Full HD Quelima A3s mini DV Camera

ver 1.0 (November, 01, 2018)

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Properties

General	Brand: Quelima
	Model: A3S
	Chipset: Generalplus1248
	Image Sensor: CMOS
	Function: Auto-Power On,Motion Detection,Time Stamp
Storage	Max External Card Supported: TF 32G (not included)
	Class Rating Requirements: Class 6 or Above
Power	Battery Type: Built-in
	Battery Capacity (mAh): 200mAh Li-ion battery
	Charge way: USB charge by PC
	Working Time: about 60mins
	Battery Charging Time: 2 - 3 hours
	Working Voltage: 5V
Primary Info.	Wide Angle: 120 degree wide angle
	Lens Size: 3.6mm
	Aperture Range : F2.0
	ISO: ISO100
Video/Image/Audio	Decode Format: H.264
	Video format: AVI
	Video Resolution: 1080P (1920 x 1080),720P (1080 x 720)
	Video System: NTSC
	Video Frame Rate: 30fps
	Video Output : AV-Out
	Image Format : JPG
	Image resolution: 12M (4032 x 3024)
	Audio System: Monophony
	White Balance Mode: Auto
Function	Waterproof: No
	Waterproof Rating : 0
	Loop-cycle Recording : Yes
	Motion Detection: Yes
	Motion Detection Distance: 3 - 5m
	Night vision : No
	Night Vision Distance: 0
	GPS: No
	Time Stamp: Yes
	Interface Type: Mini 8Pin USB,TF Card Slot
	Anti-shake: No
	Parking Monitoring: No
Operating Temp.	-10 - 50 Deg.C
Power Cable Length	80cm
Size (L x W x H)	4.10 x 3.00 x 1.90 cm / 1.61 x 1.18 x 0.75 inches
Weight	30g

Info video data

```
Format                    : AVI
Format/Info               : Audio Video Interleave
File size                 : 715 MiB
Duration                  : 5 min 1 s
Overall bit rate          : 19.9 Mb/s
Recorded date             : 2010-06-29

Video
ID                        : 0
Format                    : JPEG
Codec ID                  : MJPG
Duration                  : 5 min 0 s
Bit rate                  : 22.8 Mb/s
Width                     : 1 920 pixels
Height                    : 1 080 pixels
Display aspect ratio      : 16:9
Frame rate                : 30.000 FPS
Color space               : YUV
Chroma subsampling        : 4:2:0
Bit depth                 : 8 bits
Compression mode          : Lossy
Bits/(Pixel*Frame)        : 0.367
Stream size               : 819 MiB

Audio
ID                        : 1
Format                    : PCM
Format settings           : Little / Signed
Codec ID                  : 1
Duration                  : 5 min 1 s
Bit rate mode             : Constant
Bit rate                  : 512 kb/s
Channel(s)                : 1 channel
Sampling rate             : 32.0 kHz
Bit depth                 : 16 bits
Stream size               : 18.4 MiB (3%)
Alignment                 : Aligned on interleaves
Interleave, duration      : 999  ms (29.97 video frames)
```

Info photo data

File	
Bits Per Sample:	8
Color Components:	3
Comment:	GPEncoder
Encoding Process:	Baseline DCT, Huffman coding
File Type Extension:	jpg
File Type:	JPEG
Image Height:	3024
Image Width:	4032
MIME Type:	image/jpeg
Y Cb Cr Sub Sampling:	YCbCr4:2:2 (2 1)

Composite	
Image Size:	4032x3024
Megapixels:	12.2

Operations

Charging

- Use the provided cable to charge the camera. Plug the mini-USB connector into the camera and the normal USB plug in your computer or use an external charger. Nevertheless I suggest a wall charger for faster charging. Charging time, according the seller will take 2-3 hours.

Charging without an SD-card

- Once the camera is connected to a power source, the blue LED is lighting one time, than the red LED is blinking, indicating that the camera is in charge. When the camera is fully charged, the LED is turning to solid red. Power the camera off before disconnecting the power cord.

Charging with an SD-card inserted

- Once the camera is connected to a power source, the blue LED is lighting one time, than one time red and again 3 times blue. After that, the LED goes out. This means that the camera is recording while in charge. To stop recording, briefly press the on/off button. The LED is now blinking red again which means that the camera is in charge. When the camera is fully charged, the LED is turning to solid red. Power the camera off before disconnecting the power cord.

Video Recording

- Push the on/off button until the blue LED is lighting. Release the button. Note : when no card is inserted, the blue LED will shortly light. After that the LED is flashing blue/red a few times and the camera turns off. When an SD-card is inserted a solid blue LED is visible. The camera is now in standby mode. If no action is taken, the camera will power off after 1 minute.

