

SnapShot Multi 8.0i HD

INSTRUCTION MANUAL

GB SURVEILLANCE CAMERA
SnapShot Multi 8.0i HD



Surveillance Camera SnapShot Multi 8.0i HD

CONGRATULATIONS on the purchase of one of our cameras. Please take your time to read these instructions carefully. It shows you menu settings and important user information. So you can use the camera efficiently and for a long period.

IMPORTANT NOTES

- Your camera is fitted with a weatherproof housing according to protection class IP54 (dust and splash waterproof). So the camera can be used outdoors. Nevertheless protect the camera from extreme weather conditions and direct sunlight. The recommended storage and operation temperature is -10 to 40° C.
- Make sure to use fresh batteries of the same type and brand only.
- Use a soft cleaning tissue to clean the camera lens. Avoid touching the lens with your fingers.
- Remove dust and spots at the camera housing with a soft and slightly damp tissue.
- Store the camera at a dry, dust free and cool place when not in use.
- Remove the batteries in case you do not use the camera for a long period of time.
- Do not drop the camera onto a hard surface.
- Do not open the camera housing (except protective cover and battery cover). The warranty will become void. In case of a defect, send the camera to an authorized service agent.
- Up-to date manuals can be found at www.download.doerrfoto.info/manuals/

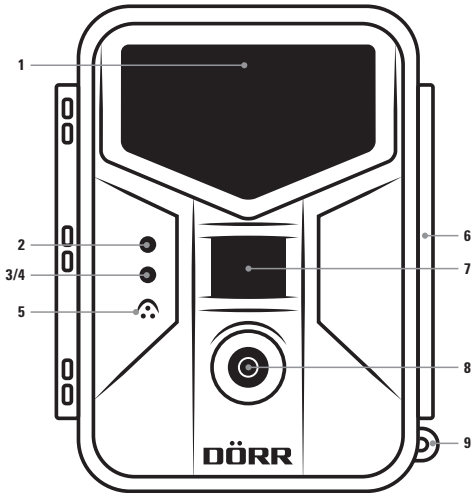
NOTE The camera is high precision electrical device. Do not attempt to repair it by yourself. When opening the housing, there is a risk of high voltage and other kind of risks.

NOTE Make sure to respect the regulations of privacy protection!

CONTENT

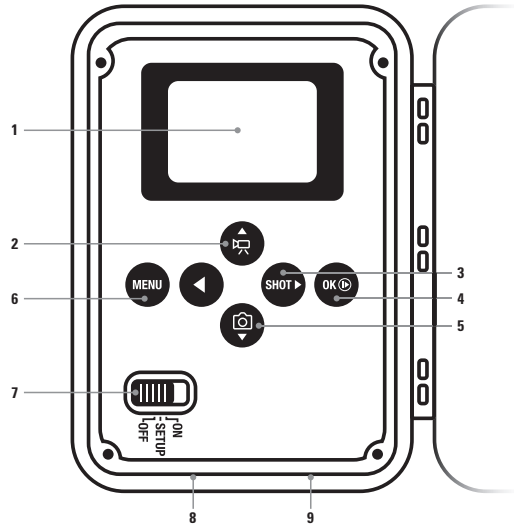
Camera Description & Overview	4
Front View	4
Control Panel Description	4
SD/SDHC Card – Installation & Information	4
SD Card Capacity Overview	5
Information on Battery Loading & Exchange	5
Camera Programming	5
Important Hints for Menu Control – Menu Navigation	5
Display Overview / Starting Menu	6
Overview Programming Options	6
Setting of Photo – Video Mode	6
Triggering Settings	7
Time Frame Settings	8
System Settings	8
Test Photo & Video – Test Recording for Orientation of the Camera	9
Viewing/Deleting Images & Video Films	9
Camera Function with WiFi SD Card	9
Camera Remote Control	10
Specifications	11
Optional Accessories	12
Important Hints for Camera Installation	13
Camera Positioning	13
Directing the Camera	13
Important Notes and Hint	14
Motion Sensor	14
Ambient Light	14
Weather Protection	14
FAQ	14
European Conformity Declaration Notes	16

