12.0 MP
Design Digital Camera
MEDION® LIFE® P43028 (MD 86908)

Instruction Manual
Overview of the appliance

Front

1. Flash
2. Display for the automatic release light
   Flashing: Automatic release switched on
3. Camera lens with a lens barrel
4. Microphone
5. LC display
6. Operating LED
7. Mode switch
8. SET button / navigation buttons

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Safety instructions

About these instructions
Read the safety instructions carefully before use. Note the warnings on the appliance and in the operating instructions. Keep the Operating Instructions always within reach. Also pass on these Instructions and the guarantee card under all circumstances if you sell or pass on the device.

Proper use
• The device is suitable for recordings in the digital format.
• Do not operate the device either in extreme heat or extreme cold.
• The device is not suitable for operation in extreme conditions.

Warning
To avoid injury, please note the following warnings when using this product.
• Make sure you are not too close to people when using the flash. Otherwise you could damage people’s eyes.
• Keep a distance of at least one metre from children when working with the flash function.
• Do not open up or dismantle the device.
• Dismantling the device could lead to an electric shock. Tests on internal components, modifications and repairs should be carried out by specialists only. Please take the product to an authorised service centre for checks.
• Separate the battery charging device from the electricity supply if it is not being used.
• The socket must be close to the device and within easy reach.
• Remove the battery to prevent it leaking, if you will not use the camera for a longer time.
• The camera and the power pack must not be subjected either to drops of water or spray. Do not place any objects filled with liquid (such as vases) on the device.

Information about the battery
You can operate your camera with the lithium-ion battery supplied with it. Charge the battery exclusively in the battery charger supplied with the device.
Pay attention to the following information about dealing with batteries:
• Keep children away from the rechargeable batteries. Seek medical attention immediately if a battery is swallowed.
• CAUTION! Never try to recharge non-rechargeable batteries. Danger of explosion!
• ATTENTION! There will be the danger of explosion in the case of the improper replacement of the batteries. Only replace the battery by the same or an equivalent type.
• Check that the contacts in the device and on the battery are clean and clean them if necessary, before inserting the battery.
• Only insert the battery supplied with the device in principle.
• Pay attention to the polarity (+/-) when inserting the battery.
• Store the battery in a cool dry place. Direct strong heat can damage the battery. Do not subject the device to any strong sources of heat for this reason.
• Avoid contact with skin, eyes and mucous membranes. If these areas come into contact with battery acid, rinse them immediately with plenty of clean water and contact a doctor immediately.
• Do not throw the battery into fire, short-circuit it or take it apart.
• Never subject the battery to excess heat, such as because of sunshine, fire or a similar phenomenon.
• Remove the battery if you are not going to use the device for a longer time.
• Remove an empty battery from the device immediately. Clean the contacts before you insert a new battery. There will be the danger of causticization by battery acid.
• Also remove an empty battery from the device.
**Precautionary measures**

Pay attention to the following precautionary measures to avoid damage to your camera and to keep it always in a perfect state:

- **Store it in a dry place**
  This camera is not watertight and will not function faultlessly for this reason, if it is submerged in water or if liquids reach the inside of the camera.

- **Keep it away from moisture, salt and dust**
  Wash off salt and dust with a slightly damp, soft cloth, if you have used the camera on the beach or at the seaside. Dry the camera carefully after this.

- **Keep it away from strong magnetic fields**
  Never take the camera too close to devices that create strong electro-magnetic fields, such as electrical motors. Strong electro-magnetic fields can lead to malfunctions of the camera or disrupt the data recording.

- **Avoid too strong heat**
  Do not use or store the camera subject to solar radiation or high temperatures. Such a strain can lead to the battery leaking or a deformation of the casing.

- **Avoid high variations in temperature**
  Condensed water, which can lead to functional disruptions and damage to the device, can form in and on the device, if you take the device from a cold environment into a warm environment, or
reverse, quickly. Wait to bring the camera into operation until the temperature of the device has adjusted to the surrounding temperature. The use of a transport or plastic bag offers limited protection against fluctuations in temperature.

- Do not drop the device
  Strong shocks or vibrations caused during falling can cause malfunctions. Place the carrying loop around your wrist if you are carrying the camera.

- Do not remove the battery when data is being processed.
  Switching off the electricity supply if image data on memory cards are being displayed or deleted can lead to a loss of date or damage the memory.

- Treat the lens and all moveable parts with care.
  Do not touch the lens or the lens barrel. Be careful when handling the memory card and the battery. These parts have not been designed for heavy stresses.

- Batteries
  The battery capacity can decline sharply at low temperatures. Keep a warm replacement battery ready, if you are photographing in cold temperatures.
  Clean the contacts of the battery with a dry, clean cloth if they are dirty, or use a rubber to remove residues.

- Memory cards
  Switch the electricity supply off before you insert or remove the
memory card. Otherwise, the memory card may become unstable. Memory cards can become warm during use. Always remove the memory card from the camera carefully.

At low temperatures, the capacity of the battery can drop significantly due to the reduced speed of the chemical reactions. When recording in cold weather keep a second battery pack in reserve in a warm place (e.g. trouser pocket).

This symbol on your camera certifies that the device fulfils the EU Directives (European Union) concerning perturbing radiation. CE stands for Conformité Européene (European Conformity).

The camera is for private use only and not intended for use by companies in the heavy industry sector.
Start of operation

Included the box
Please check your purchase to ensure all items are included and contact us within 14 days of purchase if any of the following components are missing:
You will have received the following with the product that you have acquired:
- Camera
- 2 x lithium-ion battery
- 2 GB SD memory card
- Charging tray with cover
- USB cable
- AV cable
- Hand loop
- Carrying case
- Software CD-ROM
Charging batteries in the charging device
You will only be able to charge the lithium-ion battery supplied with the device in the battery charging device supplied.

- **CAUTION!** Never try to recharge non-rechargeable batteries. Danger of explosion!
- Only use the battery charging device supplied with the device to charge the battery.
- Do not cover the charging device with objects (newspapers, table cloths, curtains, etc.), to avoid heat building up.
- Do not place any open sources of fire, such as burning candles, on the device or in the immediate vicinity of the device.

- Place the battery in the charging tray as illustrated. The contacts of the battery must lie at the contacts of the charging tray.
- Push the battery forwards against the resistance of the spring contacts, Make sure that the battery lies under the guide.
Push the cover supplied with the device onto the charging tray as shown.

Plug the charging tray into a 230 V ~ 50 Hz socket.

The charging light will shine orange.

The charging time is approx. two hours. The charging light will shine green, when the battery has been completely charged.

Detach the charging tray from the network.

Detach the charging tray from the network, to avoid unnecessary electricity consumption, although a protection against overcharging exists.

Insert the battery into the camera as described in the following.

The battery charging symbol on the display of the camera will show you the charging status of the battery. Charge the battery as soon as it is empty.

Notes about using the battery

*The battery performance is reduced in cold environments (-10°C or colder). Warm the battery up (in a pocket, for example), before you use it in cold environments.*
Inserting the battery
The lithium-ion battery supplied with the camera is necessary to operate it.

- Switch the camera off.
- Push the closure of the battery compartment in the direction of the arrow. The battery compartment will open.

- Push the battery into the battery compartment so that the contacts of the battery lie at the contacts in the battery compartment.

- Close the battery compartment and push the closure back to its starting position.
Inserting and removing SD cards
The recordings will be stored in the internal memory if no card has been inserted. Please pay attention to the fact that the internal memory is limited. Use an SD memory card to increase the memory capacity for this reason. The recordings will be stored on the card if one has been inserted.