720p recording

- In standby mode (blue LED is lighting), push one time the on/off button to begin recording. The blue LED is flashing 3 times and the recording in 720p begins. During 720p recording, no LED are lit. Push again the on/off button and the recording stops. The state of the LED returns to solid blue. To power off the camera, push and hold the on/off button until a fast blinking blue LED is visible. After that the LED goes off and the camera is turned off.

1080p recording

- In standby mode (blue LED is lighting), change to 1080p by using the 'Mode' button. Push one time the 'Mode' button, the LED is turning from blue to blue/red. Push one time the on/off button to begin recording. The LED is flashing three times blue/red and the recording in 1080p begins. During 1080p recording, no LED are lit. Push again the on/off button and the recording stops. The state of the LED returns to blue/red. To enter again the 720p mode, push two times the 'Mode' button. The LED is showing again a solid blue. To power off the camera, push and hold the on/off button until a fast blinking blue LED is visible. After that the LED goes off and the camera is turned off.

Dashcam use

- You can use the A3s as a dashcam. If connected to a USB car socket, the camera will start automatically and record a 720p video when you turn on the engine. If you want the camera to record in 1080p, you have first to turn on the camera and change to 1080p video before connecting the camera to the power source, else it will not work. In both modes (720p and 1080p) the camera will create sequences of 5 minutes each. When the capacity of the SD card is reached, it will overwrite the oldest record and continue recording a new sequence. When you turn off the engine, no matter which mode you have chosen, the camera will record the last sequence and turn off the device.

Photo shooting

- In standby mode (blue LED is lighting), change to Photo Mode by using the 'Mode' button. Push two times the 'Mode' button, the LED is turning from blue to blue/red and than to red. Take a Photo by pressing the on/off button.The red LED is briefly going off, than returns to solid red. A photo was taken. To return to video mode, push one time the 'Mode' button. The LED is showing again a solid blue.To power off the camera, (in photo or video mode),push and hold the on/off button until a fast blinking blue LED is visible. After that the LED goes off and the camera is turned off.

Motion detection

[720p motion detection](#)

- Power the camera and wait until the blue LED is lighting. Press the 'Mode' button for about 3 seconds. The blue/red LED is flashing three times and the motion detection becomes directly active. During the recording, the LED is off. The camera will now record a sequence of a minimum of 1 minute. As long as a movement is detected the camera will continuously record (up to 5 minutes sequences maximum). After saving this sequence, the camera will stop recording. The LED is still off, but the motion detection mode remains activated. Once a new movement is detected, the camera begins again to record as long as a movement is detected (5 minutes sequence max). A new movement detection is reported by a short blue/red flashing LED. Stop the detection mode by pressing the on/off button. To power off the camera, (in standby or motion detection mode), push and hold the on/off button until a fast blinking blue LED is visible. After that the LED goes off and the camera is turned off

- Power the camera and wait until the blue LED is lighting. Press the 'Mode' button one time to change to 1080p. Press and hold again the 'Mode' button. During this maneuver a red LED, a blue/red LED and a blue LED are flashing several times. After that, all the LEDs are going off. The camera is now in 1080p motion detection. The camera will now record a sequence of a minimum of 1 minute. As long as a movement is detected the camera will continuously record (up to 5 minutes sequence maximum). After saving this sequence, the camera will stop recording. The Led is still off, but the motion detection mode remains activated. Once a new movement is detected, the camera begins again to record as long as a movement is detected (5 minutes sequence max). A new movement detection is reported by a short blue/red flashing LED. Stop the detection mode by pressing the on/off button. To power off the camera, (in standby or motion detection mode), push and hold the on/off button until a fast blinking blue LED is visible. After that the LED goes off and the camera is turned off

Time Stamp

- When a blank SD-card is inserted, the camera will create a 'txt' file (TIMEREST.txt) to give you the opportunity to display the time/date data on your video/photo. The format is **20181031152035 Y** (for display) and **20181031152035 N** (for no display). Open the TIMEREST.txt in a text editor and set the correct date and time as well as 'Y' or 'N' at the end to dispay or not the time stamp in your video/photo. Directly after saving the file, insert the card in the camera and power the camera to update the internal clock.