CAMERA DESCRIPTION & OVERVIEW



Front View

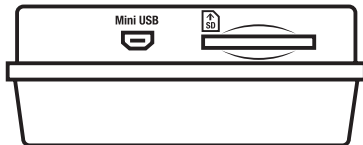
- 1 Black Vision IR Flash
- 2 WiFi LED
- 3 Motion Detector (in Set-Up Mode)
- 4 Battery Indicator (when exhausted)
- 5 Microphone
- 6 Housing Closure
- 7 PIR Sensor
- 8 Camera Lens
- 9 Lead through for U-lock



Description of Control Panel

- 1 LCD Monitor
- 2 Menu Button: Change to Video Mode
- 3 Menu Button: Test Photo/Video
- 4 Confirm / Replay
- 5 Menu Button: Change to Photo Mode
- 6 Menu Button: Menu
- 7 Scroll Bar: OFF/SETUP/ON
- 8 USB Socket
- 9 SD Card Slot

SD/SDHC CARD INSTALLATION & INFORMATION



Open the camera's protective housing. The SD card slot is located at the bottom of the housing. Insert the SD memory card as shown on the sketch at the housing. Make sure to format the memory card and that the card is not write-protected. Or else the display will indicate a missing or false SD memory card. The camera supports SD/SDHC cards with a capacity of 2 GB to 32 GB. For best results we recommend the use LEXAR brand cards with a speed of minimum "Class 10".

SD CARD CAPACITY OVERVIEW

Chart shows number of pictures or video sequences depending on resolution and SD card capacity.

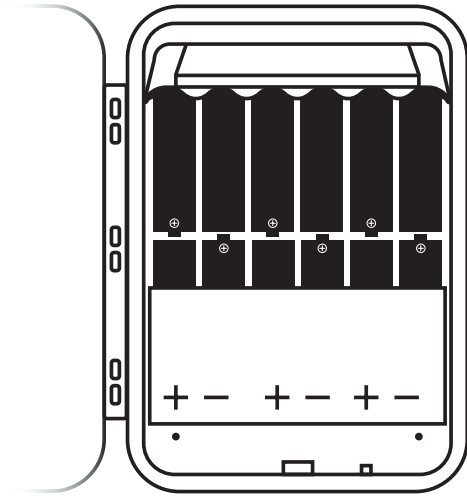
Photo Mode

	8 MP	3 MP	1,3 MP
2 GB SDHC	2330	3495	6990
4 GB SDHC	4660	6990	13980
8 GB SDHC	9320	13980	27960
16 GB SDHC	18640	27960	55920
32 GB SDHC	37280	55920	111840

Video Mode

	HD Video 10 s/30 fps	HD Video 20 s/30 fps	720p Video 10 s/60 fps	720p Video 20 s/60 fps
2 GB SDHC	102	53	211	113
4 GB SDHC	204	106	422	226
8 GB SDHC	408	212	844	452
16 GB SDHC	816	424	1688	904
32 GB SDHC	1632	848	3376	1808

INFORMATION ON LOADING AND EXCHANGE OF BATTERIES



Select one of the two Energy Sources

Insert 4, 8 or 12 AA batteries into the battery compartment. 4 batteries are sufficient for camera programming. For the actual use of the camera we recommend to use 12 batteries. Make sure to respect the correct polarity and to use batteries of the same brand and quality. Otherwise camera functions may be restricted. For best results we recommend the use of PANASONIC quality batteries.

Alternatively connect the camera to a DC 6 V battery. The battery socket DC 5-12 V is located at the bottom of the camera.

5V(2A), 6V(2A), 9V(1,5A), 12V(1A)

AA batteries, 6 V battery and connecting cable are optional accessories.

