# User Guide for the Mobius Maxi 4K ActionCam



## Description

The above picture shows the arrangement of the user operating features.

► This manual does not cover replacing the internal battery or lens.

► This manual assumes the camera is loaded with the latest firmware available at the time of writing. Functionality may vary with earlier or later firmware versions.

► A more detailed manual can be downloaded from the official Mobius website at <u>https://mobiusactioncam.com/maxi4k/</u>.

## Cards

You should always use micro SDHC or Micro SDXC cards with an UHS speed class rating of U3 and/or a video speed class rating of V30, V60 or V90. Both FAT32 and exFAT are supported, but it is recommended to always format cards with a capacity above 32GB in exFAT. In-Camera Formatting (see below) will do this automatically.

Although it is recommended to use cards with a capacity of 64G or 128GB, cards with a capacity of up to 1TB have been tested.

Clips recorded on cards formatted in exFAT can be recorded as max. 60GB clips. Clips recorded on cards formatted in FAT32 can be recorded as max. 4GB clips.

If a specific card does not work correctly after it has been freshly formatted you should no longer use the card with the camera. A different card, even an identical card, will most likely work perfectly.

► If the Video clip length is set to Max. there will always by a 2-3 second gap between clips.

► If the clip length would exceed the 4GB boundary on a card formatted to FAT32 (for example, 4K resolution and Video Quality set to High) the clip will be recorded as a 4GB clip and there will be 2-3 second gap between the next clip.

► Important: If the firmware detects that the card is too slow (class rating too low), the clip will be saved and the camera will return to standby mode.

# Formatting

Standard formatting tools provided by the operating system are not always reliable and should not be used. In addition, they do not optimize the SD card's performance. For optimal card performance it is recommended to either use the Windows setup program (mSetup, see below) or use the camera's built-in formatter. Instructions for In-Camera Formatting are outlined below.

In-Camera formatting is also available via the OSD menu.

Another excellent formatting utility is "SD Formatter" which can be downloaded from <u>https://www.sdcard.org/downloads/formatter\_4/index.html</u>. This utility has been specifically designed to format SD cards.

**Breaking the rules** tip for 32 GB SD cards: Formattng a 32GB card with exFAT is nonstandard, and not supported by the camera's integrated formatter nor the recommended SD Formatter utility.

However, Windows OS (10 & 11) formatting routine does support this, and limited testing has shown an exFAT formatted 32GB SD card does work and allows recording long clips up to the limit of the cards capacity.

# **In-Camera Formatting**

The Camera contains a built-in formatter which should be used to format the SD card.

- 1. Disconnect the camera and ensure it is turned off.
- 2. Turn on the camera and wait until it is in one of the Standby modes (steady yellow, blue or red LED).
- 3. ► If the camera was set to auto-record, press the Shutter button (top left) to stop the recording.
- 4. Press and hold down the Shutter button (top left). DO NOT RELEASE the button.
- 5. Rapidly press the Mode button (top right) 4 times.
- 6. Wait about 2 seconds until the LEDs start to blink.
- 7. Once the LEDs start to blink, immediately release the Shutter button.
- 8. ► If the LEDs don't start to blink, release the Shutter button and start over again at 4.
- 9. The LEDs will blink very quickly while the card is being formatted.
- 10. The camera will return to Standby mode when the formatting is finished.

## **USB Connections**

The camera requires a USB C (USB Type C) cable for charging or connecting to external battery packs for continuous recording. A USB C cable is also used to connect the camera to the PC in order to set the parameters or to access the camera as an external disk. The camera supports USB2.0.

► Always use **HIGH QUALITY** USB cables. Cheap cables may lead to all sorts of problems. If possible, keep the cable as short as possible.

A special USB C cable is required for A/V out (TV-Out, Video-Out) available from the vendor. The cable has a USB-C plug for the camera and two pigtail leads from that terminating in two standard "servo-style" plugs.

One is for the analog video out, which in turn needs to have a mating extension cable terminating in an old style (Yellow) "RCA Phono" plug for connecting to older analog TV inputs on a compatible monitor.