Inserting a card
- Switch the camera off.
- Push the cover of the battery compartment outwards, to open the compartment.
- Push the card into the card slot with the contacts pointing downwards.
- Close the battery compartment and push the closure back to its starting position.
Press the card downwards briefly, to unlock it, in order to remove it. The card will be pushed out slightly and can be removed.

**Attaching the hand loop**

Attach the hand loop for better handling of the camera and for safety reasons. Take the loop through the eye as shown in the illustration.

Pull the other end of the hand loop through the loop of the thin cord and pull the hand loop firmly.

*Pay attention that the camera does not bump into anything if you are carrying it with the hand loop.*

*Place the camera on a firm surface, do that it cannot fall down and be damaged, when you are attaching the hand loop.*
First Steps

Switching on the camera
- Press the ON/OFF button for 1 to 2 seconds to turn on the camera.

The lens will move out, the operating display will shine green and the display will switch on. The camera will be in the Recording mode.

*Check that the battery is inserted correctly and that it is charged, if the camera does not switch on.*

Switching off the camera
- Hold the ON/OFF button held down for rather longer, to switch off the camera.

Setting the language and the date/time
You should set the required menu language and the current date and time, before you use the camera for the first time. Both settings are made in the Settings menu:
- Press the button when the camera is switched on, to open the menus.
- Select the ‘Settings’ menu with the or the button.
Setting the language

- Select the entry for ‘Language’ in the ‘Settings’ menu with the up or the down button and press SET.
  The Speech Selection menu will open.
- Select the required language with up or down and press SET.

Setting the date and the time

- Select the ‘Date/Time’ entry in the ‘Settings’ menu with the up or the down directional button and press SET.
  The Settings menu will open.
  You will also be able to set the date format, as well as the date and the time. You have the following possibilities:
  JJ/MM/TT  (Year/Month/Day);
  MM/TT/JJ  (Month/Day/Year),
  TT/MM/JJ  (Day/Month/Year)
- Select the entry that you wish to change with the up or the down button.
- Set the value with the up or the down button.
  Hold the buttons pressed down to run quickly through the numbers.
- Go the next entry, e.g. Month, etc, with down, when the required value has been set.
- Press SET at the end, to confirm the established values.
The date and the time can only be displayed by the camera in the Replay mode. This information will not be printed. The Time setting will remain stored by the internal battery. However, it will be lost if the battery is removed from the camera for more than 48 hours.

Electricity-saving function
The camera will switch off if it has not been used for 60 seconds. You can also set the automatic switching-off time to 3 or 5 minutes. The electricity-saving function will not be active:

- During the recording of audio and video clips;
- During the replay of photos, video clips or audio recordings;
- While the camera is connected to a different device through the USB connection.
The Recording and Replay modes
The Recording mode is active after the camera has been switched on; you will be able to take photos directly. You will also be able to take audio and video clips.
You will be able to replay, process and delete photos, audio and video clips in the Replay mode.

- Push the control to the Replay symbol \( \rightarrow \) to set the Replay mode. The Replay symbol will appear above left in the display. The image taken most recently will be displayed.
- Push the control back to the required position \( \bullet \) for photo or \( \rightarrow \) video recordings, to return to the Recording mode.
Display outputs

Display outputs for the recording
The following display outputs are possible in the Recording mode:

1. You can set different types of recording (button); the current type of recording will be shown here.
2. Flash setting
3. Self-timer
4. Zoom setting
5. Recordings still available (at the current resolution)
6. Battery status
7. Memory location (internal memory IN or card)
8. Date stamp
9. Automatic exposure switched on
10. Image stabiliser switched on
11. Shows the saturation
12. Shows the contrast
13. Bar chart
14. Setting
15. Focus range
16. Shows the shutter speed
17. Aperture setting

18. Warning information: Danger of blurring!
19. Macro setting
20. Exposure setting
21. Face recognition
22. White balance
23. Exposure measurement
24. Definition
25. Quality
26. Resolution
Display outputs for the replay of photos
The following display outputs are possible in the Replay mode:

1. Display of the mode (Recording or Replay)
2. The photo is protected
3. Sound recording
4. Button arrangement
5. Current recording/total number of recordings
6. Battery status
7. Memory location (internal memory IN or card)
8. Information about the recording
9. DPOF activated
10. Resolution of the photo currently displayed
Display outputs for the replay of videos

The following display outputs are possible in the Replay mode for video clips:

1. Display of the mode (Recording or Replay)
2. The video is protected
3. Recording videos
4. Management of the recording
5. Current recording/total number of recordings
6. Battery status
7. Memory location (internal memory IN or card)
8. Information about the recording
9. Resolution
10. Volume setting
11. Length of video
12. Playing time
13. Indicates the replay status (Replay/Pause/Stop)
14. Set a screen shot
Display outputs for the replay of sound

The following display outputs are possible for sound recordings in the Replay mode:

1. Display of the mode (Recording or Replay)
2. The image is protected
3. Management of recording
4. Current recording/total number of recordings
5. Battery status
6. Memory location (internal memory IN or card)
7. Information about the recording (date and time)
8. Volume setting
9. Length of audio
10. Playing time
11. Indicates the replay status (Replay/Pause/Stop)
Switching display outputs on and off
You can switch the display on and off, and change them, by pressing the **DISP** button repeatedly.

**In the Recording mode**

- **With the most important displays**
- **With all displays**
- **With image division lines for the easier division of the image**
- **Without displays**

*The screen outputs can vary according to the Recording mode.*
In the Replay mode

With the most important displays

With all displays

Without displays

The display outputs cannot be changed:

- During the recording and replay of audio and video clips;
- While a slide show or miniature images are displayed;
- While a photo is adjusted (in the Processing mode).
Making the first recordings

Setting the Recording mode
The Recording mode is active automatically when the camera is switched on. Auto, for the automatic Recording mode, will appear above left in the display in the basic status. You will find more about the Recording mode and the symbols on Page 59. Push the control to the required Recording mode, if the Replay mode, not the Recording mode, is active.

Tips for good photographic recordings
• Move the camera slowly so that the photos do not become fuzzy. The camera should not move when pressing the shutter release. Do not move the camera directly after pressing the shutter release. Wait for the release signal.
• Observe the subject on the display before you press the Release button.
• Check the angle if the subject is lit from behind. Change your position to reduce the background lighting.
• Swing the camera slowly to make good video clips. Video recordings will be blurred and indistinct if you swing the camera too quickly.
Taking a photo

- Press the Release button down slightly initially, when you see the image on the display.
  The yellow image cut-out signs will appear red and the operating display will flash, if the auto focus cannot focus.
  The values for the shutter speed, the aperture and the ISO value, if an ISO value has been set, will appear.
- Press the Release button down completely, to take the picture. A sound will signal that the photo has been taken.
  The photos will be saved as JPEG files.

The symbol will appear in addition, if the recording threatens to blur. You should hold the camera still or a tripod should be used in this case.
You can make different settings for recording through the Functions menu, see Page 39.

Activate the Macro mode, by pressing the button, to make close recordings.
Using the stabiliser
The stabilizer enables better recordings in poor light conditions; the risk of blurred recordings is reduced.
> Press the Image Stabiliser button.

Using flash
If the light is insufficient to taking a photo the integrated flash will provide the required extra light.
You will select the following flash settings by pressing the Flash button repeatedly:

<table>
<thead>
<tr>
<th>Flash Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO</td>
<td>The flash will be activated automatically if the recording conditions require additional lighting.</td>
</tr>
<tr>
<td></td>
<td>With pre-flash before the actual flash, to avoid red-eye. The camera will recognize the brightness of the subjects and will only flash if necessary.</td>
</tr>
<tr>
<td>Permanent</td>
<td>Flash always off.</td>
</tr>
<tr>
<td>‘Slow Sync’</td>
<td>The flash will be synchronized with a slow shutter time.</td>
</tr>
</tbody>
</table>

The flash only works in the single and auto-release mode. It cannot be used during photo sequences or for video recordings.
The use of the battery is increased by the use of the flash. The flash will need longer to load, if the battery is almost empty.
Do not flash people and animals from a close position. Maintain at least 1 metre distance.

