

Action Cam FullHD 360° TX-96

The manufacturer Technaxx Deutschland GmbH & Co.KG hereby declares that this device, to which this user manual belongs, complies with the essential requirements of the standards referred to the Directive **RED 2014/53/EU**. The Declaration of Conformity you find here: **www.technaxx.de/** (in bar at the bottom "Konformitätserklärung"). Before using the device the first time, read the user manual carefully.

Service phone No. for technical support: 01805 012643 (14 cent/minute from German fixed-line and 42 cent/minute from mobile networks).
Free Email: **support@technaxx.de**

Keep this user manual for future reference or product sharing carefully. Do the same with the original accessories for this product. In case of warranty, please contact the dealer or the store where you bought this product. **Warranty 2 years**

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1. Features

- 360° Action Cam for VR & FullHD panorama recordings
- Well suited for sports & outdoor activities
- Panorama objective with 360° horizontal & 180° vertical viewing angle
- Live view wireless via WiFi connection to your Smartphone (~10m)
- Free iOS and Android APP
- MicroSD** card up to 64GB (**not included)
- Loop Function, Time Lapse, Photo Burst
- G-Sensor for automatic recording after shocks
- Waterproof case* protection class IP68 up to 30m depth (*included)
- Versatile brackets for various installation & mounting options



2. Device overview and button function

Top	Bottom	Left side	Right side

Top

Top

1. Power (On/Off)	<ul style="list-style-type: none">● Long press (2 seconds) the power button to power “ON”, press the power button long again to power “OFF” the camera.● Under working mode, a short press will close or wake up the screen.	
2. Indicator	Status indicator (Blue)	<ul style="list-style-type: none">1. Recording, blue light blinking2. Device On, blue light on
	Charging indicator (Red)	<ul style="list-style-type: none">1. Charging, red light on2. Red light off when charging finished
3. OK button	<ul style="list-style-type: none">● Short press to start or stop recording under recording mode.● Short press to setup function, press again to confirm.● Short press to take photo under photo taking mode.● Short press to play or pause video under playback mode.	

Bottom

4. Battery compartment	Insert the rechargeable battery to the camera.
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Left side

5. Up (WiFi)	<ul style="list-style-type: none">● Short press to the previous page under Menu and playback mode● Long press to open or close WiFi function
6. Menu	<ul style="list-style-type: none">● Short press to Menu setup and short press it under recording menu/taking photo menu/play back menu to System setup● Long press MODE button to switch recording, photo taking and playback.
7. Down (Mic On/Off)	<ul style="list-style-type: none">● Short press to the next page under Menu and playback mode● Short press to close or open voice recording under recording mode

Right side

8. Micro USB	<ul style="list-style-type: none">● Charging by connected to charger with USB cable● Connecting to PC ("U disk mode" to manage files, "charging mode" to charge)
9. MicroSD card Slot	Insert a MicroSD Card (max.64GB) to save recordings and snapshots.
10. Micro HDMI	Connecting to HDTV with HDMI cable (optional), output video and audio to TV.

NOTE: Do not expose the Action Cam to rain without a waterproof housing!

3. Getting started

Charging the battery: Connect the camera with the included MicroUSB cable to the computer or to an USB adapter* (DC5V/1A *not included) or a mobile device like a power bank. The charging indicator LED lights up RED (when camera OFF). This will indicate that the camera is charging and will shut off when the battery is fully charged. The battery can be fully charged within 3-4 hours (used Power adapter DC 5V/1A).

Insert/Remove the battery: Place your thumb on little extension on the bottom and pull it back. Allow the door to pop out. You are now able to remove the battery from the camera.

Note: It is also possible to record while charging cable is connected (with or without battery). Then the Blue & Red LED will light up. Make sure the power supply delivers 1A or more.

Insert memory card: Insert the MicroSD card correctly into the card holder as indicated near the card holder.

Remove memory card: Remove the MicroSD card by pressing gently on the end of the memory card, the card will be ejected.

Note: ● The camera is not equipped with built-in memory. Please insert a pre-formatted memory card before use or format it over the settings of the camera. ● Format MicroSD cards with less than 32GB to FAT32 and format 64GB with exFAT. Normally MicroSD cards are formatted when you buy them.

Start-up and shutdown

Start-up: Press & Hold the “Power” (1) button for 2 seconds, the camera will show a start-up screen and will power on.

Shut down: Press & Hold the “Power” (1) button for 2 seconds, the camera will power off.

Auto shut down device (power off): By default there is no shut down time set. Activate Power Off under general settings the camera automatically shuts down after the selected time. The timer starts after the last time a button was used, to save power.

Shut down with low power: When the battery power is low, the LCD will show Power Off and shuts down the camera automatically. Please charge the battery.