The TV Out function does NOT have any sound, so only the video (Yellow) connector needs to be connected to the monitor video input.

The other pigtail (red/black wires) is for external +5V Power IN, which is optional for when the camera's internal battery cannot power the camera long enough.

## Before you start

Before using the camera for the first time, ensure the internal battery is fully charged. See below under "Charging".

# The Reset button

The reset button is in the small hole located on the right side in line with the center of the Power Button (looking at the camera from the top with the lens pointing forward). It can be pressed by carefully inserting a bent paper clip or similar instrument. The Reset button should only be pressed in case the camera no longer reacts to button presses. Pressing the Reset button will force the processor to restart. No parameter settings will be lost and the RTC (Real Time Clock) will not be interrupted.

## **The Power button**

Press the power button (large, round button in the top center) until the LEDs start to blink. After a short while a steady yellow LED is shown. The camera is now ready for use (standby).

• To turn off the camera, first stop any recordings that may be running by pressing the shutter button (top left) and then press the power button for about 2 seconds until the camera turns off.

## The Mode button

The Mode button (top right) enables the camera to be sequentially switched between 3 (4) different modes, and toggles on the WiFi transmission with a long press (see WiFi section below for details).

Each button press advances to the next mode indicated by the LED color.

- Video Mode 1 (yellow LED). The frame rate and resolution can be individually configured.
- Video Mode 2 (blue LED). The frame rate and resolution can be individually configured.
- Photo Mode (red LED) which also includes Time-Lapse photos.
- Playback Mode (red LED) only when external monitor (Video-Out/TV-Out) special cable is connected (see USB Connections above for details).

## The Shutter button

Press the shutter button (top left) to start or end a video recording or to take a picture.

## LED status indicators

The following LED states are for a camera **not connected** to the PC.

○ Steady Yellow - The camera is in Video Mode 1 and is on standby.

Slowly flashing Yellow (1 sec. On, 1 sec. Off) - The camera is in Video Mode 1 and is recording video. The Video Recording indicator (see configuration) must be ON for this to work.

○ Steady Blue - The camera is in Video Mode 2 or Playback Mode (if an A/V cable is connected) and is on standby.

Slowly flashing Blue (1 sec. On, 1 sec. Off) - The camera is in Video Mode 2 and is recording video. The Video Recording indicator (see configuration) must be ON for this to work.

O Steady Red - The camera is in Photo Mode.

One Red/Yellow flash - The camera has taken a picture.

○ Steady Green - The battery is charging. The green LED works independently from the other LEDs and is not under firmware control.

#### The rear LED

If the camera is configured to show the Recording Indicator, then the rear LED will normally blink in sequence with the main LED while recording or in standby mode.

When the camera is turned on, the rear LED will flash up to three times before becoming steady. The number of flashes indicate the battery's state of charge. 3 Flashes=Fully charged, 2 Flashes=charged, 1Flash=The battery is running low and should be charged as soon as possible.

► The rear LED will blink when WiFi mode is enabled and the camera is waiting for a smart phone to connect. The top LED will remain on. The rear LED will remain on when a connection is made. See **WiFi** for details.

## Connecting the camera to the PC

Always connect the camera directly to the PC. Do not use a USB hub. With a card in the camera, it will always connect as an external device (disk drive, setup), whether the camera is turned off, turned on in standby, or recording, with just ONE EXCEPTION! This is when the camera is toggled into WiFi mode, and then the PC USB connection will just provide external power to the camera.

► You cannot record video or photos if the camera is connected to the PC as an external drive.

► With no card in the camera, connecting to the PC will toggle the camera into WebCam mode.

# Charging

- Connect one end of the supplied standard USB cable to the camera.
- Connect the other end to a USB, 5V DC power source (wall charger, PC or external battery).
- When the yellow LED turns on, **press the Power button** for about two seconds to turn the camera OFF.

When charging, the green LED will be on. It will turn off when the battery is fully charged. Charging takes about 2-3 hours with the camera turned off and connected to an external USB Charger. Batteries are not covered under warranty. If charged with under-rated chargers or by using a USB hub without an additional power supply, expect longer charging times. For optimum results, the charging voltage should be +5V under load. Only use quality chargers capable of supplying 1000mA (1A) and a stable voltage of 5V. Low quality chargers may not be able to supply enough current and can lead to premature battery failure or, in the worst case, even destroy the camera.