**Zoom – enlarge or reduce in size**

The camera has an optical and a digital zoom. The optical zoom is reached by setting the lens; the digital zoom is activated through the Settings menu.

- Press the Zoom control in the **W** – **T** direction. The bar giving the Zoom setting will appear.

**W** / **W**: The image will be zoomed out of (wide angle); you will capture a wider section.

**T** / **T**: The image will be zoomed into (telephoto); you will capture a smaller section.

<table>
<thead>
<tr>
<th><strong>W</strong></th>
<th>The optical zoom will be used if the mark is in the left part of the bar.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>T</strong> If you press <strong>T</strong> again, the digital zoom will be switched on automatically. You will be able to zoom in further in five stages. <strong>The digital zoom must have been switched on in the Settings menu for this!</strong></td>
</tr>
</tbody>
</table>

The digital zoom is not available for video recordings.
The enlarged image section is enlarged by interpolation in the case of the digital zoom; the picture quality can suffer somewhat because of this.

**Setting the Focussing mode**

You can define the type of focussing when you are recording a photo or a video, with this function.

- Press the Macro button repeatedly, until the symbol of the required focussing mode is displayed below left in the LCD.

Your camera offers four different focussing modes:

**Normal**
The focussing range begins at 40 cm in the case of normal focus. No symbol will be displayed if the camera has been set to the Normal mode.

**Macro**
This mode is particularly suitable for close recordings. You will be able to capture details and to set the subject as sharp, even at a small distance, by means of a fixed focus in this mode.

**PF Multi-focus**
The camera will set every subject as sharp if multi-focus is active.

**INF Infinite**
The camera will focus on particularly distant subjects in the case of the Infinite setting.
Making video clips

- Push the Mode Selection switch to the 🎥 position.
- Press the Release button to start the recording. The recording time will appear in the display.
- You will be able to change the picture sections with the ⌚ – ⌚ Zoom buttons.
- Press the ⏰ button, if you want to pause the recording.
- Press the ⏰ button again, to continue the recording.
- Press the Release button again to end the recording.

Note:
The digital zoom is not available for recording video clips. No sound will be recorded while the Zoom button is pressed. The microphone is active and sound will be recorded with the video, during the video recording. The video recordings will be saved with sound as AVI files.
Recording audio clips
The microphone is located on the front of the camera, on the left below the lens. Make sure that you do not touch the microphone during a recording.

- Select the Speech Recording entry under the ‘Recording mode’ setting in the ‘Recording menu’.
- Press the Release button to start the recording. The recording bar will appear in the display.
- Press the Release button again to end the recording.

Note:
The speech recordings will be saved as WAV files.
Using the Functions menu
The Functions menu enables the significant settings for a recording to be made quickly.
The available functions for setting the camera will be shown on the left menu strip. The possible settings of the respective function will be shown in the lower bar.

- Press the button to open the menu.
- Select the function that you wish to change with the or directional buttons.
- Select the required setting, for example the 12M resolution, with the or the button.
- Press the SET button to save the setting.
**My mode**
The five most recently used Recording modes will be listed here.

Each Recording mode has different setting options. The setting options will change accordingly if you change the Recording mode with the or the button.

**Resolution – photos**
The resolution significantly determines the quality of the photo. The higher the resolution, the more memory a photo needs. The highest resolutions are recommended above all for large prints (larger than DIN A4).

<table>
<thead>
<tr>
<th>Setting</th>
<th>Size in pixels</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 M</td>
<td>4000 x 3000</td>
</tr>
<tr>
<td>3:2</td>
<td>4000 x 2672</td>
</tr>
<tr>
<td>8 M</td>
<td>3264 x 2448</td>
</tr>
<tr>
<td>5 M</td>
<td>2592 x 1944</td>
</tr>
<tr>
<td>3 M</td>
<td>2048 x 1536</td>
</tr>
<tr>
<td>16:9 HD</td>
<td>1920 x 1080</td>
</tr>
<tr>
<td>VGA*</td>
<td>640 x 480</td>
</tr>
</tbody>
</table>

The VGA setting is recommended for sending photos by email, for example.
Quality
You will determine the compression of the data recorded with the quality. The higher the quality, the more memory space the recordings will need.

<table>
<thead>
<tr>
<th>Setting</th>
<th>Explanation</th>
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<tbody>
<tr>
<td>Superfine</td>
<td>Highest quality.</td>
</tr>
<tr>
<td>Fine</td>
<td>Medium quality.</td>
</tr>
<tr>
<td>Standard</td>
<td>Normal quality.</td>
</tr>
</tbody>
</table>

Exposure correction (EV)
By correcting the exposure values (EV, exposure value) you can adjust pictures that are too dark or too light.
You can set the value in nine steps between +2.0 EV and -2.0 EV. A bar diagram with 3 images to compare will appear on the display.
For example, the image will show an exposure correction of – 0.3, the centre one will show the exposure correction actually selected and the right image will show an exposure correction of + 0.3.
Use a positive value when light conditions are poor and a negative value in strong light.
Do not use the exposure correction if the subject is in a very light or a very dark area or if you are using flash. Select the Automatic setting then.
White balance
The white balance can correct certain light conditions.

<table>
<thead>
<tr>
<th>Setting</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>AWB</td>
<td>Automatic white balance: The white balance will be adjusted automatically.</td>
</tr>
<tr>
<td>![Daylight]</td>
<td>Daylight: Suitable for recordings in light daylight.</td>
</tr>
<tr>
<td>![Cloudy]</td>
<td>Cloudy: Suitable for recordings in the case of a cloudy sky, twilight or shadow.</td>
</tr>
<tr>
<td>![Light bulb]</td>
<td>Light bulb: Suitable for recordings in incandescent light.</td>
</tr>
<tr>
<td>![Neon H.]</td>
<td>Neon H.: Suitable for recordings in fluorescent light. Corrects the green shade of fluorescent light and can save the flash here.</td>
</tr>
<tr>
<td>![Neon L.]</td>
<td>Neon L.:</td>
</tr>
<tr>
<td>![User-defined]</td>
<td>User-defined: For the more precise adjustment or if the source of light cannot be classified. <em>Point the camera to sheet of white paper or a similar</em></td>
</tr>
<tr>
<td>Setting</td>
<td>Explanation</td>
</tr>
<tr>
<td>---------</td>
<td>-------------</td>
</tr>
<tr>
<td></td>
<td><em>object, under the light conditions for which you want to set a white balance, and take a sample photo, to find the correct setting.</em></td>
</tr>
</tbody>
</table>

The left image will show the previous white balance, the centre one will show the actually selected white balance and the right image will show the next possible white balance.
**ISO (Light sensitivity)**
This setting changes the light sensitivity in accordance with the brightness of the photo subject. A higher value will reduce the sharpness of the picture. A lower value will lead to clearer pictures in good light conditions.