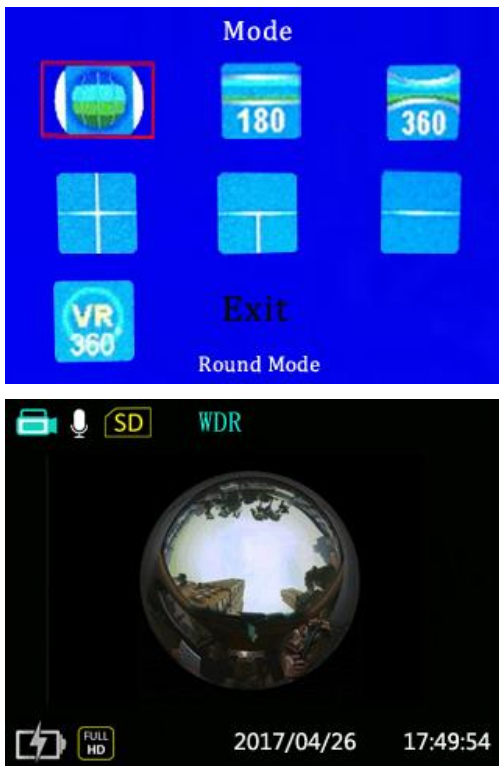
Note: The system will keep the last data after the device automatically shut down; video will be saved automatically in the case of low-power.

4. Function Menu: Navigate through the camera menu.

Long press the “Menu” button (6) to change between Video, Snapshot or Playback mode.		
↓	↓	↓
Record video	Record Snapshot	Playback
↓	↓	↓
Short press “Menu” button (6)	Short press “Menu” button (6)	Short press “Menu” button (6)
↓	↓	↓
Video setting	Snapshot setting	Playback setting
Short press “Menu” button (6)	Short press “Menu” button (6)	Short press “Menu” button (6)
↓	↓	↓
General Settings	General Settings	General Settings

5. Recording Modes

1. Round mode (Fisheye)



Round mode captures the original image output with no dewarping for the shown/recorded image. Video mode resolution: 1344x1344 30fps

Information:

No dewarping (distorted) means to show the pure, original image (fish-eye) that the lens shows/records.

Dewarping (straightened) means that the selected image area for the viewer is converted into the original dimensions and the selected viewing angle - and thus equalized.

2. Panorama 180° mode

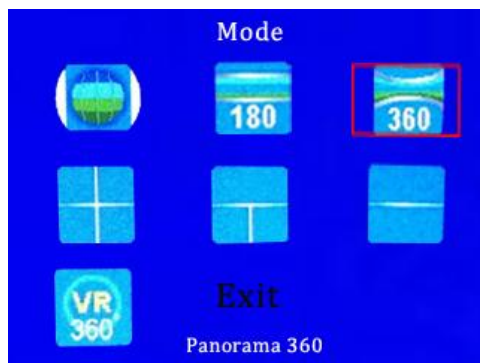


Panorama 180° mode captures a straightened image of the shown/ recorded image. The dewarped area is shown in the picture below in white.

Video mode resolution: 1920x1080 30fps



3. Panorama 360° mode

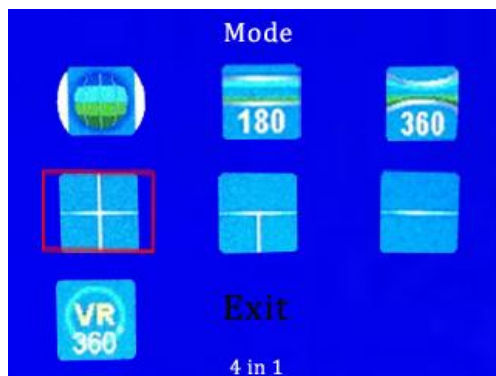


Panorama 360° mode captures raw data image of what is 360° around the camera. Like you see in the picture below. The black dot is where the camera is standing.

Video mode resolution: 2048x416 30fps



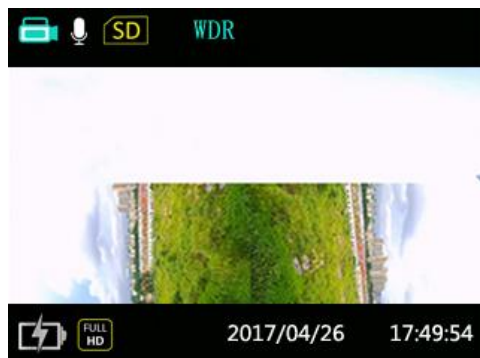
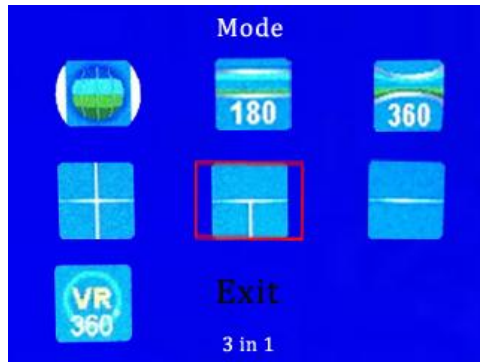
4. 4 in 1 Mode



4 in 1 mode captures a 360° image split into 4 windows. The top right image is right side up and the top left image is upside down. The bottom images are rotated 90°. The picture below shows the dewarped areas in white. Video mode resolution: 1280x960 30fps



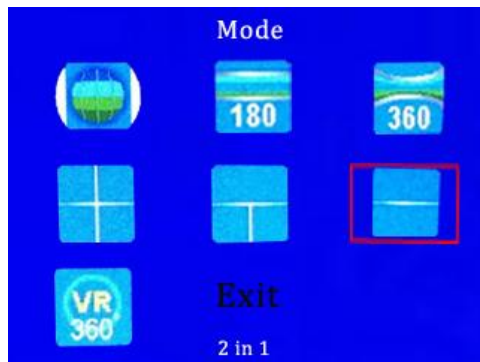
5. 3 in 1 Mode



3 in 1 mode captures a 360° image split into 3 windows. The top image is upside down, the left bottom image is rotated 90° and the right bottom image is rotated 90° too. The picture below shows the dewarped areas in white. Video mode resolution: 1280x960 30fps