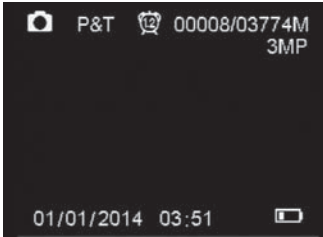
CAMERA PROGRAMMING

Important Hints for Menu Control - Menu Navigation

- If you do not navigate or make settings, the screen will switch off after 3 minutes. To continue programming, slide the scroll bar to position "OFF" and again to position „SETUP".
- All changes must be confirmed by pressing the menu control button "OK", otherwise, they will not become active.

- Using these control buttons     you can navigate through the menu.

- If you wish to quit a certain menu, press the control button  to reach one level higher.



Display Overview/Starting Menu

Switch the scroll bar to position "SETUP" to reach the camera's starting menu.

The starting menu shows the following information as symbols:

- Photo or video mode
- Trigger mode
- Time frame active
- Volume of recorded files / storage capacity
- Recording quality
- Date and time
- Battery Status



Overview Programming Options

Press the control button "MENU" while in SETUP mode. The symbols shown at the top bar describe the following programming options:

- Recording mode photo/video and all fine adjustments
- Trigger mode and all fine adjustments
- Setting and editing a time frame
- System settings



Photo – Video Mode Settings

Scroll to photo/video mode in the main menu and confirm with "OK".

The camera is pre-set to take a picture of 3 MP with each release. If you wish to change this setting, proceed as follows:



Recording Mode: Press the OK button. Now you can define if you wish to take photos, videos or a combination of both.

If you select the combination of photo and video, the camera will automatically take a photo with 3 MP and a video of 10 s length with 720 p resolution.

Confirm your choice by pressing the OK button.

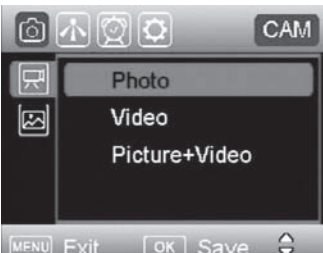
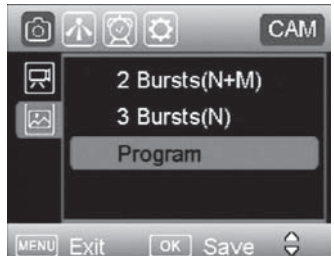
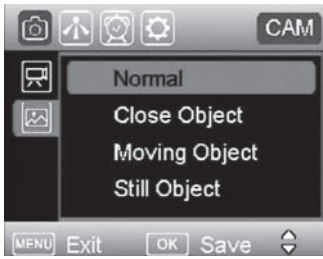


Photo Mode: Having selected photo mode, the menu topic "recording scene" offers the following settings:



Normal	Colour picture 8 MP at daylight, black & white picture 3 MP at night
Close Object	For distance to object of 3 to 5 meters, the flash range will be adapted accordingly. 8 or 3 MP
Moving Object	A shorter shutter release time reduces blur caused by movements. 8 or 3 MP
Still Object	A higher light efficiency is granted by a longer shutter release time. 8 or 3 MP
2 Bursts	2 images per release, image no.1 in "normal" mode, image no. 2 in "movement" mode.
3 Bursts	3 images per release in "normal mode"
Program	For custom setting: 1,3 MP/3 MP/8 MP – flash power – continuous shots available.

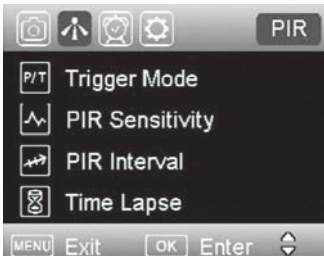


Video Mode: Having selected video mode, press "OK" to confirm. Then press "MENU" to return to the main menu „recording mode". The following setting options are now available:

- Video Format: 1080 p/720 p/WVGA
- Video Length: 5 to 60 seconds selectable by seconds

If you operate your camera with batteries, we recommend to maximize the video sequences to 20 seconds.

