camera.



- 5. Locate the USB port on your computer.
- 6. Connect the end of the USB cable (**①**) with a free USB socket on your computer (**②**).





⇒ When the camera is linked via the USB connection to the computer, it is powered up and remains in operation.

#### STARTING MEGA CAMERA MANAGER

You can transfer pictures you have taken to your PC at any time. It is not necessary to wait until the camera memory is full. When you connect the camera using the USB connection, a double tone alert sounds. If you disconnect the camera from the USB port it switches off.

If the camera is connected to your PC it operates as a PC-camera (Web-cam).

To start Mega Camera Manager, in Windows click "Start", select "Programs" followed by the "Mega Camera Manager" set of programs and finally the "Mega Camera Manager" program. Use this program to control the camera.

#### MODE SELECTION

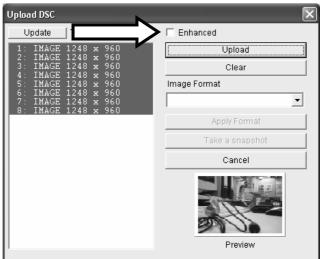
Use the following buttons to switch between the two modes "**DSC mode"** (for data transmission) and "**Live mode**" (for Web-cam for example).



⇒ If the mouse pointer is left for a second or so over a button (without clicking), the respective function is displayed for a few seconds.

## TRANSFERRING STILL IMAGES AND VIDEO RECORDINGS

- 1. Select the "DSC mode" (see page 20).
- 2. Then click the following button
- 3. If you want to transfer your picture with a 2.1 resolution, select "**Enhanced**" as shown in the picture:



- 4. After uploading, all pictures and videos now appear in the top right-hand section of the window.
- 5. In order to transfer a picture to the "**Album window**" (from where you can save it), click on the following button:

With the left mouse button you can click and mark, save, delete and so on, pictures that are in the album window.

21

#### **LIVE MODE**

In this mode you can use the camera on the PC like a conventional PC camera. The preview window displays the current picture.

<u></u>	Click "Video Record" to save a video in the album file.
rÕn	Click "Snapshot" to take a single image and to save it in
	the album file.
	Click "Video format" in order to specify the picture size.
	Click "Setting" in order to specify the picture size.
4	Click "Video source" in order to make further camera
1	settings.

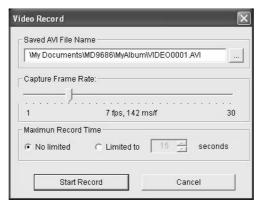
#### TRANSFERRING VIDEOS FROM THE CAMERA MEMORY

Depending on the resolution, your video can contain a maximum of 40 or 160 pictures, if the camera is in the continuous recording mode and is **not** connected to the PC.

If the camera memory is full, connect the camera with the PC via the USB connection and download all the pictures in the video as described above to the PC.

#### **USE AS A VIDEO CAMERA**

Once you have connected the camera to the PC and clicked the Live mode button, by clicking the "Video Record" button you can start video recording and this is not limited by the memory capacity of the camera.



#### VIDEO PLAYBACK

In order to play back a video file (AVI format) from the album file, double click this.

This opens a standard reproduction program and the video is played back.

#### MAIL FUNCTION

Click the "**Send Mail**" button in order to attach the selected images automatically to an e-mail message.

Follow the further instructions that the program gives you. You will need a serviceable Internet configuration to send the message.

-	4
,	7

## INSTALLING THE OTHER PROGRAMS

#### **GENERAL NOTES**

- ⇒ Internet: In order to make proper use of Microsoft NetMeeting you should have one Internet access per network, modem or ISDN card.
  - Additionally, an E-mail account according to the POP3 standard is necessary for using the E-Mail-Client within "**VideoLive Mail**".
- **⇒** Modem/ISDN connection:
  - In order to make full use of the accompanying programs, a correctly set up data transmission network under Windows® is required. Drag down the Help function from Windows® for guidance on how to perform the corresponding settings within your system.
- The software installations described in the following are representative of all the programs that accompany the product. **Deviations** may arise in the scope, installation steps and functioning of the programs from the illustrations used here. The installation procedures are self-explanatory and offer appropriate help directly on-screen.