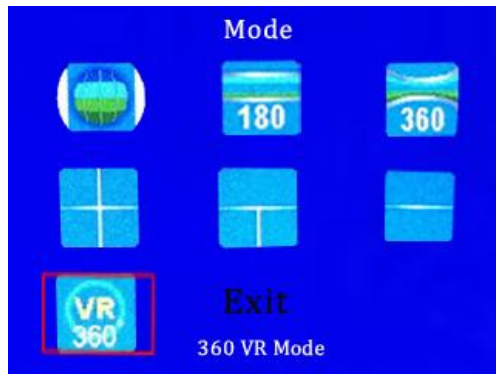
6. 2 in 1 Mode



2 in 1 mode captures a 360° image split into 2 windows. The top image is upside down and the bottom image is right side up. The picture below shows the dewarped areas in white. Video mode resolution: 1280x960 30fps



7.360 VR Mode



360° VR mode captures raw data image of what is 360° around the camera. To watch videos in 360 VR mode, swipe and rotate the video, you need to download a third party software to your PC, like GoPro VR Player” or uploaded the video file with injected meta data to YouTube.

On mobile devices, you can download third party APP like “Homido 360 VR player”, or upload to YouTube via your PC and watch in YouTube APP on your Smartphone.

To inject the raw data recorded by the camera with the metadata, please Google how to upload 360° or a 360° VR video to Youtube. Youtube has instructions prepared for that.

Video mode resolution: 1920x960 30fps

6. Video mode:

Long press the “Menu” button to enter the video mode. See chapter 4. Function Menu Introduction.

Mode: Select between one of the recording modes from chapter 5. above: Round mode (Fisheye) / Panorama 180/ Panorama 360/ 4 in 1/ 3 in 1/ 2 in 1/ 360 VR mode/ Exit

Loop recording mode: Loop recording is set to “OFF” as default. The length of Loop recording can be set for 1, 3, or 5 minutes. After these times the recording is set to be as a new file. Loop recording allows recording of independent segments of movies, according to the selected time length. The product will continually record movies of the length selected until the record button is pressed to end recording. When the memory card is full, the product will overwrite the recorded files starting from the first movie circularly.



Attention: Loop recording functionality can only be activated when a memory card is inserted.

Time Lapse: enables the recording of an interval of time and splices the frames together to present a condensed video which usually requires a long period of time. Select between OFF, 1 second, 2 seconds, 5 seconds, 10 seconds, 30 seconds, 60 seconds.



Attention: Sound cannot be recorded in this mode.

WDR (Wide Dynamic Range): is a technique for image processing in bad or extreme light or contrast ratios. The Wide Dynamic Range can be set to OFF (default)/ON

Motion detection: means that if the product detects moving objects entering into the view, it will automatically start recording. During the recording process, if there is no moving object detected for 10 continuous seconds, the recording will pause automatically. Can be set to OFF/ON. **There are 2 options:**

 Off (default)  On

→ Enter the Motion detection menu, select “On”, and return to the main screen.

→→ The display will show the  icon in the top row of the display. If the product detects moving objects, it will automatically start recording. You will see in the top row of the display a red flashing dot . The product will stop recording when there is no change in the image within 10 seconds. When the image changes again, the product will start recording automatically, and a new video file will be generated after each pause and restart.

Time stamp: If time stamp is enabled the time is shown on the recorded file.

G-Sensor: This function is mainly used in the car while driving. When an accident happens it automatically starts recording. There are 4 levels (LV1, LV2, LV3 or LV4) to select how hard the impact has to be to start the record.

LV1: High sensitivity, just slight impact, G-sensor works (Not recommended).

LV4: Low sensitivity, if there's intense collision happened, the G-sensor function works, the video will be locked.

Default setting is OFF.

Sound recording: Set the microphone ON/OFF. Can be done in video mode by short pressing the down button.

7. Snapshot mode:

Long press the “Menu” button to enter the snapshot mode. See chapter 4. Function Menu Introduction.

Mode: Select between one of the recording modes from chapter 5. Round mode (Fisheye)/ Panorama 180/ Panorama 360/ 4 in 1/ 3 in 1/ 2 in 1

Resolution: 12M (Default) / 8M / 5M / 3M

Quality: High (Default) / Middle / Normal

Brightness: -2/-1.7 / -1.3 / -1 / -0.7 / -0.3 / 0 / 0.3 / 0.7 / 1 / 1.3 / 1.7 / 2

Self Snapshot: OFF (Default) / 3 seconds / 5 seconds / 10 seconds

Photo burst: OFF (Default) / Triple Shoot / Five shoot / Ten shoot / Exit. Enable 3, 5 or 10 photos to be captured continuously before auto pause.

Time Stamp: OFF / Date & Time (Default) / Date

8. Playback mode:

Long press the “Menu” button to enter the playback mode. See chapter 4. Function Menu Introduction.