<table>
<thead>
<tr>
<th>Setting</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automatic</td>
<td>Automatic ISO value.</td>
</tr>
<tr>
<td>ISO 50</td>
<td>Sets the sensitivity to ISO 50.</td>
</tr>
<tr>
<td>ISO 100</td>
<td>Sets the sensitivity to ISO 100.</td>
</tr>
<tr>
<td>ISO 200</td>
<td>Sets the sensitivity to ISO 200.</td>
</tr>
<tr>
<td>ISO 400</td>
<td>Sets the sensitivity to ISO 400.</td>
</tr>
<tr>
<td>ISO 800</td>
<td>Sets the sensitivity to ISO 800.</td>
</tr>
<tr>
<td>ISO 1600</td>
<td>Sets the sensitivity to ISO 1600.</td>
</tr>
<tr>
<td>ISO 3200</td>
<td>Sets the sensitivity to ISO 3200.</td>
</tr>
<tr>
<td>ISO 6400</td>
<td>Sets the sensitivity to ISO 6400.</td>
</tr>
</tbody>
</table>
Light measuring procedure
You can determine the area in which the light measurement for the photo or video recording should take place with this function.

<table>
<thead>
<tr>
<th>Setting</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Several</td>
<td>Selects an exposure on the basis of the measured results at several points in the recording area.</td>
</tr>
<tr>
<td>Centre</td>
<td>The light of the whole recording area will be measured, however more weight is given to the values near to the centre.</td>
</tr>
<tr>
<td>Point</td>
<td>Selects an exposure on the basis of a single measured result in the image centre.</td>
</tr>
</tbody>
</table>
**Colour effects**
You can use the photo effects to give recordings different tones or artistic effects in the Recording and Replay modes.

<table>
<thead>
<tr>
<th>Setting</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard</td>
<td>No photo effect set.</td>
</tr>
<tr>
<td>Lifelike</td>
<td>The picture will be presented with higher colour and saturation to emphasize the bright colours.</td>
</tr>
<tr>
<td>Sepia</td>
<td>The picture will be presented in nostalgic brown shades.</td>
</tr>
<tr>
<td>Black/white</td>
<td>The picture will be presented in black and white.</td>
</tr>
<tr>
<td>Red</td>
<td>The picture will receive a red tone.</td>
</tr>
<tr>
<td>Green</td>
<td>The picture will receive a green tone.</td>
</tr>
<tr>
<td>Blue</td>
<td>The picture will receive a blue tone.</td>
</tr>
</tbody>
</table>
**Video size (resolution - videos)**

The Video Size setting is only available for the recording of video clips.

<table>
<thead>
<tr>
<th>Setting</th>
<th>Size in pixels</th>
<th>Picture quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>16:9</td>
<td>1280 x 720</td>
<td>HDTV (only possible with Class 6 SDHC cards)</td>
</tr>
<tr>
<td>640</td>
<td>640 x 480</td>
<td>High quality</td>
</tr>
<tr>
<td>320</td>
<td>320 x 240</td>
<td>Standard</td>
</tr>
<tr>
<td>🎥</td>
<td>640 x 480</td>
<td>Web Quality</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Quality for presentation by Internet platforms</td>
</tr>
</tbody>
</table>

The recording of video clips for presentation on Internet platforms will be optimized in the 🎥 setting.

The camera will switch off automatically if the file reaches a size of 100 MB, because the size of a file is restricted on Internet platforms.

The files will be saved in the DCF standard (see Page 84) in the ‘101UTUBE’ directory (see Page 86) if the resolution has been set to ‘web quality’.
Using the Recording menu
You can also select the settings for recordings through the Recording menu.
You can take more precise information about navigation in the menus and the different settings from the ‘The Recording menu’.
Viewing/seeing recordings

Replaying recordings individually
You can replay the recordings made most recently one after the other in the Replay mode.

- Push the Mode Selection switch to 1, to activate the Replay mode.

The most recently made recording will appear on the display; the following outputs are possible according to the type:

- Press the $ or the % button to see the previous or the next recording.
Replaying recordings as miniatures

- Press the Zoom button in the **HH** direction in the Replay mode, to display up to nine small preview images.
- You can select a required file with the **←** or the **→**, the **↑** or the **↓** direction button.
- Press the **SET** button to display the recording as a full image.
- Press the Zoom button in the **↓** direction, to return to the full image view.

Some miniature views contain icons that give the file type.

<table>
<thead>
<tr>
<th>Icon</th>
<th>File type</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>🎤</td>
<td>Speech recording</td>
<td>Indicates a speech recording.</td>
</tr>
<tr>
<td>🎬</td>
<td>Defective file</td>
<td>Indicates a defective file.</td>
</tr>
</tbody>
</table>

Calendar mode

- Press the Zoom button twice in the **HH** direction in the Replay mode, to activate the Calendar mode.

The first file (photo, video or audio) that was recorded on the respective date will appear on the screen.

- You can select a required file with the **←** or the **→**, the **↑** or the **↓** direction buttons.
- Press the **SET** button to display the recording as a full image.
- Press the Zoom button in the [ ] direction, to leave the Calendar mode.

**Zooming in photos**
You can view individual image sections in the case of photo recordings.
- You can enlarge an image section up to 12 times by pressing the button in the [ ] direction repeatedly in the full image view.
- The 4 arrows at the edge indicate that the image section has been enlarged.
- You can change the image section within the picture with the [ ], the [ ], the [ ] and the [ ] direction buttons.
- Press the [ ] button, to return to the full image.
Replaying video / audio clips / speech notes

- Select the required recording.
- Press the SET button, to start the replay.
Press the $ or the & button during the replay of video clips, to start a fast forward or rewind.
- Press the Zoom button in the direction, to increase the volume.
- Press the Zoom button in the direction, to reduce the volume.
- Press the button if you wish to pause the replay.
- Press the button again, to continue the replay.
- Press the button, if you wish to end the replay.

Making a screen shot of a video clip

Press the $ button during a video clip, to stop the replay.
Press the Release button to save the image displayed as a screen shot.
The Release symbol will appear on the display.
The camera will end the replay automatically and will change to the Display mode.
This function is only available if sufficient memory space is present; the Release symbol will not appear otherwise.
Deleting photos

You can delete photos in the Replay mode or through the Replay menu (see Page 69).

You will delete a single recording most quickly with the button in the Replay mode.

- Select the recording in the Replay mode and press the button.
- The Delete query will appear on the display. Select the Delete entry with the or button.
- Press the SET button and confirm the answer.
  Select the ‘Terminate’ entry and confirm again with SET, to interrupt the function.
- The next recording will be shown on the display.

Protected files cannot be deleted; the ‘File protected’ message will appear on the display in this case.

You will only be able to delete the files present on the memory card if one has been inserted.
You will not be able to delete the files present on the memory card if the card is locked.
A deleted file cannot be recreated. Proceed carefully when deleting files for this reason.
The menus

Navigating in the menus
Push the Mode Selection switch to the position, if you wish to open the Replay menu.