A new and fully charged battery will record up to 110 minutes of 4K 30fps videos and 155 minutes of 1080p 60fps videos.

► For Dashcam use it is recommended to use a charger or power bank which can supply at least 2A at a stable 5V.

## Automatic Power Off from Standby mode

If the camera is in standby mode you must take a picture(s) or start a video recording within \*30 seconds. The camera will automatically turn off after \*30 seconds of no activity. \*This value can be set using any of the setup methods. Automatic Power Off can also disabled.

When the special A/V cable is connected, automatic power-off will be disabled. This prevents signal loss during FPV use when the standby time times out.

# Recording Video Mode 1 or 2 (yellow or blue LED) Start video recording.

- Briefly press the shutter button (top left).
- ► If the recording LED has been disabled, the yellow or blue LED will slowly blink 3 times and then turn off, indicating that recording has started.
- ► If the recording LED has been enabled, the yellow or blue LED will slowly flash at 2 second intervals indicating that the camera is recording.

#### Stop video recording.

• Briefly press the shutter button (top left). The camera will return to the standby mode from which the video was started.

# Taking a Photo (red LED)

- Briefly press the shutter button (top left). The top and rear red LEDs will both be on when in Photo Mode, and both will flash together when pictures are taken.
- In Normal (single photo) and Burst (multiple fast photos) Modes, both LEDs will remain on when not blinking. In Time-Lapse and Long Exposure Modes, the top red LED will turn off between after the shutter trips but the rear LED will remain on as long as the Mode is still in progress.

# Removable Disk Mode

- Make sure the camera is turned off and a memory card is inserted.
- Connect the camera to the PC using a standard USB-C cable. The green LED may turn on at the same time indicating that the battery is charging.
- ► If this is the first time you are connecting the camera to the PC the operating system will attempt to install the iCatch drivers. This may take a few minutes.
- The LEDs will blink and after a short while the red LED will turn on.
- The camera is now in Disk Mode and a new removable drive should be available on your computer. The above procedure may take up to 30 seconds.
- You cannot record video or photos if the camera is connected to the PC in Removable Disk Mode.

## **USB Webcam Mode**

► In Windows 10 and 11 you must ensure that programs have access to the Camera. The Camera access settings can be found under 'Privacy' from the 'Settings' dialog. Click the Windows Icon at the bottom left of the screen. Then click the Settings icon (Gear icon) a little higher up on the left. This will bring up the Settings dialog from which you should click 'Privacy' and then, on the left 'Camera'. Make sure that access to the camera is turned on. There are two ways in which you can enter webcam mode. Method 1:

- Remove the SD card and connect the camera to the PC.
- The camera will connect in webcam mode (blue LED).
- If this is the first time you are connecting the camera to the PC the operating system will attempt to install the iCatch drivers. This may take a few minutes.
- If the drivers were installed correctly the camera should now be in USB camera mode.

#### Method 2:

- Connect the camera to the PC until it is in Removable Disk Mode. See above.
- Very briefly press the Shutter button (top left). The camera will exit Removable Disk Mode and switch to webcam mode (blue LED).
- ► If this is the first time you are connecting the camera to the PC the operating system will attempt to install the iCatch drivers. This may take a few minutes.
- If the drivers were installed correctly the camera should now be in webcam mode.

► Notes: Windows XP has an integrated WebCam viewer. Your Mobius should be visible in Explorer (My Computer) as a "USB Video Device". This functionality does not exist in Windows 7.

With Windows 10 and 11, the system "Camera" App (accessed via the Start Menu) is recommended as the camera's web cam viewer. It readily connects to the camera and allows a number of Photo and Video resolutions/frame rates to be viewed and recorded in high resolution.

## OSD (On Screen Display)

Whenever an external analog TV or monitor is connected to the camera using the *special* USB-C cable the output will be shown on the monitor. See the USB Connections above for special cable details.