Folder select	Normal	All taken video/snapshot files are selected by the mode you have chosen: Normal, Event, Snapshot or Motion. You find either all recordings in one folder or recordings sorted by date. By pressing the “OK” (3) button and the “Up” (5) or “Down” (7) button you navigate through the folder. To change the page, use the arrows on the screen. Select them with the “OK” (3) button. Navigate through the folder until you find the desired file. To watch the file (Folder select): First press “OK” (3) button to select the file. After that press “OK” (3) button, a second time to start playing the video. To delete the file/folder (Delete file/folder): First press “OK” (3) button to select the file/folder. You will see a window which asks if you really want to delete the file/folder. If you want to delete press “OK” (3) button, a second time. If you do not want to delete the selected file/folder change with the “Up” (5) or “Down” (7) button to “Cancel” and press “OK” (3) button.
	Event	
Delete File	Snapshot	
	Motion	

9. General setting:

From every menu (Video, Snapshot or Playback) you will get to General setting by just pressing the “Menu” button shortly. See chapter 4. Function Menu Introduction.

Date & Time: Set the date and time by using the “OK” (3) button and the “Up” (5) or “Down” (7). **Note:** If you put out the battery or the battery is empty before charging you have to set the date and Time again. Year / Month / Day / Hour / Minute / Date Format

Power save: Set Power save mode, the device will turn off after the set amount of time. OFF / 1 minute / 3 minutes / 5 minutes.

Key sounds: Set the key sound of the device OFF or ON.

Screen setting: Change the setting of the Screen. → Enable Screen Save and choose the time 1 minute, 3 minutes, 5 minutes. The device will turn the screen off to save energy. → Enable Rotate Screen to rotated the screen by 180°.

Delay Power Off: OFF (Default) / 30 seconds / 1 minute

Picture frequency: Set the right frequency for your location. → Europe (PAL) 50Hz / USA (NTSC) 60Hz.

Format: By pressing YES you are going to format the inserted MicroSD card and delete all recordings/snapshots stored on the card.

Language: Set the language: Czech / English / German / French / Italian / Polish / Spanish (CZ / EN / DE / FR / IT / PL / ES)

System information: Default Setting / Firmware version and MicroSD Card capacity

10. WiFi Connection

This device can connect to Android and iOS Smartphone's by WiFi over the "OTCam360" APP, for connection operate as below:

→ Install "OTCam360" APP from Google Play or Apple APP store.

APP functions: ● Operate nearly all options of the Action Cam by remote-control via WiFi connection. ● Review the real-time images, video & snapshot taking and file download management. ● Max. distance between cam and Smartphone about 10m.

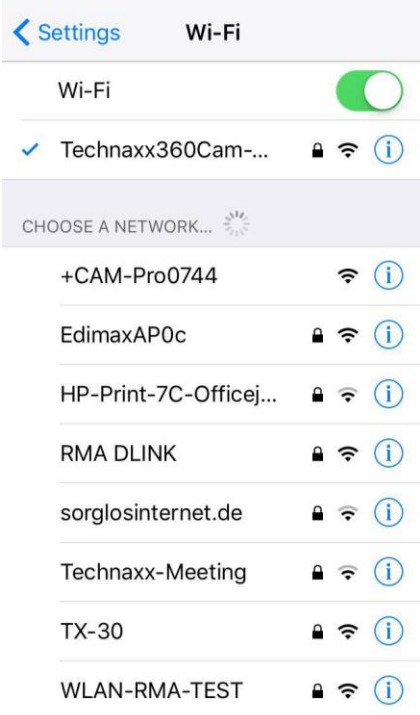
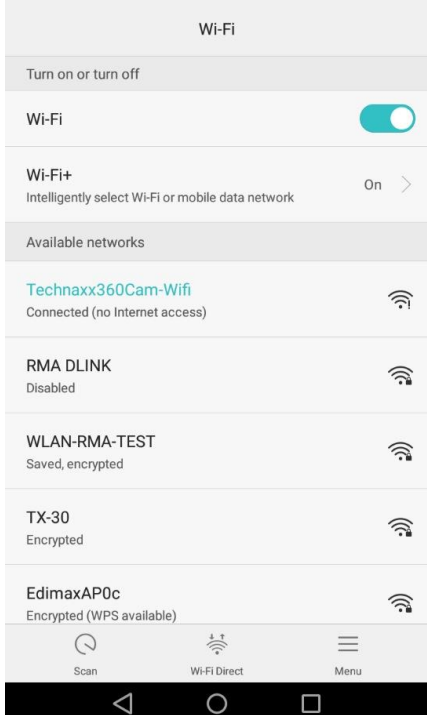


→→ Power on the Action Cam. Press the "Up" (5) button to enable WiFi function, LCD will display WiFi hotspot and password.