- Press the button, to open the menus.
- Select the setting that you wish to change with the or the direction button.
- Press the SET button; the corresponding sub-menu will open.
- Select the required option with the or the direction button and confirm with the SET button.
- You will come to the previous level at any time with the button.
## The Recording menu

<table>
<thead>
<tr>
<th>Setting</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recording mode</td>
<td>You can select the different Recording modes here.</td>
</tr>
<tr>
<td>Type of operation</td>
<td>You can set the automatic release or select the picture sequence here. 10 sec. – The photo will be taken 10 seconds after the Release button has been pressed. 2 sec. - The photo will be taken 2 seconds after the Release button has been pressed. DOUBLE – Two photos will be taken; the first 10 seconds and the second 12 seconds after the Release button has been pressed.</td>
</tr>
<tr>
<td><strong>Setting</strong></td>
<td><strong>Explanation</strong></td>
</tr>
<tr>
<td>--------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Sequence</td>
<td>Sequence (photo sequence) – The camera will take a series of photos as long as you press the Release button down in the case of this setting. Fast series – The camera will take a series of 30 photos in the case of this setting. This mode can only be activated if a Class 6 SDHC memory card is used. OFF – the recording of a sequence will be stopped.</td>
</tr>
<tr>
<td>Automatic exposure</td>
<td>You can switch the automatic exposure on or off here.</td>
</tr>
<tr>
<td>Autofocus area</td>
<td>You can select the autofocus (AF) area here. Wide – a wide area will be set as sharp. Centre – the centre will be set as sharp.</td>
</tr>
<tr>
<td><strong>Setting</strong></td>
<td><strong>Explanation</strong></td>
</tr>
<tr>
<td>--------------</td>
<td>----------------</td>
</tr>
<tr>
<td>AF light</td>
<td>You can set the AF light to automatic operation or to manual operation here.</td>
</tr>
</tbody>
</table>
| Definition   | You can make the details of a photo appear sharper or softer here.  
               | High – Marks out the photo sharply.  
               | Normal – Normal photo sharpness  
               | Low – Marks out the photo softly. |
| Saturation   | You can select the colour saturation of the photo here.  
               | Select the high saturation for strong colours and the low saturation for more natural tones.  
               | High – Strong colours  
               | Standard  
<pre><code>           | Low – Natural shades |
</code></pre>
<table>
<thead>
<tr>
<th>Setting</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contrast</td>
<td>You can select the contrast here.</td>
</tr>
<tr>
<td><img src="#" alt="High contrast" /></td>
<td>High – Increases the contrast</td>
</tr>
<tr>
<td><img src="#" alt="Normal contrast" /></td>
<td>Normal – Normal contrast</td>
</tr>
<tr>
<td><img src="#" alt="Low contrast" /></td>
<td>Low – Reduces the contrast</td>
</tr>
<tr>
<td>Digital zoom</td>
<td>You can select the digital zoom for some types of operation here. Intellig. zoom – Enlarges and optimizes the photo digitally</td>
</tr>
<tr>
<td></td>
<td>Standard zoom – Enlarges all photo sizes up to 5 times, but leads to deterioration in the picture quality.</td>
</tr>
<tr>
<td></td>
<td>Off – Only use the optical zoom.</td>
</tr>
<tr>
<td>Date stamp</td>
<td>You can select the printing of the date and time on photos here. Date</td>
</tr>
<tr>
<td></td>
<td>Date/time</td>
</tr>
<tr>
<td></td>
<td>Off</td>
</tr>
<tr>
<td>Auto-preview</td>
<td>The photo taken will be displayed for a few seconds after the shot. You can switch this function on or off.</td>
</tr>
</tbody>
</table>
Recording mode
You can use the pre-set Recording modes for particular recording situations or subjects. You will save a manual setting through this. The selected mode (with the exception of the Speech Recording mode) will be added at the front position in the Function menu in ‘My Mode’, after you have made your selection.

The following Recording modes are available:

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Setting</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auto</td>
<td>Automatic</td>
<td>For unpractised photographers. All settings will be established by the camera automatically.</td>
</tr>
<tr>
<td>P</td>
<td>Programme</td>
<td>The camera will establish the suitable recording settings for the shutter time and the aperture value automatically.</td>
</tr>
<tr>
<td>M</td>
<td>Manual exposure</td>
<td>You will be able to set the aperture value and the aperture closing time manually.</td>
</tr>
</tbody>
</table>

Certain settings (e.g. Flash, Macro) cannot be changed, because they are pre-set for the particular type of the recording, in the case of the following special types of recording.
<table>
<thead>
<tr>
<th>Symbol</th>
<th>Setting</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>🏛️</td>
<td>Adjusted scene</td>
<td>The camera analyzes the recording conditions and switches to the suitable Scenic mode automatically.</td>
</tr>
<tr>
<td>🚹</td>
<td>Portrait</td>
<td>Sets the background as less sharp and focuses on the centre.</td>
</tr>
<tr>
<td>🔞</td>
<td>Scenery</td>
<td>Suitable for wide sections of landscape.</td>
</tr>
<tr>
<td>☀️</td>
<td>Sunset</td>
<td>Strengthens the red tone to record sunsets.</td>
</tr>
<tr>
<td>⭐️</td>
<td>Backlight</td>
<td>Adjust the Measurement setting to the backlight.</td>
</tr>
<tr>
<td>🧙‍♂️</td>
<td>Children</td>
<td>Suitable for shooting people in movement.</td>
</tr>
<tr>
<td>🧡</td>
<td>Night scene</td>
<td>Retains the night effect in the background of the photo.</td>
</tr>
<tr>
<td>🎆</td>
<td>Fireworks</td>
<td>Reduces the shutter speed to shoot the firework.</td>
</tr>
<tr>
<td>🧿</td>
<td>Snow</td>
<td>Suitable for photos of beaches and snow.</td>
</tr>
<tr>
<td>Symbol</td>
<td>Setting</td>
<td>Explanation</td>
</tr>
<tr>
<td>--------</td>
<td>-----------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>🚴♀♂</td>
<td>Sport</td>
<td>Suitable for creating photos in the case of fast movements.</td>
</tr>
<tr>
<td>🎉</td>
<td>Party</td>
<td>Suitable for internal photos and parties.</td>
</tr>
<tr>
<td>🕯️</td>
<td>Candlelight</td>
<td>Creates photos in warm light.</td>
</tr>
<tr>
<td>🕉️</td>
<td>Night scene portrait</td>
<td>Suitable for portrait photos with a dark background.</td>
</tr>
<tr>
<td>🍎نسب</td>
<td>Skin tones, soft</td>
<td>Creates photos with soft transitions and pastel colours.</td>
</tr>
<tr>
<td>🔊💧</td>
<td>Flowing water</td>
<td>Creates a soft effect in the case of fast movements.</td>
</tr>
<tr>
<td>🍎</td>
<td>Foodstuffs</td>
<td>Increases the colour saturation.</td>
</tr>
<tr>
<td>🏙️</td>
<td>Buildings</td>
<td>Emphasizes the edge (contour) of the subject photographed more strongly.</td>
</tr>
<tr>
<td>📝</td>
<td>Text</td>
<td>Reinforces the contrast between black and white.</td>
</tr>
<tr>
<td>Symbol</td>
<td>Setting</td>
<td>Explanation</td>
</tr>
<tr>
<td>--------</td>
<td>------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>Greenery</td>
<td>This function reinforces the colour saturation of green tones.</td>
</tr>
<tr>
<td>🏤</td>
<td>Auction</td>
<td>Optimizes the photos for reproduction on Internet platforms (auctions), e. g. VGA resolution (see Page 86). Four different samples can be selected.</td>
</tr>
<tr>
<td>😊</td>
<td>Capture smiles</td>
<td>Uses face recognition to capture a smiling face automatically.</td>
</tr>
<tr>
<td>😬</td>
<td>Perception of blinking</td>
<td>The camera discerns whether the eyes of your subject were closed during the shot and leaves the choice whether the photo should be saved to you.</td>
</tr>
<tr>
<td>📸</td>
<td>Creation of a sample</td>
<td>This function takes a photo as a temporary orientation. Press the Release button down completely after you have referred the person to be photographed to the reference point.</td>
</tr>
<tr>
<td>Symbol</td>
<td>Setting</td>
<td>Explanation</td>
</tr>
<tr>
<td>--------</td>
<td>-----------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><img src="167x728" alt="emoji" /></td>
<td>Romantic portrait</td>
<td>This function uses face recognition to record faces automatically, to create portrait photos without outside support in this way. Auto Focus will be activated automatically if more than two faces are discerned. The camera will start the countdown and will take the photo after the expiry of two seconds.</td>
</tr>
<tr>
<td><img src="189x748" alt="emoji" /></td>
<td>Self-portrait</td>
<td>This function sets the zoom to wide angle. The Auto Focus will be activated automatically and a signal noise will sound if a face has been discerned. The camera will start a 2-second countdown and will take the photo.</td>
</tr>
<tr>
<td><img src="429x518" alt="emoji" /></td>
<td>HDR</td>
<td>This function increases the dynamic range of a photo by increased brightness and contrast values.</td>
</tr>
<tr>
<td><img src="429x518" alt="emoji" /></td>
<td>Aperture setting</td>
<td>You can establish the aperture value with this function.</td>
</tr>
<tr>
<td>Symbol</td>
<td>Setting</td>
<td>Explanation</td>
</tr>
<tr>
<td>--------</td>
<td>------------------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>TV</td>
<td>Shutter setting</td>
<td>You can establish the shutter speed with this function.</td>
</tr>
<tr>
<td>M</td>
<td>Manual exposure</td>
<td>You can set the shutter speed and the aperture value with this function.</td>
</tr>
<tr>
<td>🎤</td>
<td>Speech recording</td>
<td>Record an audio clip.</td>
</tr>
</tbody>
</table>
Using the Capture Smiles mode