By using the OSD Menu it is possible to modify the camera's parameters, format the SD card, view the photos on the SD disk and playback video clips on the SD card. For more information see "Manual configuration using an external monitor (OSD Menu)" below.

## Camera Setup (configuration and date/time setting)

There are three methods in which the camera's date and time can be set or the parameters modified: A simple text file (works on most operating systems), using the camera's internal OSD Video Out method, and using either of the two dedicated programs (GUI) for Windows.

**IMPORTANT!** There are many settings that conflict with one another or are not supported by the firmware for all possible resolution/frame rate options. The Manual and mTool methods do NOT alert the user when a conflicting or unsupported setting is selected.

When those settings are written into the camera, the FW will either ignore the setting or replace it with the closest compatible one. This will NOT harm the camera, but you may not get the results you expect.

The mSetup program method, however, will prevent you from selecting a setting if it's not supported by disabling the choice in the program, and it also will alert you to make an alternate choice in some cases via it's Tool Tips option (if you haven't disabled it).

You are strongly advised to use the mSetup method for changing the camera settngs. The primary conflicts occur between resolution/frame rate, field of view (FOV), lens distortion correction, (LDC) and electronic image stabilization (EIS).

They are too detailed to be listed here, but you can download a chart that shows all of these conflicts from this link:

https://static.rcgroups.net/forums/attachments/2/5/5/1/8/a15752627-215-LDC%20and%20EIS%20SETTINGS%20%26%20RESULTS.jpg.

Whenever the firmware is updated you will need to set the parameters as well as the date and time. These are reset to their default values whenever the firmware is updated. In addition, the date and time will need to be set whenever the battery becomes discharged or is disconnected.

# 1. GUI (Graphical User Interface) configuration - recommended method for Windows users

There are two Windows programs available for setting the camera's parameters:

1. mTool, a small utility written by the Mobius team. Different FW versions may require a different version of mTool.

2. mSetup, a program which supports all the Mobius cameras and all the FW versions. This is the recommended program to use.

Both programs can be used to modify the camera's configuration or format the SD card. Both programs communicate directly with the camera and makes configuring the camera a very simple task.

The camera must be in Webcam mode in order to set the parameters by software. See Webcam Mode, above.

#### 2. Manual configuration using a text file

The parameters can be also be set by using a text file. This makes it possible to set the parameters using virtually any computer system.

A "SYNC\_PARA.CFG.BAK" text file is automatically created in the card's root folder each time the camera is turned on.

NOTE: Your Windows PC MUST be configured to show "file type extensions" or you will NOT see the ".BAK" extension on the config file and will NOT be able to delete it to properly or rename the edited configuration file on a Windows PC.

If you don't see the BAK extension, toggle on this ability using the search button on the toolbar to open your Folder or File Explorer Options pop up window, and click on the View tab to find and uncheck the box for the "hide extensions for know file types" option.

You may use any ASCII editor, for example Notepad, to modify the parameters. The text file must be in plain ASCII, it must not be in Unicode. If you don't know what a root folder is, or you don't know what ASCII is or don't know how to manually edit ASCII files please use one of the two Windows programs or the method using an external monitor outlined above.

Only modify the values in brackets [] and only enter valid numbers. Once the text file has been edited and saved, the file must be renamed to SYNC\_PARA.CFG (with .BAK deleted).

Now turn the camera off.

The next time the camera is turned on it will load the new parameters, delete the "SYNC\_PARA.CFG" file, and create a new "SYNC\_PARA.CFG.BAK" with the new settings.

#### 3. Manual configuration using an external monitor (OSD Menu)

It is possible to manually change the configuration settings by using the On Screen Display (OSD) by connecting the camera to an external analog (NTSC or PAL) Monitor/TV using the special TV OUT cable (refer to USB Connections section for details).

3.1 Disconnect the camera from the PC and turn it off.

3.2 Connect the camera to an external analog TV or compatible monitor using the special cable.

► If the camera is not connected to external power (see above), turn on the camera by pressing the Power button (large button in the top center) until the LEDs begin to blink. The camera will start up in Standby Mode.