SSID: **Technaxx360Cam-Wifi**; Password: 87654321

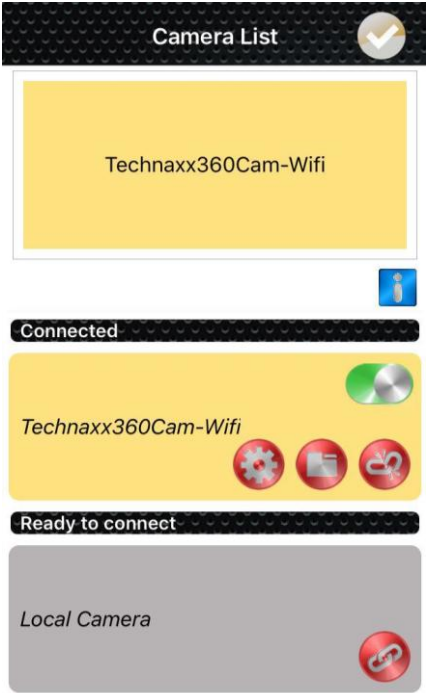
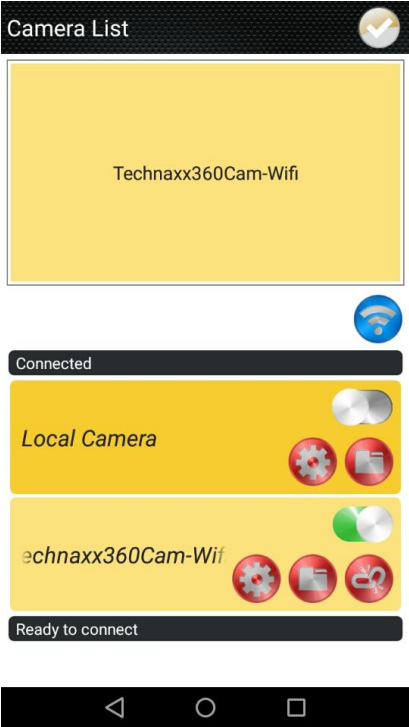
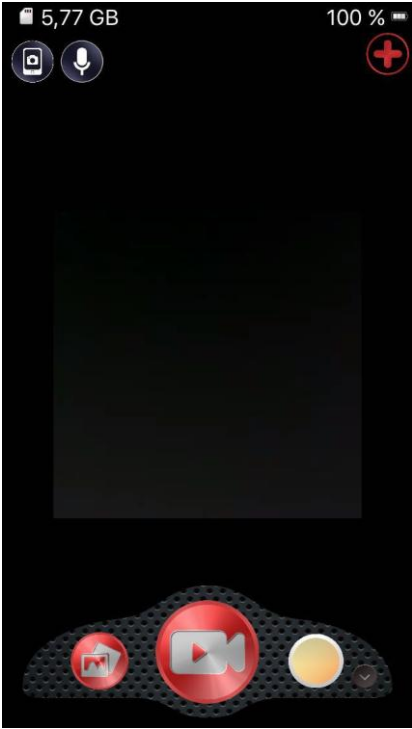
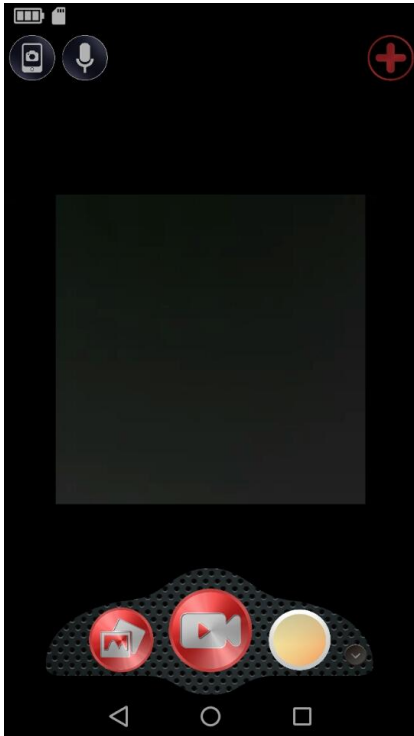
Note: WiFi can only be activated from Video or Snapshot mode.

→→→ Find the WiFi hotspot of the Action Cam in your Smartphone and input the password displayed on the LCD, camera will be connected with your Smartphone via WiFi. Note: Under Android you get a message: “Do you want to change to other available network? If you select “No” then you stay connected to the current network”. Please select “No”!

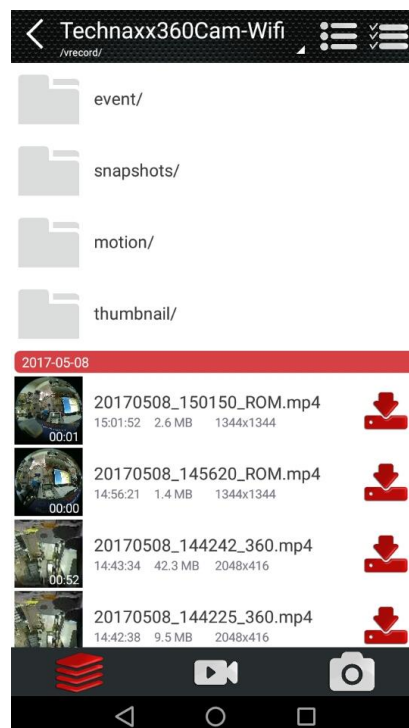
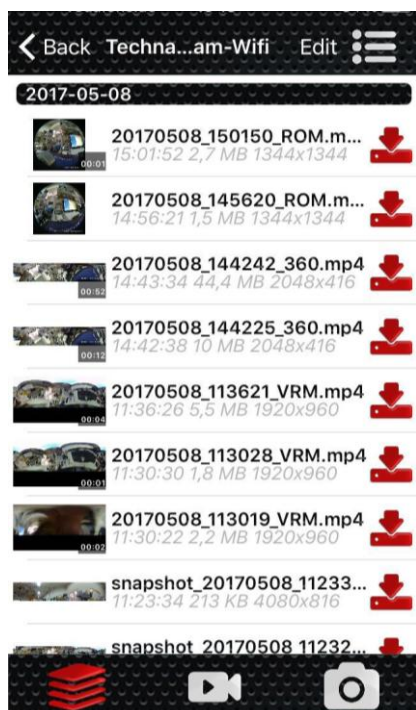
	
iOS device	Android device

→→→→ Open the “OTCam 360” APP on the Smartphone. The camera should be connected automatically.