Trigger Mode Settings



PIR Sensitivity: The camera will react on movements and temperature changes. Select this mode, press „MENU" to get the menu of trigger mode.

Now set the following functions:

- Low
- Auto
- High

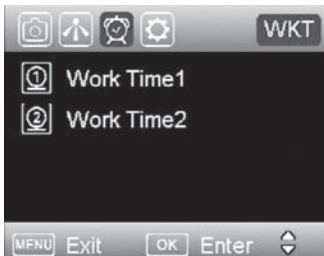
PIR Interval: The PIR sensor takes a break in order to avoid unnecessary recordings.

- 5 - 60 seconds in 5 second steps
- 1 - 5 minutes in steps of 1 minute
- 5 - 60 minutes in steps of 5 minutes

Interval: Camera release at defined intervals.

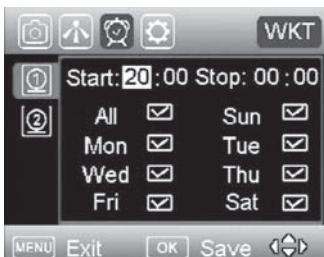
- 5 - 60 seconds in 5 second steps
- 1 - 5 minutes in steps of 1 minute
- 5 - 60 minutes in steps of 5 minutes
- 1 - 8 hours in steps of 1 hour
- 24 hours

Time Frame Setting



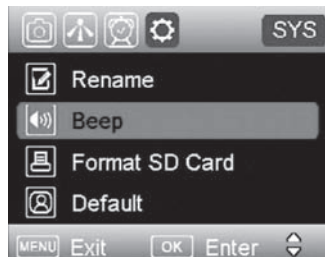
Work Time 1: Select "ON" or "OFF". Select a work time for the activity of the camera. Now select the weekdays.

Work Time 2: Repeat the steps as in work time 1, if desired.



If you wish the camera to be active permanently, select the time frame menu and switch it "OFF".

System Settings



The following settings can be done:

(Information about navigation please see chapter camera programming)

- **Date and Time**
- **Remote Control Mode:**
 - Off:** Camera will not react to remote control
 - PIR Trigger:** Remote control mode will be activated when a movement is recognized by the camera.
 - On:** Camera will always react on the remote control. This option consumes more energy, we therefore recommend its use only in connection with an external battery power supply.
- **Language**
- **Password:**
 - Select "On" and enter a 4 digit code to protect the camera from unauthorized use. Be sure to note the password and store the code at a safe place. It will not be possible to reset the code on your own.
 - Select "Off" if you do not wish to use a password. The pre-set code is 0000.
- **Rename:** Enter a name that will be shown on each picture stamp.
- **Beep:** Activate or deactivate the beep tone for the control key use.
- **SD Card Formatting:** Deletes all data of your memory card. Be sure that you won't need the data any more.
- **Factory Setting (Default):** With a reset to factory settings, all your own settings will be lost.
 - This makes sense, when you change the place of use of your camera or when you plan to sell it.
- **Software Version:** Indicates the software version in case of contact to our service agents.

Test Photo & Video – Test Recording for Orientation of the Camera

Slide the scroll bar to "SETUP" position. Use the control buttons to program photo or video, as desired. Now press the menu control button "SHOT" to create a recording. Press the "OK" control button to view the recorded image of video. Using the "Up" and "Down" buttons you can view all recording. Pressing the "Menu" button, you can now delete all or selected recordings.

Viewing/Deleting Images & Video Films

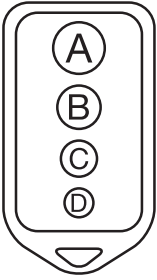
Slide the scroll bar to "SETUP" position and confirm by press the "OK" button. Using the "Up" and "Down" buttons you can view all recording. Pressing the "Menu" button, you can now delete all or selected recordings.

