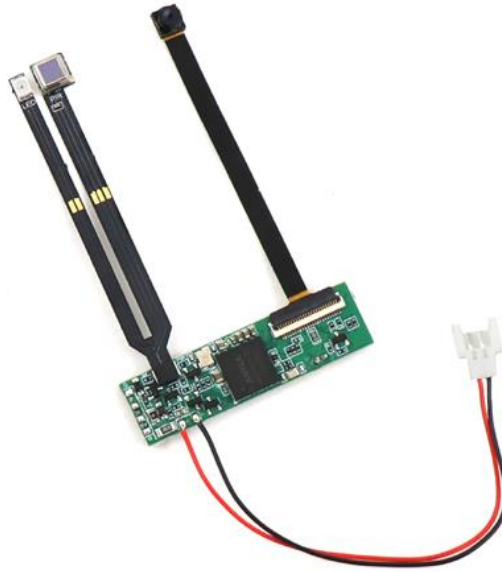


User Manual CAM50

DVR module with motion detector and PIR sensor



A camera module of a new generation with super low power consumption. Super small camera with dimensions 5x5 mm and long 64 mm ribbon cable. The novelty here is that the module has a PIR sensor, i.e. a motion detector. When set to PIR motion detector regime, the camera will record video only when motion is detected regardless whether it is day or night. What is even better is that it also has IR LED with invisible light capable of illuminating objects up to 25 cm. And that is not all, the PC software has a Time Lapse feature which means you can choose the working time of the camera - during the day or the night, or in certain time periods. The Time Lapse feature allows you to record only at times of your choice and, not lastly, to save battery power. The free software that comes with the camera allows you to adjust multiple settings: date and time, work regime: Normal, Auto, Motion Detector, PIR Motion Detector, the option to select FPS of the recording, resolution of the recording - 640x480 or 352x288 - time lapse, night vision diode and many more. Power consumption when in standby mode in PIR Mode is exceptionally low, with a 1000 mA battery - around 10 days. A great module with multiple features at a great price.

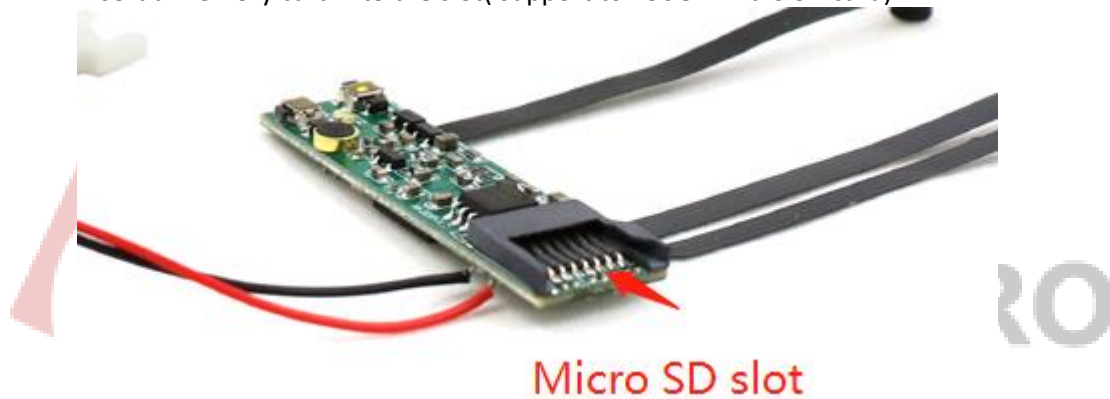
- The best product on the market
- Really small DVR module
- Super compact
- Super slim camera
- Super low power consumption-
- Super sensitive PIR sensor (motion detector)
- IR LED light invisible to human eye (illuminating objects up to 25 cm)
- Time Lapse - you choose the working time intervals for the camera.
- Four working modes:
 - * Normal
 - * Auto Frame
 - * Motion Detector
 - * Motion Detector with PIR sensor (recording only when motion is detected by the PIR sensor, regardless day or night)
- Video Format: MPG-4

- Video Resolution: 640x480 or 352x288
- Frames per Second: 5—30 fps (adjustable)
- The smallest camera: 5X5 mm
- Long ribbon cable: 60 mm
- Angel degree: 90
- Date and Time: Yes

- Recording Memory: 1GB/hr at 352x288 and 15 fps
- Work voltage: 3.7 V
- Power Consumption:
 - * Recording – 95 mA
 - * Pir Mode – 5mA
 - * Standby – 2mA
- Size: 4 * 12 * 45 mm