3.3 Slowly press the Mode button 3 times to cycle from Mode 1 (yellow) to Mode 2 (blue) to Photo Mode (red) and finally to OSD Menu Mode (red again).

The OSD menu will be shown.

► The two top icons represent the Video files on the card (left icon) and the Photo files on the card (right icon). When selected, these files can be viewed/played on the monitor.

► The three bottom icons represent the Video settings (left icon), the Photo settings (center icon) and the General settings (right icon).

Pressing the Power button will move the focus from one selection to the next selection. Pressing the Power button on the last selection will return focus to the first selection.

▶ Pressing the Shutter button will enter the selection or confirm the selection.

▶ Press the Mode button to exit the selection or switch to Mode1 when on the OSD selection menu.

► In-Camera formatting is also available via the OSD menu.

## **Playback Mode**

The TV out analog display will be a low resolution image with a standard (NTSC or PAL) 4:3 aspect ratio. Your video monitor must be capable of displaying a 4:3 aspect ratio frame size or 16:9 aspect ratio images will look flattened.

If you have a 16:9 aspect ratio monitor that can be set to display the 4:3 image, it will look normal, but will have black bars above and below your image to fill out the 4:3 frame.

#### Video playback (Top-left icon on OSD menu).

► When the Video playback icon has the focus, press the Shutter button to enter the Video playback screen.

A list of all the video clips on the SD card will be shown.

- ▶ Press the Power button to move the focus to the next file on the list.
- Pressing the Power button on the last item in the list will return focus to the first item
- Press the Shutter button to select the video clip to be viewed.

The video clip will begin to play.

- ▶ Press the Shutter button to pause or resume playback.
  - Fast Forward (FF) or Fast Reverse (FR) is not possible.

#### View Photos (Top-right icon on OSD menu).

► When the View Photos icon has the focus, press the Shutter button to enter the View Photos screen.

- A list of all the photos on the SD card will be shown.
- ▶ Press the Power button to move the focus to the next file on the list.
  - Pressing the Power button on the last item in the list will return focus to the first item
- ▶ Press the Shutter button to select the photo to be viewed in full-screen mode.

# **Firmware Update**

New firmware versions usually correct issues found in previous versions but often provide new functionality which was not previously available.

Use mSetup (click the 'Tools' button) to automatically update the firmware. This is by far the easiest method.

#### Manual Firmware Update

#### DO NOT PRESS ANY BUTTONS during the firmware update process.

There are two similar methods with which you can update the firmware. Always use one of these methods to update the FW.

#### Method 1 (recommended method):

- Turn off the camera.
- Connect the camera to the computer and wait until the card is recognized as a Removable Drive.
- Copy the new firmware file (MAXI4K.BRN) into the camera's flash card root folder.
- Disconnect the camera from the computer and wait until it turns off.
- Wait until all the LEDs are turned off.
- Connect the camera to the PC. The green LED, indicating the battery is charging, may turn on. WAIT.
- The LEDs will blink indicating the firmware is being updated. WAIT
- The firmware will be updated when the LEDs stop flashing. After a few seconds the camera will beep once and will be recognized as a Removable Drive.
- The firmware file will have been automatically deleted.
- The date and time and all parameters will be reset to their default values.

## Method 2:

- Turn off the camera and remove the card.
- Insert the card into an external card reader and connect the card reader to your computer.
- Copy the new firmware file (MAXI4K.BRN) into the card's root folder.
- Safely disconnect the card reader from the computer and remove the card.
- Insert the card into the camera. DO NOT turn the camera on or press any buttons.
- Connect the camera to external USB power or connect the camera to the PC. The green LED, indicating the battery is charging, may turn on. **WAIT**.
- The LEDs will blink rapidly indicating the firmware is being updated. WAIT
- The firmware will be updated when the LEDs stop flashing. The camera will then automatically turn on with a beep.
- The firmware file will have been automatically deleted.
- The date and time and all parameters will be reset to their default values.