The ‘Capture Smiles’ mode will take photos automatically as soon as it discerns a smile.

You will activate the ‘Capture Smiles’ mode in this way

- Select the 😊 function in the Recording mode.
- Focus the camera on the subject.
- The camera will start to take a photo as soon as a smile is discerned.
### The Settings menu

<table>
<thead>
<tr>
<th>Setting</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sounds</td>
<td>You can switch the starting sound off or choose between 3 sounds, switch on the signal sound and sound at release, and set the volume for all sounds here.</td>
</tr>
</tbody>
</table>
| **SAVE ELECTRICITY** | Save electricity  
The camera will switch off automatically after the selected time, to save the battery charge. Select **1 min, 3 min or 5 min.**  
The electricity-saving function is not active during the recording of audio and video clips, during the replay of photos, video clips or audio recordings or while the camera is connected to a different device through the USB connection. |
<p>| <strong>DARKEN LCD</strong>   | The display will be darkened after a short time, if it is not used, if you set this function to ON.                                          |</p>
<table>
<thead>
<tr>
<th><strong>Setting</strong></th>
<th><strong>Explanation</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Date / time</td>
<td>You can set the date and the time and select the display format here (see Page 22).</td>
</tr>
<tr>
<td>Language</td>
<td>You can select the language of the menu here (see Page 22).</td>
</tr>
</tbody>
</table>
| File numbering   | File numbering  
Series: The files will be numbered continuously from 0001.  
Set back: Sets the numbering back to 0001. This function is sensible after the memory card has been changed, for example. |
| TV output        | You can transfer recordings to your television with the TV cable supplied with the camera. Select the picture format of your region.  
NTSC: For the USA, Japan, Taiwan and others  
PAL: For Europe, Australia and others |
<table>
<thead>
<tr>
<th>Setting</th>
<th>Explanation</th>
</tr>
</thead>
</table>
| LCD brightness | You can set the brightness of the display here.  
|              | Bright: The display is brightened  
|              | Normal: Standard brightness                                                                                                               |
| Memory aid   | You can organize the data on the internal memory here.  
|              | Format: Formats the current memory, i.e. the memory card or the internal memory.  
|              | All recordings will be deleted during this.  
|              | Copy to card: Copies recording to an inserted memory card from the internal memory.  
|              | Select Yes with $\uparrow$ or $\downarrow$ and press the SET button, if you wish to carry out the selected function.                |
| Set all back | You can set back all the individual settings to the factory settings here. Confirm the query with Yes in this case. The following settings will not be set back:  
|              | Date & Time  
|              | Language  
|              | TV system |
## The Replay menu

<table>
<thead>
<tr>
<th>Setting</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slide show</td>
<td>You can have the picture recordings (only photos) run as a slide show (see Page 74).</td>
</tr>
</tbody>
</table>
| Delete | You can delete files no longer needed on the internal memory or the memory card with this function (see Page 75).  
You will have the following possibilities:  
Single: Delete one recording  
Voice: Delete the speech recording of a photo  
Multi: Delete several recordings that you will have selected in the miniature view.  
Delete all: Delete all recordings |
| Protect | You will protect the recordings against accidental deletion with this function (see Page 75).  
You will have the following possibilities:  
Individual: Protect one recording  
Multi: Protect several recordings that you will have selected in the miniature view.  
Protect all: Protect all recordings  
Unlock all: Lift the protection for all recordings |
<table>
<thead>
<tr>
<th>Setting</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red-eye correction</td>
<td>You can correct photos that have not been taken with pre-flash here (see Page 76). You will be able to save the corrected file under a new name or to overwrite the original file.</td>
</tr>
<tr>
<td>Speech note</td>
<td>You can save a speech note for each photo taken (see Page 77). The maximum length of the speech note is 30 seconds. The remaining time will be shown on the display. A speech note for the selected photo will be deleted if one already exists.</td>
</tr>
<tr>
<td>Colour mode</td>
<td>You will be able to create colour effects subsequently with the existing photos (see Page 77).</td>
</tr>
<tr>
<td>Adjust</td>
<td>You can select a picture section and adjust the photo to that size with this function. The edge not visible on the display will be deleted (see Page 79). You can save the adjusted file under a new name or overwrite the original file.</td>
</tr>
<tr>
<td>Setting</td>
<td>Explanation</td>
</tr>
<tr>
<td>------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Change the size</td>
<td>You can reduce the resolution of photos and reduce the size of the file through this (see Page 80). You can save the adjusted file under a new name or overwrite the original file. The resolution of photos in VGA cannot be changed.</td>
</tr>
<tr>
<td>Start screen</td>
<td>You can select a starting image that will appear on the screen after the camera has been switched on. You can choose between: System: The standard system image will be displayed. My PHOTO: The selected photo will be displayed. Off: No photo will be displayed. Select the ‘My PHOTO’ entry with DISP or DISP. Select the photo with \ or \ and press SET for confirmation.</td>
</tr>
</tbody>
</table>
DPOF stands for Digital Print Order Format. You will be able to establish the printer settings for photos here, if you want to have the photos printed by a photographic studio or a DPOF-compatible printer. You will be able to print the photos directly with a DPOF-compatible printer, without transferring them to a computer in advance.

You will be able to print all photos or one photo, or set the DPOF settings back. You will set the number of prints for each photo with the or the button. You will switch the date stamp on or off with the button.

You will be able to establish up to 99 copies in the case of DPOF. The DPOF setting will deactivate the photo automatically if you have set 0 copies.

<table>
<thead>
<tr>
<th>Setting</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>DPOF</td>
<td>DPOF stands for Digital Print Order Format. You will be able to establish the printer settings for photos here, if you want to have the photos printed by a photographic studio or a DPOF-compatible printer. You will be able to print the photos directly with a DPOF-compatible printer, without transferring them to a computer in advance. You will be able to print all photos or one photo, or set the DPOF settings back. You will set the number of prints for each photo with the or the button. You will switch the date stamp on or off with the button. You will be able to establish up to 99 copies in the case of DPOF. The DPOF setting will deactivate the photo automatically if you have set 0 copies.</td>
</tr>
<tr>
<td>Setting</td>
<td>Explanation</td>
</tr>
<tr>
<td>------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Radial soft-focus lens</td>
<td>The radial soft-focus lens is an effect that traces out the centre of the photo indistinctly. You will select the soft-focus stage with the  button or the  button. Press <strong>SET</strong> to save the photo.</td>
</tr>
</tbody>
</table>
Show a slide show
You can have the photos run as a slide show.