SD-card directory

- When you connect the camera to your computer, the mass storage device becomes visible and is indicated by a drive letter. You can also take out the card and use it with a card reader. The SD card directory consists of a photo folder, a video folder, and the file for the timestamp.
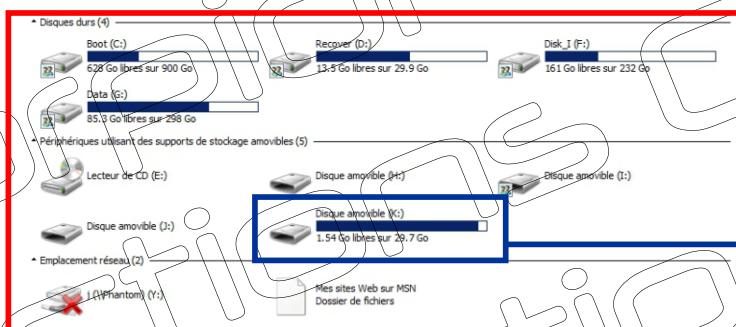
Computer drive letter

Photo folder

Photo folder

SD-card directory

Resetting the camera

- As indicated in the manual, you should be able to reset the camera by inserting a small object in the reset hole. Unfortunately, there exists no reset hole. If I find a solution, I will indicate it in a next update.

Using the A3s as a webcam

It is possible to use the A3s as a webcam, but not all programs are supporting this camera. One of a very interesting program is the 'Debut Video Capture Software ' from NCH which I use.
- Download the program from the website and install it **(1)**
- Turn on the camera and connect it to the computer using the supplied cable. The camera is now charging and the mass storage drivers will be installed **(2)**. Wait until these drivers are completely installed. Now push the on/off button. Supplemental video and audio drivers will be installed **(3)**. During all these operations the red LED flashes, no matter if your are in video mode or in charging/access mode. (note : you do not need to remove the SD-card). Next time you connect the camera to the computer, the camera will directly start in charging/access mode. You need to push the on/off button to switch to the video transfer mode.
- Start the program now. Open the 'Tools' menu **(4)**, then 'Options'. In the Video tab, chose the device 'GENERAL -UVC ' **(5)**
- The A3s is now ready for use
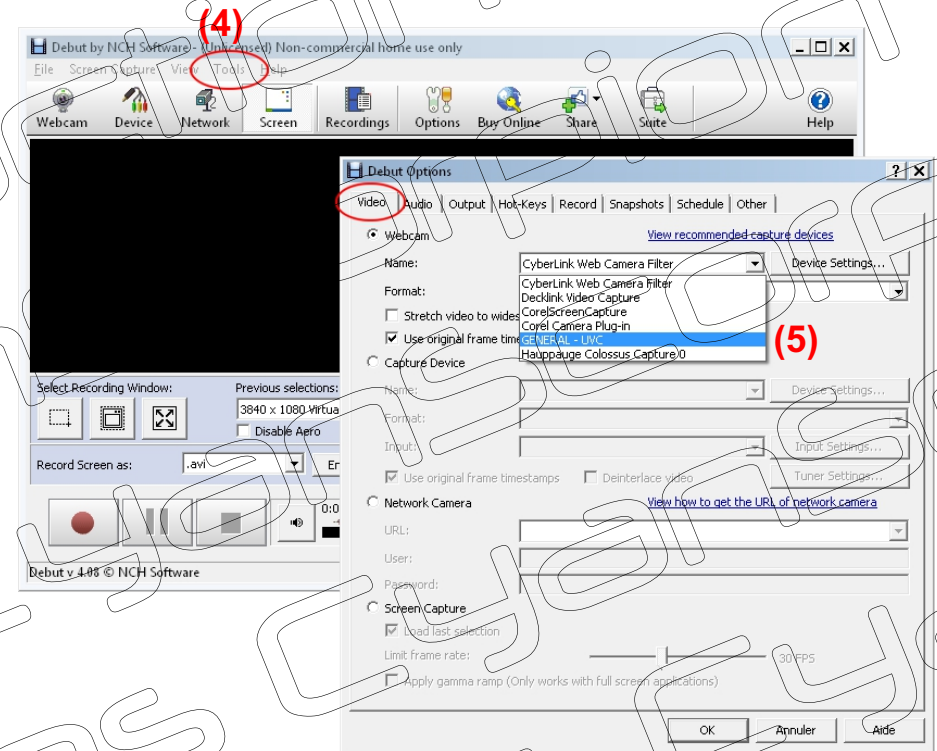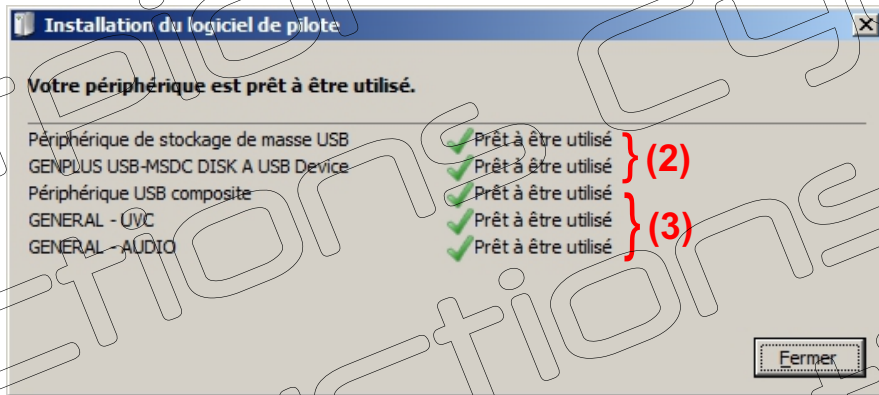
Sample of a captured image in Debut software