How to Setup camera:

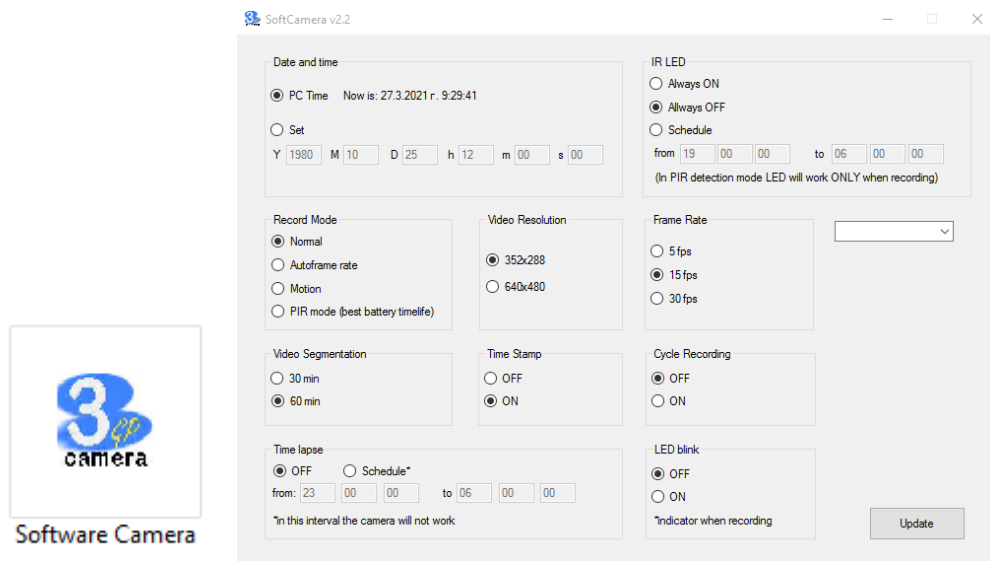
1. Insert a memory card into the slot(support to 256GB Micro SD card).



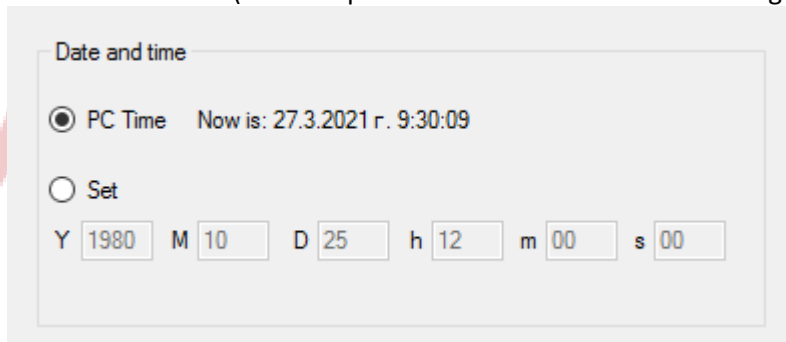
2. Connect the battery to the camera connector(use only 3.7V battery with correct connector).



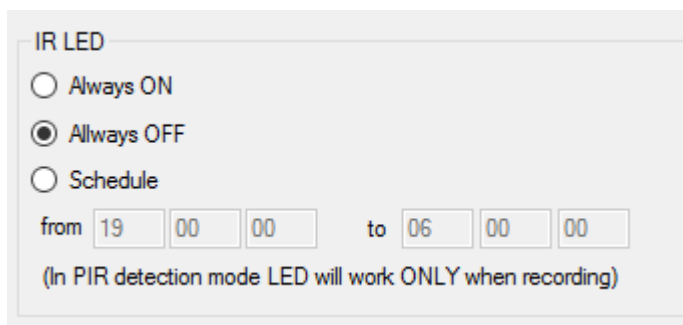
3. Connect USB cable to PC wait around 15-20 seconds to detect USB port open software PC app.



4. Set Time and Date (can setup camera manual or automatic will get PC time)



5. Set IR LED (Set the operation mode of the light IR diode)
* IR LED light is invisible to human eyes.

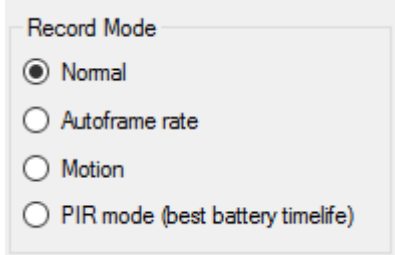


Always ON- The LED will light up all the time when the camera is recording.