CAMERA FUNCTION WITH WIFI SD CARD

WiFi SD cards can store data. With their incorporated WLAN chip, they offer the possibility of wireless data transmission to a receiver unit, which can be a PC, tablet PC or Smartphone. We recommend to use the user friendly and reliable TOSHIBA FlashAir SDHC 16 GB card. Please ask your specializing dealer who sold the camera to you.

WiFi SD cards require energy for the data transmission. Traditional cameras will switch to stand-by mode to save energy. So the data transmission on basis of a WiFi card won't function with most conventional surveillance cameras. The DÖRR SnapShot Multi camera boasts of a receiver module which will provide energy to the WiFi card and a remote control for activation.

CAMERA REMOTE CONTROL



Remote Control Function of Buttons

- A Activate camera
- B Deactivate camera
- C Activate WiFi
- D Deactivate WiFi

In case you do not deactivate the WiFi function, it will automatically switch off after 15 minutes in order to save energy.

The remote control ranges approx. 30 m on open terrain. Also read Mode Remote Control in chapter System Settings.

SPECIFICATIONS

Model Name	DÖRR Snapshot Multi 8.0i HD Surveillance Camera
LCD	Colour display 5 cm / 2"
Lens	F2.2 / Angle of view 58°
Resolution Photo	Photo: High performance sensor 3 MP (interpolated up to 8 MP), image format JPEG
Resolution Video	HD 1080 p / 30 fps, 720 p / 60 fps, WVGA / 60fps / with Audio
Video Format	MOV / Codec H264
Remote Control	Wireless remote control to activate the camera and to view or download images from an optional WiFi SD card.
Picture Transmission	An optional WiFi SD card allows wireless viewing or download of pictures within a distance of approx. 30 m using a Smartphone or Tablet PC with APP. See also chapter "Remote Release Camera Control"
Flash	60 invisible BLACK VISION LEDs, 940 nm
Flash Range	adjustable: 3/6 /12 meters
Motion Detector Range	up to 20 m, depending on weather conditions
Trigger Time	0,6 s
Operation	With 4, 8 or 12 AA batteries and SD Card with max. 32GB capacity (both not included); DC 5-12V socket for optional external battery.
Functions	Combined photo and video function. Continuous shooting mode Display of date, time, temperature (°C) battery status and camera name on every image. Camera name can be given at choice. 2 time frames per weekday programmable Auto overwrite function for SD card. The eldest data will be replaced in case the SD card is full.
Extras	Compatible with "DÖRR Holding Fixture for Snapshot Multi". Weatherproof housing IP54, menu guided in German and English language.
Measurements	14,6 x 11,5 x 6,7 cm
Net weight	400 g
Weight with Batteries	675 g
Operation Conditions	Operating temperature -20 to +60°C / storage temperature -30 to +70°C; humidity 5% to 90%
Power Consumption	< 0,3 mA $\hat{=}$ < 7 mAh/day
Supplied with	Remote control, fixing belt, multi-language manual

OPTIONAL ACCESSORIES

Item	Item No
Holding Fixture for Snap Shot Multi camouflage	204490
Holding Fixture for Snap Shot Multi white	204491
WiFi SD Card Toshiba FlashAir 16GB	991055
Metal Housing	204466
Tree Screw	204465
Ball Head for Tree Screw	386015
Python Lock black	204451
Python Lock camouflage	204450
Multi Power PBQ Battery 6V 4,5 Ah	204348
Battery Cable	204363
AC Adapter	204407

Please contact your local specializing dealer for these accessories.

IMPORTANT HINTS FOR CAMERA INSTALLATION

Positioning the Camera

For the fastest and most comfortable way to mount the camera we recommend the use of the optionally available DÖRR holding fixture. Read chapter "Optional Accessories".

Mount the camera on a tree or pole or any other suitable object using the supplied belt. Do not fix the belt finally at this stage. Make sure that the camera won't move with the wind. The optimum distance to the object is between 3 -15 meters. Theoretically, larger distances are also possible, however with less reliability and a larger picture frame. We recommend to take a few test shots and to finally fix the camera afterwards.