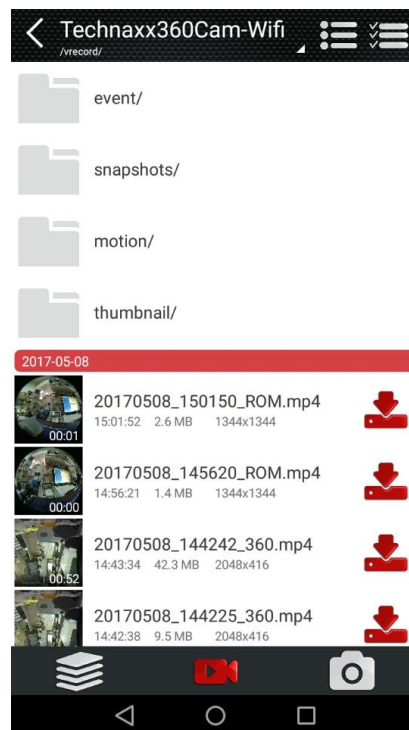
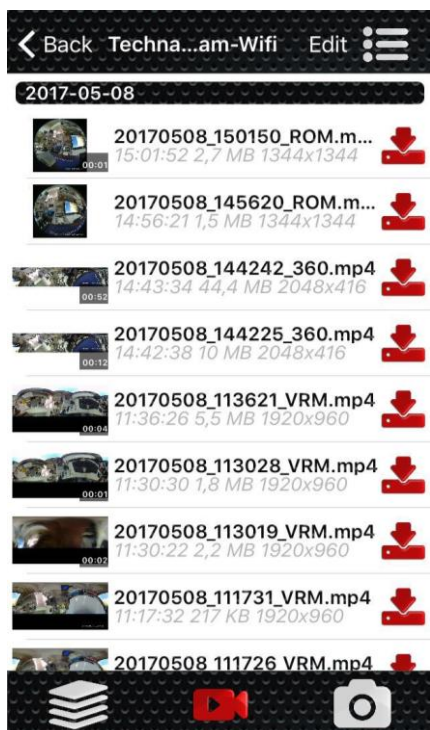
<p>If the device is not connected automatically press the connection button you see on the right. The camera is going to connect with your phone and you will see the live view. Note: If you do not see the “camera list” press the right button on the right in the second image below.</p>	 Connect	 Open Camera list
<p>By pressing the button on the right you can quit the connection between your Smartphone and the camera.</p>	 Disconnect	

Connection interface (Camera list)	
	
Live View interface	
	
iOS device	Android device

All saved files (video & photo) on the MicroSD card of the camera.



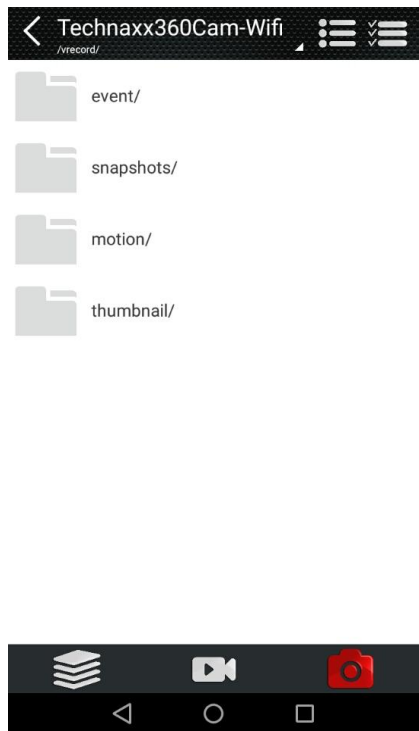
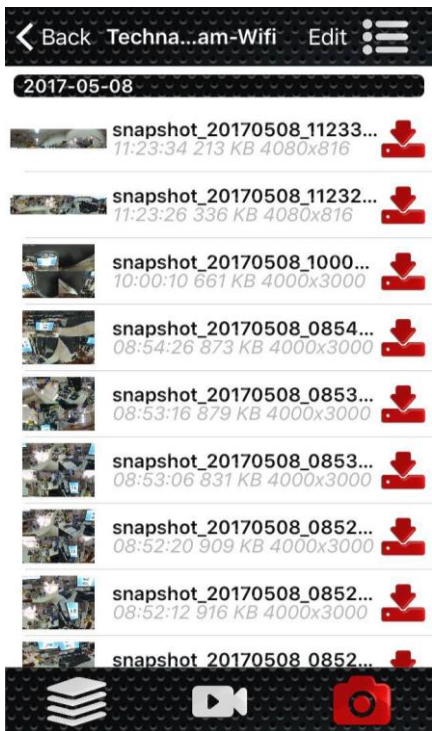
Recorded Videos saved on the MicroSD card of the camera.