2018/10/31 15:14:05
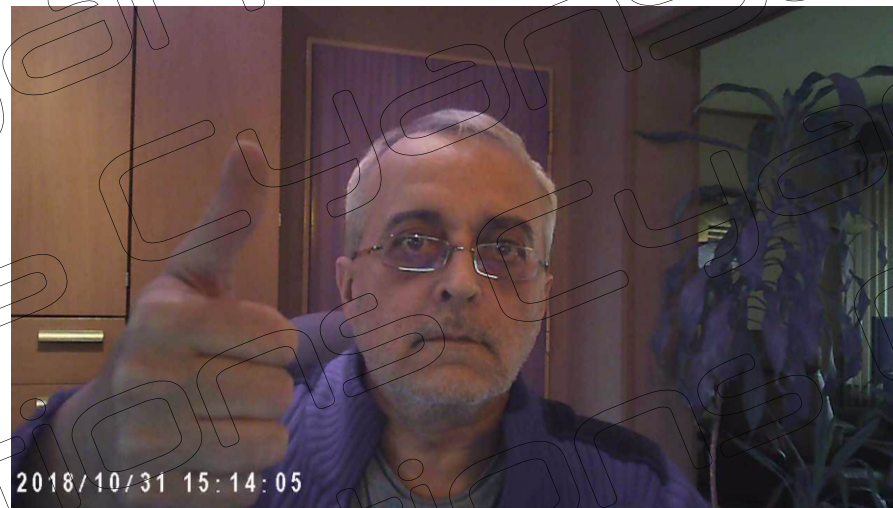
TV connection

If you like, you can use your camera as a surveillance camera. You can connect the camera directly to your TV's AV input. **(A)** using the provided cable. On the TV, select AV as your input **(B)**.Now turn on your camera and an image in 720p is displayed **(C)**. Note : you can only display a live image. It is not possible to playback recorded files on TV.

(A)

(B)

No Signal

(C)
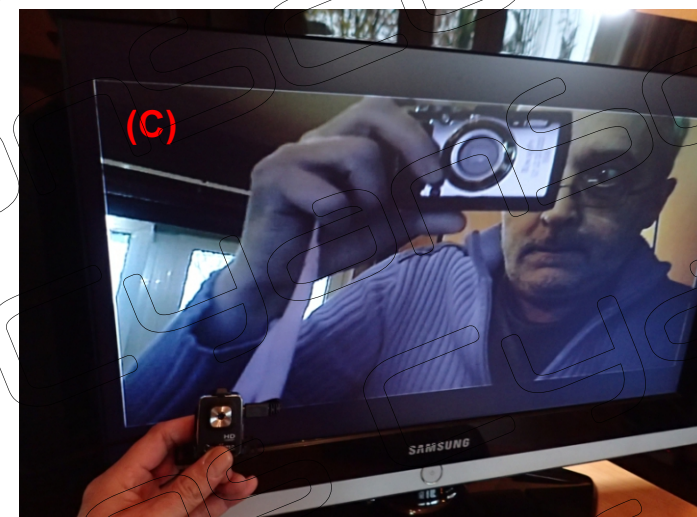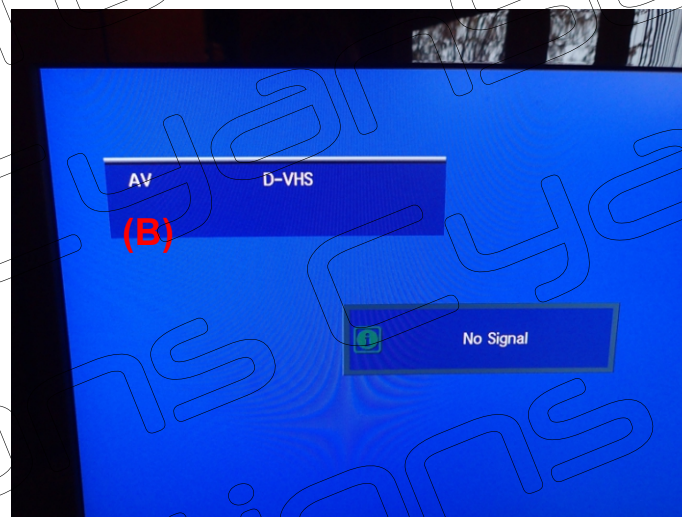
If you want to use your camera as a surveillance camera, I also recommend connecting an external power source.