#### THIS IS HOW TO INSTALL YOUR SOFTWARE:

Please follow the instruction of the software vendor. We will describe a typical installation. Once you insert a CD, the installation menu is started automatically.

**Note:** If the automatic start does not work, it is likely that the so-called "*Autorun*" function has been deactivated. Read the respective chapter in the Windows<sup>xp-</sup>Help how to activate this function.

An example for the manual installation without the autorun function:

- 1. Open the "Start menu" and select the item "RUN".
- 2. Now enter the letter of the CD-ROM drive followed by a colon and the program name **setup**.
- 3. Click on "OK".
- 4. Follow the instruction given by the program.
  - ⇒ Information about how to use the applications are generally given through the online help (F1).

#### **UNINSTALLING THE SOFTWARE**

In order to remove the installed software from your PC, please follow the steps below:

- 1. Click "Start".
- 2. Click "Control Panel"
- 3. Then select the "Software" item.

Select the program concerned, start the uninstall and follow the instructions on your screen.

## **CUSTOMER SERVICE**

## WHAT DOES THAT MEAN?

Resolution	The ratio between the pixels displayed and the area. Measured in dpi (dots per inch).
Dpi	(Dots per inch) Unit of measure for resolution.
Colours	Number of colours that can be displayed simultaneously.
	$1-Bit = 2^1 = 2 colours = black/white$
	$8-Bit = 2^8 = 256 colours$
	16-Bit = 216 = 65,536 colours
	24-Bit = 224 = 16,777,216 colours
Pixel	PICture element
TWAIN	Protocol for exchanging information between applications and devices.

## FIRST-AID IN THE EVENT OF MALFUNCTION

## **TROUBLESHOOTING**

Malfunctions can sometimes have very simple causes, but at times, they can be quite complex.

#### **GENERAL GUIDANCE**

➤ The regular running of the Windows<sup>®</sup> programs "Defrag" and "Scandisk" can remove sources of error and raise system performance.

#### **CHECK CONNECTIONS AND CABLES**

Start with a carefully visual check of all cable links. If the LCD's are not working, make sure that the power is reaching the computer and all peripherals.

➤ Switch off the computer and check all cable links. If the computer is connected to peripherals, check also the plug connections of all cables. Do not arbitrarily swap the cables between various units, even if they appear to be precisely the same. The pin assignments of the cables are likely to be different. Once you have ascertained that the power supply is not at fault and all connections are intact, switch on the computer again.

#### **FAULTS AND POSSIBLE CAUSES**

The digital camera is not recognized or receives no response.

- ➤ Have you connected the cable according to the installation instructions? Check all cable connections.
- ➤ Did you connect the camera before installing **Mega Camera Manager**? Remove the USB plug from the port and only connect it to the unit **after** installation.

Under Windows® ME the camera is not recognized with the image processing software.

First start the Mega Camera Manager program and then the image processing software (such as Ulead Photo Express). In the Mega Camera Manager program under Options > transfer to select the corresponding image processing software (such as Ulead Photo Express). Click "Snapshot" and then "Transfer". The corresponding image processing software is automatically started and the picture is transferred.

Changes under **VideoLive Mail** are not be recognized:

- ➤ The maximum size of the video format under **VideoLive Mail** is 640 x 480 pixels.
- Following a change in the frame rate in the system configuration program under VideoLive Mail the application must be closed and restarted in order for the changes to be effective.

#### **DRIVER SUPPORT**

This PC has been tested in our test laboratories in detail and extensively with a large number of different devices. It fulfils all required standards and complies with the standard "Designed for Windows", which certifies compatibility. However, it is usual, that drivers are updated from time to time. This is because e.g. possible compatibility problems occur with other components (programs, equipment) which have not yet been tested. Driver updates and the latest information on your product are available in the Internet.

<u>www.medion.com</u>

### **Do You Need Further Support?**

If the suggestions in the above section have not solved your problem, please contact the hotline. We will try to help you over the telephone. However, before you contact your Technology Center it would be helpful to have the following information available:

- How is your computer configured?
- What additional peripherals do you use?
- What messages, if any, appear on your screen?
- What software were you using when the error occurred?
- What steps have you already undertaken to solve the problem?
- Have you upgraded or removed drivers or hardware?
- Can you manually repeat the problem?
- If you have been given a customer number previously, please refer to this number when you call.