## Recording using an external power supply

With the Mobius Maxi 4K, it is possible to charge the battery and record at the same time using a standard external USB 5V DC power supply. The power supply may be mains driven (normal household wall plug), or run off batteries, including the car charger USB plug (optional accessory) and cable supplied with the camera.

External USB power supplies usually only use the +5V and the - (Ground) wires. The 2 data wires are normally not used. However, some USB power supplies designed for a specific USB device may use different wiring schemes and thus may not work with this camera. To avoid possible problems, always use a generic power supply.

For recording video or taking pictures using a standard external power supply connection, the USB power supply can be connected at any time, i.e. before the camera is turned on, before the recording is started, or after the recording has been started.

► Only use a quality chargers capable of supplying at least 1000mA (1A) and a stable voltage of 5V (2A chargers are recommended). Low quality chargers may not be able to supply enough current and can lead to premature battery failure or, in the worst case, even destroy the camera.

► Extremely long recordings will cause the camera to become very warm which will affect the battery life. To avoid early battery failure it is recommended to use an optional Super capacitor.

#### Additional heat sink

An additional heat sink is available for when the camera is used for recording video for an extended time in hot conditions. For example, dash cam use. An additional heat sink can reduce the internal temperature by up to 10°C.

#### **Additional information**

The following functions/parameters need additional explanation:

## Beeper

The camera is equipped with a built-in beeper. The beeper volume can be adjusted or turned off by using one of the setup methods described above.

## **G-Sensor**

The camera is equipped with a built-in Gravity-Sensor which allows the camera to record upright video or pictures automatically, even when used upside-down. This feature can be turned on or off by using one of the setup methods described above.

The G-Sensor can also be enabled to sense abrupt changes of the center of gravity (impact) while recording video. The video file being recorded will be moved to the EVENT folder on the SD card should a sudden change be detected.

► 'Loop Recording' must be enabled if the G-Sensor is also enabled in order to sense abrupt changes of the center of gravity.

► When the 'Rotate Image' parameter is set to Auto and a recording is started, the video will be recorded the correct way up according to the position of the camera. Should the camera be rotated after the recording is started, the new position of the G-Sensor will be ignored.

► If the camera is permanently mounted in a specific position, for example as a dashcam, it is recommended to set the 'Rotate Image' parameter to either No or Inverted as appropriate. You should avoid setting it to Auto.

► Battery power consumption slightly increases when the G-Sensor is explicitly enabled or partially enabled by setting the 'Rotate Image' parameter to Auto.

# (Auto) Rotate Image

The camera can be configured to record upside-down (inverted) which enables the camera to record normal video and photos with the buttons facing downwards. It is also possible to set the Rotate Image mode to 'Auto' which ensures the image will always be recorded in the upright position.

► If Auto mode is selected, the Rotate parameter should also be set to it's normal start-up mode, either Inverted or not. This will avoid a possible very brief inverted image at the beginning of the clip caused by the recording starting before the firmware has a chance to determine in which position the camera is recording.

# Loop Recording

Loop recording can be enabled or disabled by software or by using the camera's OSD menu.

By default, Loop Recording is disabled meaning the camera will record clips until the card is full. The camera will then stop recording and enter standby mode.

If Loop Recording is enabled, the oldest clips will be overwritten when the card is full. As such, the camera will never stop recording and only the most recent clips will be available on the card.

► Loop recording is only permitted for 1 min., 3 min., and 5 min. clip lengths.

## **Motion Detection**

Motion Detection only works in video modes. It does not function in Photo Mode.

When Motion Detection is enabled, the Power-Off Standby timeout setting will be ignored. The camera will, therefore, not turn off unless there is no power left to keep the camera running, the memory card is full or the camera is manually turned off.

When Motion is detected, the camera will start recording and the selected Motion Timeout counter will be started. If no further motion is detected by the time the counter runs out the camera will save the recording and return to standby mode where it will wait for new motion detection.

If motion is detected while recording the timeout counter will be reset to the selected timeout.

The camera will continue recording until no more motion is detected and the timeout counter runs out or the video clip length is reached, or the memory card is full.

## Lens Distortion Correction (LDC)

LDC has a conflict with the EIS function, and will not function if EIS is turned on at the same time.