Orientation of the Camera

The camera needs to be well directed for proper pictures

1. Position the camera at a height of 0,75 m to 1 m slightly inclined forwards.
2. The camera lens should now point to where the photographic object is expected to show-up.
You can position the camera at a higher level, however the coverage angle will be reduced by the fact that the camera needs to be more inclined downwards.
3. Set the On/Off switch to position "SETUP", then close the camera.
4. If someone moves now in front of the camera, the red test light glows up, so the motion sensor is active. This is how you can try out the range of the motion detector, to find out if your object will be recognized.
5. We recommend to take a test recording. Therefore switch the camera off again. Then set the ON/OFF switch to position "ON" and close the camera. After 30s the camera will be ready to shot. Move now with normal speed through the range of the motion sensor. The camera will release and you can view the image taken on the monitor.
6. We recommend to direct the camera in a way that the object will be in the centre of the image. You may have to re-adjust the camera and take another test shot. If you do not own a DÖRR holding fixture for the camera, use a small wooden wedge to stabilize the camera's inclined position. Once the position is correct, the fixing belt can be tightened to hold the camera firmly.
The camera is now ready for operation.
7. Switch the scroll bar to position "ON". Your camera is now ready for operation according to your settings.

IMPORTANT HINTS AND NOTES

Motion Sensor

The motion sensor will react under certain circumstances and within a certain range. In general the range of recognition is slightly larger than the range covered by the image.

The recognition of the objects depends on temperature, vegetal cover, reflecting surfaces and more circumstances. Under optimum conditions, a perfectly oriented camera and high sensitivity level adjustment, the recognition range can be up to 20m. Usually, you may expect a range of 10 m. It can take a few attempts to find the proper position for your camera. When you test the motion detector reaction, be aware of the facts that animals are usually remarkably smaller than human beings. So they may not be recognized.

Light Conditions

Avoid direct back light, as you do in normal photography. When you choose the camera position, make sure that there will be no direct back light and also that the camera will not be placed in the shadow.

Weather Protection

Although the camera is weatherproof and well-suited for outdoor use, we recommend to mount it at a secured place, so not on the weather side or in the direct sunshine. After long periods of humidity, caused by rain or fog, the camera should be stored in a dry area for a few days. Dust and splash waterproof according to protection class IP54.

EUROPEAN CONFORMITY DECLARATION NOTES



ATTENTION

Batteries are marked with the symbol of a crossed out bin. This symbol indicates that empty batteries or rechargeable batteries which can no longer be charged, should not be disposed of with household waste. Waste batteries may contain harmful substances that can cause damage to health and to the environment. Please use the return and collection systems available in your country for the disposal of the waste batteries.



WEEE INFORMATION

The Waste Electrical and Electronic Equipment Directive (WEEE Directive) is the European community directive on waste electrical and electronic equipment, which became European law in February 2003. The main purpose of this directive is to prevent electronic waste. Recycling and other forms of waste recovery should be encouraged to reduce waste. The below symbol (trash can) on the product and on the packing means that used electrical and electronic products should not be disposed of with general household waste. It is your responsibility to dispose of all your electronic or electrical waste at designated collection points. Disposing of this product correctly will help to save valuable resources and it is a significant contribution to protect our environment as well as human health. For more information about the correct disposal of electrical and electronic equipment, recycling and collection points please contact your local authorities, waste management companies, your retailer or the manufacturer of this device.



ROHS CONFORMITY

This product is compliant with the European directive 2011/65/EU of June 08, 2011 for the restriction of use of certain hazardous substances in electrical and electronic equipment (RoHS) and its amendments.

CE MARKING

The CE marking complies with the European directives.

You can download the relative EU declaration of conformity with following link:

<http://www.doerrfoto.de/info/EG-Konformitätserklärungen>