iOS device

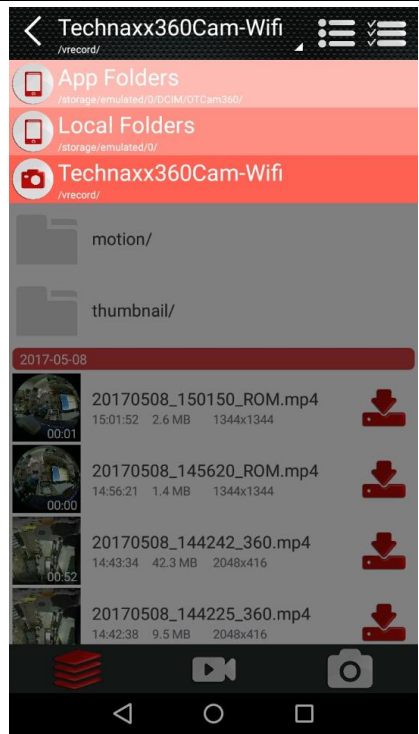
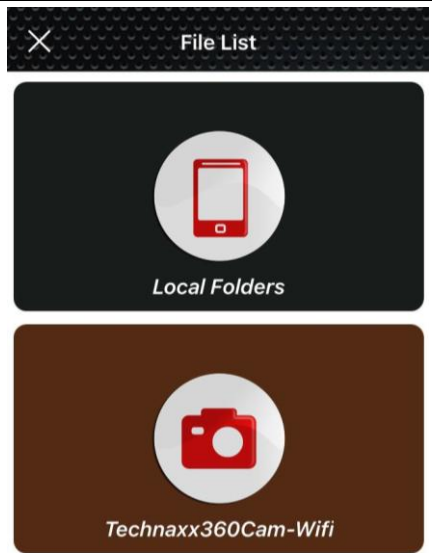
Android device

Taken photos saved on the MicroSD card of the camera.



Local folders (iOS)/ APP folders (Android): Here you find the files you downloaded from the camera.

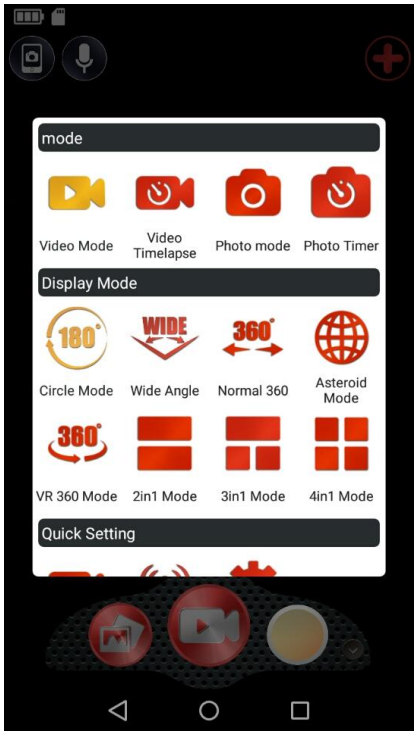
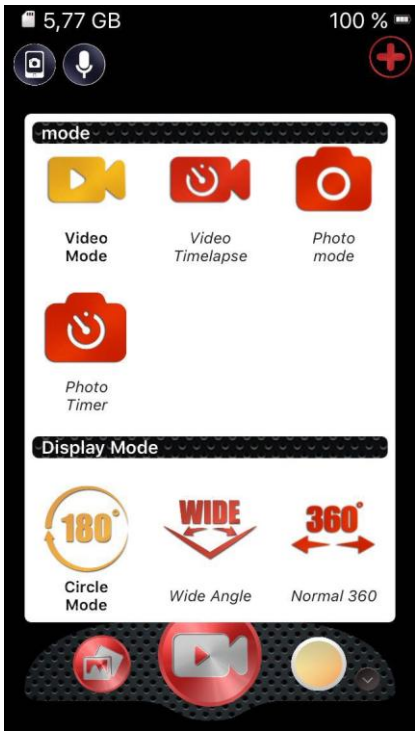
Technaxx360Cam-Wifi: Here you can find the files saved on the MicroSD card.
Download the video/photo to your Smartphone by pressing on the download button.



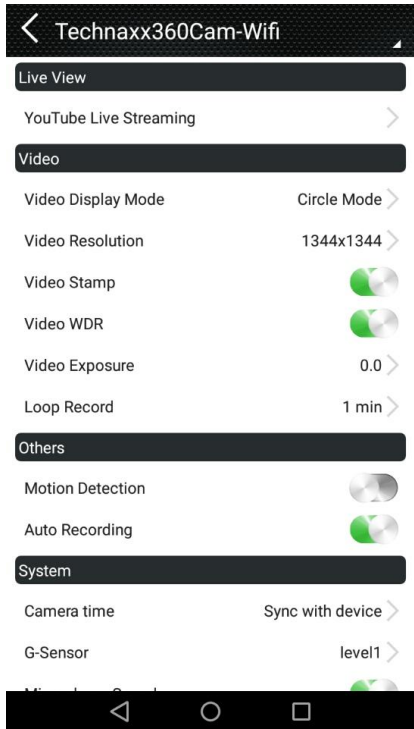
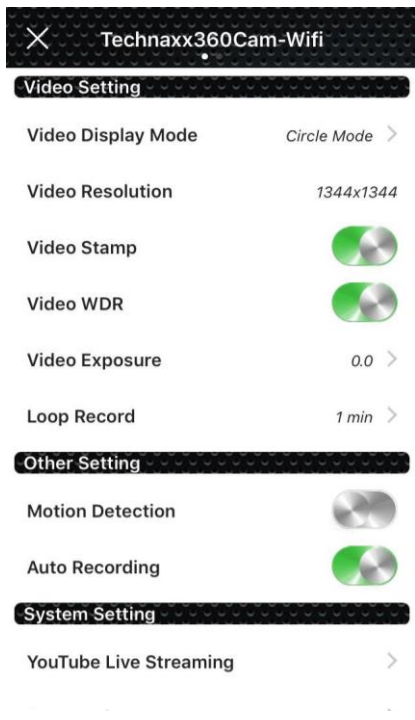
iOS device

Android device

Open the menu by pressing the icon shown on the right:
 Select the mode you want to record in; also open the extended settings by pressing the gear icon. Scroll down for more settings.