When EIS is Off, turning on LDC can reduce (but not fully eliminate) the amount of fish eye distortion in all camera resolution/frame rate settings that the camera supports. With mSetup, unsupported resolution/frame rates will be ghosted out. With the other manual setting tools, users can refer to the table of interactions linked above under "Camera Setup".

## Image Stabilizer (EIS - Electronic Image Stabilization)

Image Stabilization can help reduce jerky camera motion in recorded video for the resolutions / frame rates supported. It will also disable the LDC function when enabled. The Time Stamp should be turned off when Image Stabilization is enabled, otherwise the stamp will move around and not be fixed when the video is played.

► Image Stabilization is only supported for Wide FOV for 4K 30fps, 2.7K 30fps, 1440p 30fps, 1080p 30fps and 1080p 60fps. Also these videos will (ironically) have essentially no fisheye distortion (with LDC setting On or Off), and the images will be downscaled to a much narrower FOV.

► Image Stabilization with 4K resolution may not yield the desired results.

# WiFi

There is no specific WiFi app for this camera, but the iCatch App from the chip manufacturer may be used to preview videos and download video / photo files to your phone.

It can also be used to start a video recording or take a photo with live-view. No camera settings can be modified using the WiFi app.

The WiFi App "iSmart DV2" can be downloaded and installed from Google Play or the Apple App Store.

WiFi for the Mobius Maxi 4K can be set up as follows:

- Press the Power button to turn the camera on. The camera will enter standby mode.
- Press and hold the Mode button for approx. 3 seconds until you hear 2 beeps. The red rear LED will start flashing continuously, along with a beeping sound. WiFi is enabled, waiting for a connecting.
- In the WiFi settings of your phone, select "Maxi4K" as the new WiFi connection. On Android phones, the WiFi settings can often be found under Settings->Connections->Wi-Fi.
- Once connected, the rear LED will stop blinking and remain steady.
- Launch the "iSmart DV2" which you should have previously downloaded and installed from Google Play or the Apple App Store.
- Tap the MAXI4K camera to connect to the camera. You may first have to "Add New Camera".
- The main menu with live-view will be shown. From here you can view/download/delete individual or all photos or video clips. You can also start and stop a video recording.
- You should **NOT** attempt to change the settings by tapping the gear icon. This is a generic app and the settings do not correspond to the Mobius Maxi 4K settings.

# **Trouble shooting**

Q. When I press the Power button, nothing happens (the green LED may blink briefly). A. An apparent 'dead' camera can be caused by the following:

- The battery is flat or defective. Replace or charge the battery.
- The Firmware may have locked up. Use a paper clip or similar object to press the Reset button.
- The lens module cable is not properly inserted or defective. Ensure the lens cable is firmly and squarely seated at both ends. Take note that the connectors have an opening mechanism. Never use force to insert/remove the cable.

Q. When I turn on the camera or while recording the rear LED continuously blinks very quickly. The camera will, at some time, turn off.

A. The battery is almost depleted and needs to be recharged.

Q. When I turn on the camera the top LEDs blink (Blue and Yellow or Blue and Red and Yellow) and the rear LED blink rapidly for about 30 seconds. The camera then turns off. A. There is no SD card inserted or the SD card is not making proper contact. Insert the card and/or clean the contacts.

Q. When I try to record a video or photo nothing happens. The camera may or may not beep once.

A. There is a problem with the SD card.

- The card is full. Format the card using SDFormatter, if possible.
- The card is not formatted correctly. Format the card using SDFormatter, if possible.
- The card is too slow. It is recommended to only use cards with a speed rating of U3 or above.

Q. I can take photos normally but when I try to record a video nothing happens. A. There is a problem with the SD card.

- The card is full. Format the card using SDFormatter, if possible.
- The card is not formatted correctly. Format the card using SDFormatter, if possible.
- The card is too slow. It is recommended to only use cards with a speed rating of U3 or above.