- Select the ‘Slide show’ entry in the Replay menu. The Slide show menu will open.

The following settings are available:
Select the interval at which the photos should be faded in (1, 3, 5 or 10 seconds).
You will be able to select various effects for the transitions.
Select whether the photo sequence should be continuously repeated or should end after the last photo.

- Select the START entry and press the SET button, to start the slide show, when all settings have been made.
- You will be able to pause the replay and continue it again with SET during the replay.
Protect / unlock or delete an individual file

- Select ‘Delete’ or ‘Protect’ singly in the sub-menu; the photos will be shown singly on the display.
- Select a photo with the or the button.
- Select ‘Protect’ / ‘Unlock’ or ‘Delete’, as soon as the required file is shown on the screen.
- You will protect / unlock or delete the file and return to the Replay mode by pressing the SET button.

Protect / unlock or delete several files (multi)

- Select the ‘Multi’ [several] sub-point in the ‘Delete’ or ‘Protect’ sub-menu; the photos will be shown in miniature view on the display.
- Select a photo with the or the button.
- Press the SET button, as soon as the required file is displayed. You will mark the file or lift the marking through this.
- Repeat the previous step until all the photos that you wish to protect or delete have been marked.
- Press the SET button. A confirmation selection will appear.
- Select ‘Yes’ and press the SET button, to protect or delete the files. The camera will return to the Replay mode.
Protect / unlock or delete all files

- Select ‘Protect all?’/ ‘Unlock all’ or ‘Delete all’ in the ‘Delete’ or ‘Protect’ sub-menu. A confirmation message will appear.
- Select ‘Yes’. You will protect, unlock or delete all files by pressing the SET button.

You will only be able to delete the files present on the memory card, if a card is inserted. You will not be able to delete the files present on the memory card if the card is locked. A deleted file cannot be recreated. Proceed carefully when deleting files for this reason.

Correcting red-eye

This function serves to reduce the red-eye effect on photos. It is only available in the case of photos. The red-eye correction can be used several times on one photo; however, the picture quality may also deteriorate in stages through this.

You will activate the red-eye correction in this way:

- Select the photo in the Replay mode.
- Open the ‘Red-eye correction’ sub-menu in the Replay menu. The image preview and the Red-eye menu will appear on the display.
- Select the Start entry and press the SET button to start the correction.
- A selection menu will appear after the function has ended.
Overwrite: The new file will be saved by overwriting the old one.
Save under: The new file will be saved as a new file.
Terminate: The function will be terminated.

- Press the SET button to save or terminate the changes.

Recording a speech note

- Select the required photo in the Replay menu.
  The Speech Note symbol will appear if the photo already contains a speech note.
- Open the ‘Speech note’ sub-menu in the Replay menu.
The image preview and a selection menu will appear on the display.
- Select Start and press the SET button to begin the recording. The microphone is located below the lens.
- The recording will be terminated automatically after 30 seconds.
  Select Stop and press the SET button again, if you want to end the recording before this.

You will only be able to add speech notes to photos, not to video clips. You will not be able to add speech notes to protected photos. You will only be able to delete a speech note together with the associated photo, not separately.
Colour mode
The following effects are available:

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Setting</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard</td>
<td>No photo effect will be added.</td>
<td></td>
</tr>
<tr>
<td>Sepia</td>
<td>The photo will be presented in nostalgic shades of brown.</td>
<td></td>
</tr>
<tr>
<td>Black/white</td>
<td>The photo will be presented in black and white.</td>
<td></td>
</tr>
<tr>
<td>Negative</td>
<td>The photo will be presented in reverse tone values.</td>
<td></td>
</tr>
<tr>
<td>Mosaic</td>
<td>The photo will be presented as a mosaic.</td>
<td></td>
</tr>
<tr>
<td>Red</td>
<td>The photo will receive a red tone.</td>
<td></td>
</tr>
<tr>
<td>Green</td>
<td>The photo will receive a green tone.</td>
<td></td>
</tr>
<tr>
<td>Blue</td>
<td>The photo will receive a blue tone.</td>
<td></td>
</tr>
</tbody>
</table>

- Select the required photo in the Replay mode.
- Open the ‘Photo processing’ sub-menu in the Replay menu; the menu will open.
- Select the required effect with the ⬅️ or the ⬇️ button.
The respective effect will be used on the photo preview and displayed accordingly.

› Press the **SET** button to store the new file.

**Adjusting a photo**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Enlarged photo</td>
</tr>
<tr>
<td>2</td>
<td>4-way display</td>
</tr>
<tr>
<td>3</td>
<td>Adjusted size</td>
</tr>
<tr>
<td>4</td>
<td>The approximate position of the area to be adjusted</td>
</tr>
<tr>
<td>5</td>
<td>Photo area</td>
</tr>
</tbody>
</table>

› Select the required photo in the Replay mode.
› Open the ‘Adjust’ sub-menu in the Replay menu. The processing window will appear on the display.
› Press the Zoom button in the **↑** direction to enlarge the photo. You will be able to recognize the position of the image section in the grey rectangle on the left.
› You will be able to use the **↑** , the **Disp** , the **↓** or the **→** button to change the image section during the enlargement.
› Press the Zoom button in the **↓** direction to enlarge the photo or in the **→** direction to make the photo smaller.

A menu selection will appear after the function has terminated.
Select between:
Overwrite: The new file will be saved by overwriting the old file.
Save under: The new file will be saved under a different name, without replacing the old file.
Terminate: The function will be terminated.

- Press the SET button to save / terminate the changes.

Changing the size

- Select the required photo in the Replay mode.
- Open the ‘Change size’ sub-menu in the Replay menu. The selection menu will appear on the display.
- Select one of the following resolutions and press the SET button: 8 M, 5 M, 3 M or VGA.

*The available resolutions can vary according to the original size of the photo. Settings that are unavailable will be presented in grey.*

A selection menu will appear after the function has ended.
Select between:
Overwrite: The new file will be stored by overwriting the old file.
Save under: The new file will be saved under a different name, without replacing the old file.
Terminate: The function will be terminated.

- Press the SET button to save / terminate the changes.
Connection to a TV or PC

Displaying recordings on a television device
You can replay the recordings of the camera on a television device.

» Switch the camera and the television device off.
» Connect the TV cable supplied with the camera to the USB connection of the camera and the video input (yellow) and audio input (white) of the television device.
» Switch the camera and the television device on.
» Switch the camera to the Replay mode and start the required replay.
» Switch on the video input on the television device (usually with the AV button), if the television device does not discern the camera image automatically.
» You may have to choose between PAL and NTSC in the ‘TV output’ sub-menu in the ‘Settings’ camera menu.
Printing photos on a photoprinter
You will be able to print your photos directly through a PictBridge-compatible photoprinter by means of PictBridge.

- Connect the printer and the camera with the USB cable supplied with the camera.
- Switch the camera and the photoprinter on.

The camera will discern that a USB device has been connected.

- Change to the Printer mode by selecting the ‘Printer’ option and confirm with SET.
- Select the required photo and the require number of copies with the up or the down direction button.

You will have the following possibilities:
Single – Prints one photo
All – Prints all photos
Set back – Sets the setting back.
Transferring data to a Computer
You will be able to transfer the recordings to a computer.
Supported operating systems:
• Windows XP
• Windows Vista
• Windows 7

Using the USB cable
› Switch the camera off.
› Connect the USB cable supplied with the camera to the USB connection of the camera and a USB connection on the computer, when the computer is switched on.
› Switch the camera on.
› Select ‘Computer’ and press the SET button to confirm the selection.
‘Connect’ will appear in the camera display.
The camera will be recognized by the computer as a mass storage device (replaceable medium).
You will be able to access the content of the camera memory immediately under Windows XP, Windows Vista and Windows 7.
Open Windows Explorer or double-click on Workplace (under Vista: Computer under Vista) under other Windows versions.
Double-click on the Media symbol for the camera.