Extended settings, scroll down for more settings. For explanation see the camera settings above.



iOS device

Android device

11. Additional functions

Check the file on the computer

Connect the MicroUSB cable (included) to the computer and Action Cam. Either mass storage will open by itself or you have to open it manually, to view the stored video/snapshot files. If the camera has not powered itself up while inserting the Micro USB cable, turn the camera on. You will see a blue display, select USB mode by pressing “OK” (3) button. Now you will see three folders, event folder, motion folder and snapshot folder. Choose any folders to check the corresponding files.

Note: The manually taken videos are in no folder.

HDMI TV-viewing function

Connect the Action Cam port (10) with a Micro HDMI** (**not included) cable to your HDTV. The TV needs to be adjusted to the HDMI input port. Then the camera operation will be displayed on TV with max resolution 1080p 30fps.

Note: The Action Cam display will go black.

12. Technical Specifications

CMOS Sensor	1/3" CMOS sensor 3MP (AR0330)	
Mode Video resolution	Fisheye (circle) (1344x1344, 30fps), Panorama-180° (1920x1080, 30fps), Panorama-360° (2048x416, 30fps), 4-in-1 (1280x960, 30fps), 3-in-1 (1280x960, 30fps), 2-in-1 (1280x960, 30fps), 360°-VR (1920x960, 30fps)	
Image quality	12M / 8M / 5M / 3M	
Lens	180° super-large panoramic lens (Ø ~27mm)	
Exposure	-2, -1.7, -1.3, -1, -0.7, -0.3, 0, 0.3, 0.7, 1, 1.3, 1.7, 2	
White balance	Auto setting	
Photo mode	normal, self-timer, burst shooting	
Video mode	normal, loop recording, time-lapse, motion detection, G-sensor	
Playback modes	Fisheye (circle), Panorama-180°, Panorama-360°, 4-in-1, 3-in-1, 2-in-1, 360°-VR	
Screen	1.5" LCD display (320x240)	
Picture format	JPEG	
Video format	Format: MP4; Compression Format: H.264	
Data connection	Micro USB2.0, Micro HDMI** (**not included)	
External memory	MicroSD** card up to 64GB class 10 (**not included)	
Power / Consumption	DC 5V/1A	DC 5V/600mA
LED indicator	Blue is status indicator, Red is charging indicator	
Built-in Microphone & built-in Speaker	Speaker 8Ω / 1W	
G-Sensor	ST-LIS3DH	
WIFI	Support	
Battery	Rechargeable & replaceable 900mAh Lithium-ion battery 3.7V/3.33W	

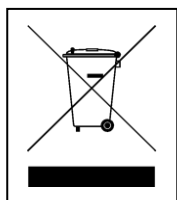
Charging time	~3–4 hours (used power adapter** DC 5V/1A)
Recording time	with 1080P ~60 minutes
Language	EN, DE, IT, FR, ES, PL, CZ
Operating System	Windows 7 / 8 / 8.1 / 10 and Mac 10.5 or above
Weight & Dimensions (without case)	80g (with battery) / (L) 4.8 x (W) 4.3 x (H) 5.0cm
Working temperature	–10°C up to +55°C
Storing temperature	– 20°C up to +70°C
Water-proof	only with water-proof case ~30m depth
Protection class	IP68 (case)
Package contents	Action Cam FullHD 360° TX-96, Micro USB to USB charging cable, Waterproof case, Fixed base & Bicycle bracket, 2x pedestals & 2x helmet pedestals, 2x supports for tripod, Back clip & 3x connection pieces, 3x ribbons with velcro closure, 2x 3M stickers & cable ties, Cleaning cloth, User Manual

Warnings

- Do not attempt to disassemble the device, it may result in short-circuit or even damage.
- Do not drop or shake the device, it may break internal circuit boards or mechanics.
- Keep the device in dry and ventilated environment. Avoid high humidity and high temperature. Also batteries should not be exposed to excessive heat or direct sunlight.
- Keep the device away from little children.
- The device will be hot after using for too long time. This is normal.
- Please use the accessory provided by our factory.



Security and Disposal Hints for Batteries: Hold children off batteries. When a child swallowed a battery go to a doctors place or bring the child into a hospital promptly! Look for the right polarity (+) and (–) of batteries! Always change all batteries. Never use old and new batteries or batteries of different types together. Never short, open, deform or load up batteries! **Risk of injury!** Never throw batteies into fire! **Risk of explosion!**



Hints for Environment Protection: Packages materials are raw materials and can be recycled. Do not disposal old devices or batteries into the domestic waste. **Cleaning:** Protect the device from contamination and pollution (use a clean drapery). Avoid using rough, coarse-grained materials or solvents/aggressive cleaner. Wipe the cleaned device accurately. **Important Notice:** Should battery fluid leak from a battery, wipe the battery case with a soft cloth dry. **Distributor:** Technaxx Deutschland GmbH & Co.KG, Kruppstr. 105, 60388 Frankfurt a.M., Germany