Always OFF- The LED light will be always OFF when the camera recording.

Schedule- Select the period during which the LED light will operate during recording.

6. Set Recording mode (Setting the recording mode)



Record Mode

- Normal
- Autoframe rate
- Motion
- PIR mode (best battery timelife)

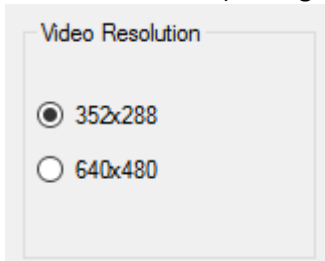
Normal- The camera will record all the time without stopping.
Power consumption around 95 mA/h(IR LED OFF) and 115 mA/h(IR LED ON)

Auto frame rate-The camera will record all the time without stopping.
If there is no movement, it will record at a reduced FPS (1-5 fps).
When the camera detects movement it will increase the FPS (15-30fps).
This mode saves memory space, not power consumption.
Power consumption around 95 mA/h(IR LED OFF) and 115 mA/h(IR LED ON).

Motion- The camera will record only when it detects movement.
Recording starts when the camera detects movement.
Waiting detect movement power consumption around 75 mA/h.
Recording power consumption around 95 mA/h(IR LED OFF) and 115 mA/h(IR LED ON).

PIR mode- The camera will record only when it detects movement.
Recording starts when the PIR sensor detects movement.
Best mode for save battery power and to save memory space on micro SD card.
Waiting detect movement power consumption around 5 mA/h.
Recording power consumption around 95 mA/h(IR LED OFF) and 115 mA/h(IR LED ON)

7. Video Resolution (Setting the video resolution)



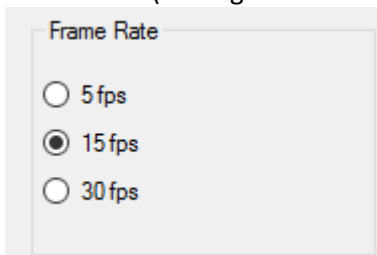
Video Resolution

- 352x288
- 640x480

352x288- Low video resolution.

640x480- High video resolution.

8. Frame Rate (Setting the video clip, frames per second)



Frame Rate

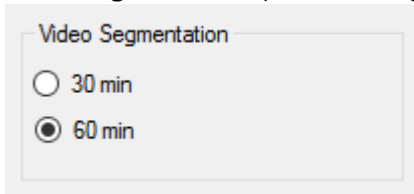
- 5 fps
- 15 fps
- 30 fps

5 fps- 5 frames per one second

15 fps- 15 frames per one second

30 fps- 30 frames per one second

9. Video Segmentation (Set how long to recording and segmentation the each video clip)

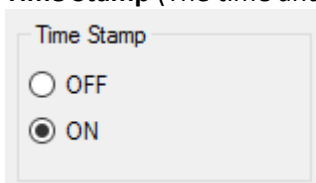


The screenshot shows a 'Video Segmentation' control panel with two radio button options: '30 min' and '60 min'. The '60 min' option is selected, indicated by a filled circle next to it.

30 min- On every 30 minutes will save records on micro SD card. For example, if camera recording 5h, will have 10 video clip (each 30 min).

60 min- On every 60 minutes will save records on micro SD card. For example, if camera recording 5h, will have 5 video clip (each 60 min).

10. Time Stamp (The time and date of the video are displayed as a watermark)



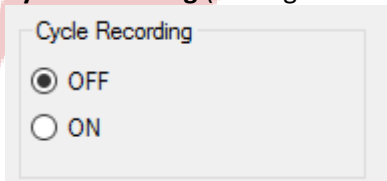
The screenshot shows a 'Time Stamp' control panel with two radio button options: 'OFF' and 'ON'. The 'ON' option is selected, indicated by a filled circle next to it.



OFF- Not Displayed date and time

ON- Displayed date and time

11. Cycle Recording (Setting video loop)

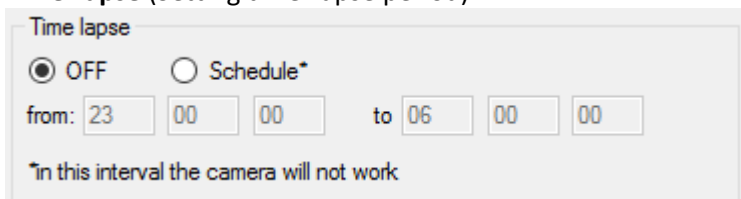


The screenshot shows a 'Cycle Recording' control panel with two radio button options: 'OFF' and 'ON'. The 'OFF' option is selected, indicated by a filled circle next to it.