Q. The camera functions normally but only records very short clips and may turn off. A. This can be caused by the following:

- The battery may not be charged. Charge the battery for about 2 hours until the green LED turns off.
- The battery is too cold to provide the power needed to record video. Keep the battery warm before using the camera in cold temperatures (around freezing point and below).
- Check the integrity of your card by using the program h2testw to make sure your card is genuine and not a fake card that has been up-rated.
- The card used is not compatible with the camera. Use cards with a speed rating of U3 or above.
- The card may be defective. Use a different card.

Q. When I turn on the camera the rear LED will remain on, even after pressing the Reset button. The top LED is off but may initially show a very short blink.

A. The lens module cable is not properly inserted or defective. Ensure the lens cable is firmly and squarely seated at both ends. Take note that the connectors have an opening mechanism. Never use force to insert/remove the cable.

Q. The camera does not react.

A. The firmware may have entered a continuous loop, or the battery may be discharged.

- Make sure the battery is fully charged.
- Use a paper clip or similar object to press the Reset button. This should force the camera to be turned off.
- Wait a couple of seconds.
- Turn on the camera if it does not turn on automatically.
- As a last resort, disconnect the battery and reconnect again after waiting 30 seconds.
- Should all the above fail, contact <u>eletoponline@gmail.com</u> who will send you instructions on how to reinstall the firmware using a back door method (the supplied tool requires a PC running Windows).

Q. The camera is not recognized as a removable disk.

A. The operating system must be XP or greater. The camera must be connected using a standard USB cable. Confirm the cable is not defective by attaching another USB device using the same cable. Do not use a USB hub. Try using another USB port. Defective cables are the most common problems when the camera is not correctly recognized by the PC.

The iCatch drivers may not be installed correctly. Disconnect the camera from the PC, power down the PC and start over. An Internet connection is required in order to download the drivers.

Q. The camera is not recognized by mSetup or Webcam programs.

A. The camera must be in Webcam mode, **not** Removable Disk mode. The camera must be connected using a standard USB cable. Confirm the cable is not defective by attaching another USB device using the same cable. Do not use a USB hub. Try using another USB port. Defective cables are the most common problems when the camera is not correctly recognized by the PC.

The iCatch drivers may not be installed correctly. Disconnect the camera from the PC, power down the PC and start over. An Internet connection is required in order to download the drivers.

You may need to rollback or update the driver software in Device Manager.

Q. An SD card is installed, but the camera is not recognized as a removable disk. A. If you are sure your USB cable is not defective, then it's possible that the PC USB drivers are not working properly. DriveCleanup.exe (freeware) may be able to fix USB corruption problems.

Q. It is not possible to eject the SD card.

A. Most likely the battery has become swollen and is wedged against the SD card holder preventing removal of the card. Very carefully open the camera holding a finger against the card to prevent it flying out and being lost. Replace the battery.

Q. When the camera is connected as an external disk all the files on the SD card appear as corrupt.

A. There is a problem with your cable or the PC USB drivers are corrupt. DriveCleanup.exe (freeware) may be able to fix USB corruption problems.

Q. The camera does not charge or does not automatically start recording when external power is connected and the 'Auto Record External Power' parameter is set appropriately. A. External USB power exceeds ~5.25V or is under-powered.

Q. Playback is erratic or stutters or the playback colors are psychedelic or the video flashes, has corrupted blocks etc.

A. Always first copy the video file from the memory card to your hard drive.

- Your PC or graphics card may not be powerful enough to playback the video stream.
- You may not have enough memory installed in your PC.
- Use VLC Media Player or MPC-HC (Media Player Classic Home Cinema). Windows Media Player often chokes on underpowered machines.
- Psychedelic colors may also indicate problems with the CMOS lens module. Make sure the CMOS lens cable is correctly seated and not cracked. The lens cable is very fragile.

Q. The camera functions normally but the video is completely black.

A. Make sure the lens cap is removed.

Q. The camera functions normally but no sound is recorded.

A. Make sure the audio has not been toggled off (see above).

Q. There is a distinctive buzzing or clicking noise when videos are played back. A. Only use quality micro SD cards with a class rating of U3 or greater. Low quality cards can draw excessive current which may result in electrical noise in the recording.

This manual was last updated on 18. January 2022 (3rd. release)