Navigate to the ‘DCIM’ directory and to the directory contained in it, if necessary, to display the files (*.jpg = photos; *.avi = sound recordings; *.wav = video recordings). Compare also the directory structure in the memory.

Now, pull the required file, with the left mouse button pressed down, to the directory on the PC intended for it, to the ‘My Own Files’ directory, for example. You can also highlight the files and use the ‘Copy’ and ‘Enter’ Windows commands.

The files are transferred to the computer and stored there. You can display and process the files with suitable application software.

**DCF memory standard**

The recordings on your camera will be administered (saved, named, etc.) in accordance with the DCF standard (DCF = Design Rule for Camera File System). Recordings on the memory cards of other DCF cameras can be reproduced on your camera.
**Card drive**

You will, of course, also be able to copy the recordings to the PC through a card drive, if the PC has such a drive or a card reading device has been connected and if you have saved the recordings on the memory card.

A card reader will also be recognized as a replaceable medium in the Windows Workplace (or in ‘Computer’ under Vista).
The directory structure in the memory

The camera will save the photos, videos and audio files on the internal memory or the memory card in three different directories. The following directories will be set up automatically:

**DICAM**: All the photos, videos and audio files recorded will be saved in this directory. Files that have been recorded in the Auction or Internet Quality mode are exempted from this.

**_UTUBE**: The videos recorded in the Internet Quality mode will be saved in this directory. Normal recordings will be located in the ‘100DICAM’ directory and identified automatically by ‘DSCI’ and a four-digit number.

The next ‘101DICAM’, etc. directory will be set up for additional recordings when the highest ‘DSCI9999’ number is reached.

A maximum of 999 directories can be set up. An error message will appear (“Directory cannot be set up”) if an additional recording is made. Proceed as follows in this case:

- Insert a new memory card.
- Set back the file numbering in the ‘File
numbering’ entry in the ‘Settings’ menu. The file numbering will start again at 0001 in the DSCI1000 directory. Do not attempt to change the directories and files in the directory structure of the camera (rename, etc.). You can destroy the files through this.

**Installing the software**

‘Media Impression’, a program for processing your photos, is on the CD supplied with the camera.

- Place the CD into the CD-ROM drive of your computer.
- The CD will usually be recognized and presented automatically. If not, select the CD drive in Windows Explorer > Workplace and double-click on the drive letter, to open the CD.
- You will see the contents of the CD on the starting page.
- Highlight the software and click on the INSTALL interface, to install it.
- Follow the further instructions on the screen.
## Memory capacity

<table>
<thead>
<tr>
<th>Resolution</th>
<th>64 MB</th>
<th>128 MB</th>
<th>256 MB</th>
<th>512 MB</th>
<th>1 GB</th>
<th>2 GB</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 M</td>
<td>16</td>
<td>33</td>
<td>66</td>
<td>133</td>
<td>260</td>
<td>520</td>
</tr>
<tr>
<td>3:2</td>
<td>21</td>
<td>43</td>
<td>86</td>
<td>173</td>
<td>338</td>
<td>677</td>
</tr>
<tr>
<td>8 M</td>
<td>25</td>
<td>50</td>
<td>100</td>
<td>200</td>
<td>390</td>
<td>781</td>
</tr>
<tr>
<td>5 M</td>
<td>40</td>
<td>80</td>
<td>160</td>
<td>320</td>
<td>625</td>
<td>1250</td>
</tr>
<tr>
<td>3 M</td>
<td>66</td>
<td>133</td>
<td>266</td>
<td>533</td>
<td>1041</td>
<td>2083</td>
</tr>
<tr>
<td>VGA</td>
<td>305</td>
<td>611</td>
<td>1223</td>
<td>2466</td>
<td>4778</td>
<td>9557</td>
</tr>
</tbody>
</table>

The Table gives the number of photos at a selected resolution (e.g. 5 M) that you can save on a memory card with the given size (e.g. 128 MB).

The actual number of photos that can be stored can vary by up to 30 %, according to the resolution and the number of colours.
Troubleshooting

Check the following points if the camera does not function perfectly. Please contact the MEDION Service if the problem remains.

The camera will not switch on.
- The battery has been inserted incorrectly.
- The battery is empty. Charge it.
- The battery compartment flap is not completely closed.

The camera does not take any photos.
- The flash is still charging.
- The memory is full.
- The SD card is not correctly formatted or is defective.
- The maximum file number has been exceeded. Carry out a file number reset.
- Not sufficient light. Change the camera angle, to take up more light, or use the flash.

The flash does not trigger.
- The camera has been moved during the shot.
- The flash is switched off.

The picture is blurred.
- The camera has been moved during the shot.
• The subject was outside the setting range of the camera.
• Use the Macro mode for close photos, if necessary.

The image is not shown on the display.
• An SD card that has accepted photos in a non-DCF mode on another camera has been inserted. The camera cannot display such photos.

The period of time between shots is longer when taking pictures in the dark.
• The shutter usually works slower under weak light conditions. Change the angle of the camera, or improve the light conditions.

The camera switches itself off.
• The camera will switch itself off after a pre-set time, to save the battery charge. Restart the camera.

The recording has not been saved.
• The camera has been switched off before the recording could be saved.

Recordings on other memory cards are not displayed.
• The recordings on the memory cards of other cameras will be displayed if the other camera also uses the DCF memory system.
The recordings cannot be transferred to the PC through the USB cable.
- The camera is not switched on.

When the camera is connected to the computer for the first time, no new hardware is found
- The USB connection of the computer is deactivated in the BIOS.
- Activate the port in the BIOS of the PC. Look this up in the Handbook of the PC, if necessary.
Maintenance and care

Clean the casing, the lens and the display as follows:
Clean the camera casing with a soft, dry cloth.
Do not use thinners or cleaning solutions that contain oil. This could damage the camera.
Remove the dust first with a lens brush, to clean the lens or the display. Then clean them with a soft cloth. Do not press on the display or use any hard objects to clean it.
Do not use any strong cleaning substances for the casing and the lens (contact your dealer if dirt cannot be removed).
Disposal

Packaging
Your camera is packaged to protect it from transportation damage. Packaging is raw material and can be reused or added to the recycling system.

Appliance
Do not throw the device into the normal domestic waste at the end of its useful life under any circumstances. Dispose of it through a local collection point for old devices in an environmentally-friendly way. Find out about the locations of the collection points at the local administration.

Batteries
Used batteries do not belong in domestic waste. The batteries must be handed in at a collection point for old batteries.
Technical specifications

Pixels: 12 CCD mega pixels
Aperture: $F = 2.8 \sim 6.3$
Shutter speed: $1/2000 \sim 15\,\text{s}$
Focal length: $f = 5\,\text{mm} \sim 20.2\,\text{mm}$
Optical zoom: 4 times
Digital zoom: 5 times
LCD monitor: 2.7” LC Display
File format: JPEG (EXIF 2.2), DPOF, AVI, WAV
Max. resolution: 4000 x 3000 pixels
Camera mode: 640 x480 / 1280 x 720 pixels (with a Class 6 SDHC memory card)
Video mode: Internal: 32 MB internal memory, of which approx. 11 MB can be used.

External: SD/SDHC card
Connection: 2.0 Mini-USB
Dimensions: 9.1 x 5.7 x 1.7 cm (W x H x D)

Technical and visual changes and print errors reserved!