OFF- If micro SD card is full and not have memory space, camera will OFF. And not will deletes old files on Micro SD card.

ON- Deletes old files on Micro SD card and automatically saves new ones on the oldest ones

12. Time Lapse (Setting time Lapse period)



The screenshot shows a 'Time lapse' control panel. It has two radio button options: 'OFF' (selected) and 'Schedule*'. Below the options, there are time selection fields: 'from: 23 00 00 to 06 00 00'. A note below the fields states: '*in this interval the camera will not work'.

OFF-Time Lapse is OFF and the camera will recording like as is the set mode.

Schedule- Time Lapse is ON by schedule. In this interval of time camera will not work and not will recording video. Camera will be on standby more, power consumption is 2mA/h, this is save power battery.

This is a very good option if you want the camera not to work for a certain time range.

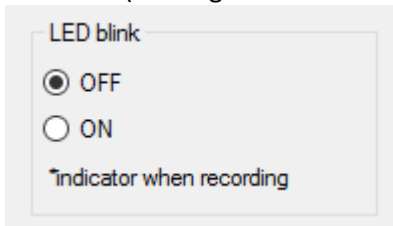
Example:

If set camera schedule interval 23:00 to 06:00:

- from 23:00- to 06:00 – camera will be OFF and not will recording video.

- form 06:00 to 23:00 camera will be ON and will recording video like as set mode.

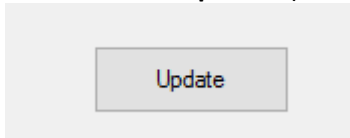
13. LED blink (Setting Led indicator on board)



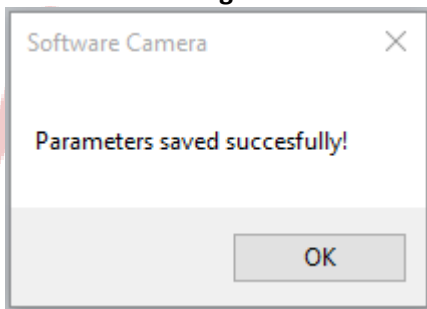
OFF- Led indicator on board Not will blink when recording.

ON- Led indicator on board will blink when recording.

14. Press button “Update” (save the camera settings)



VERY IMPORTANT: Need wait some seconds to save and update settings on camera.
Will see this dialog windows



Then press “OK” button.

Wait 1-2 seconds and remove camera from PC USB.

Done.

How to start camera:



Press the button once and hold for 2 seconds, a yellow diode will light up.

After 3-4 seconds , a red diode will start flashing - it shows the selected work mode - and the camera is ready to work. During taping, a red diode will flash (if you have selected that option from the software)

How blink Led indicator:

Normal mode: Yellow Led is ON > Red Led blink 5 times > All Led OFF

Auto Frame mode: Yellow Led ON > Red Led blink 3 times > Yellow Led blink 2 times > All Led OFF

Motion mode: Yellow Led ON > Red Led blink 3 time > Red Led OFF > Yellow Led blink 2 times > Yellow led OFF

PIR mode: Yellow led ON > Red Led blink 4 times > Red led OFF > Yellow Led blink 2 times > Yellow Led OFF

How to Download file:

Can use the computer USB or directly can download from the Micro SD card.

How to charging Battery:

Connect USB cable to USB Charger adapter 5V. Yellow Led indicator will start blink after 20 seconds. When battery is full Yellow Led indicator will ON and stop blink.

How to change the sensitivity of the sensor:

The PIR sensor is extremely sensitive, lowering sensitivity is done by covering part of the PIR sensor (allowing you to adjust to desired sensitivity)

Example:



100% sensitivity – all 5x5 mm sensitivity area is visible



50% sensitivity – 5x2.5 mm sensitivity area is visible



25% sensitivity – 2.5x2.5 mm sensitivity area is visible

* Need to make more test to get the desired result .

Another option is to place a part of plastic in front of the sensor, and to make hole.

If hole is bigger sensitivity will be high, if hole is smallest sensitivity will be low.

Invisible IR diode lighting (IR LED):

The light emitted by the diode is invisible to the human eye and is capable of lighting an object distance up to 15-25 cm. (depending on conditions).

The operation of the IR diode is controlled by the relevant working mode selected in the software.

Package:

Mini PIR detect DVR Camera CP50

<https://cardreaderpro.co>