RSV5-C328 Serial Command ControlledCamera with Infrared Lens

A great very small camera from arduino egypt that can be fully controlled by your Arduino or Mico-controller (TTL Version) or your PC (RS232 version). This low cost camera can work for your robot, security system, or you can put it on your moving vehicle(car/ airplane). It can take fixed pictures (snapshot) or continuous video frames. It is equipped with infrared lens which make it able to take photos even in very weak lighting (night vision).

This give great opportunity for using the RSV5-C328 camera in your project. You can write your program such that the camera start taking snapshot when your GPS reading give certain position. Or you can start taking photos at certain time during the day as defined by your program. You can order the camera to start taking snapshot when your object detection sensor (ultrasonic or PIR motion sensor) indicates there is an object.

The small dimensions and weight allows the camera to be put on a small servo and controlled to rotate in all directions.

RSV5-C328 is controlled by twelve commands, like *Sync, Initial, Snapshot, GetPicture* and so on. These commands are represented by two bytes and has four arguments. The complete command packet is always six bytes long. Please read both RSV5-C328 user manual and code commands tutorials for better understanding of the camera functionality.

1- **Model Number**: RSV5-C328
2- **Photo Format:** Jpeg Compressed
3- **Colors**: Colored photos as well as grey scale photos according to your program settings. Built-in colour conversion circuits for 2-bit gray, 4-bit gray, 8-bit gray, 12-bit RGB, 16-bit RGB or standard JPEG preview images.

4- **Lens**
Lens Type: Infrared lens , 2.8 mm
Lens Filter: 980 nm
What does mean?
This means that the camera can detect photos not only during day light but also at night in weak light conditions because of infrared capabilities

5- **Signal output data format**: serial RS232 or TTL
What does this mean?
It means that the camera output signal data comes in RS232 and you can receive data from the camera or give commands to camera using PC serial port or using any serial RS232 input -output in your micro-controller. This direct connection to RS 232 serial port makes it easy to connect with the camera without any hardware in between

6- **Resolution:** VGA 640×480 or less (according to your program)
7- **Baud rate:** 115200 or less (according to your program)
8- **Weight**: 20 gram
9- **Dimensions**: :32mm*32mm,38mm*38mm
10- **Pin Description**:
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10- **Pin Description**:
four pins as shown in the picture above as follows:

- Power: 5v
- Rx (UART data receive - input)
- Tx (UART data transmit - output)
- Ground

11- **Working Modes**: Snapshot or Video

What does this mean?

This means that you can make static or fixed pictures (Snapshots) or continuous video frames according to your software command to the Camera. This is good as you can take snapshots at certain conditions and then it is easier to make your photo analysis (pattern recognition for example) with small amount and well defined data.

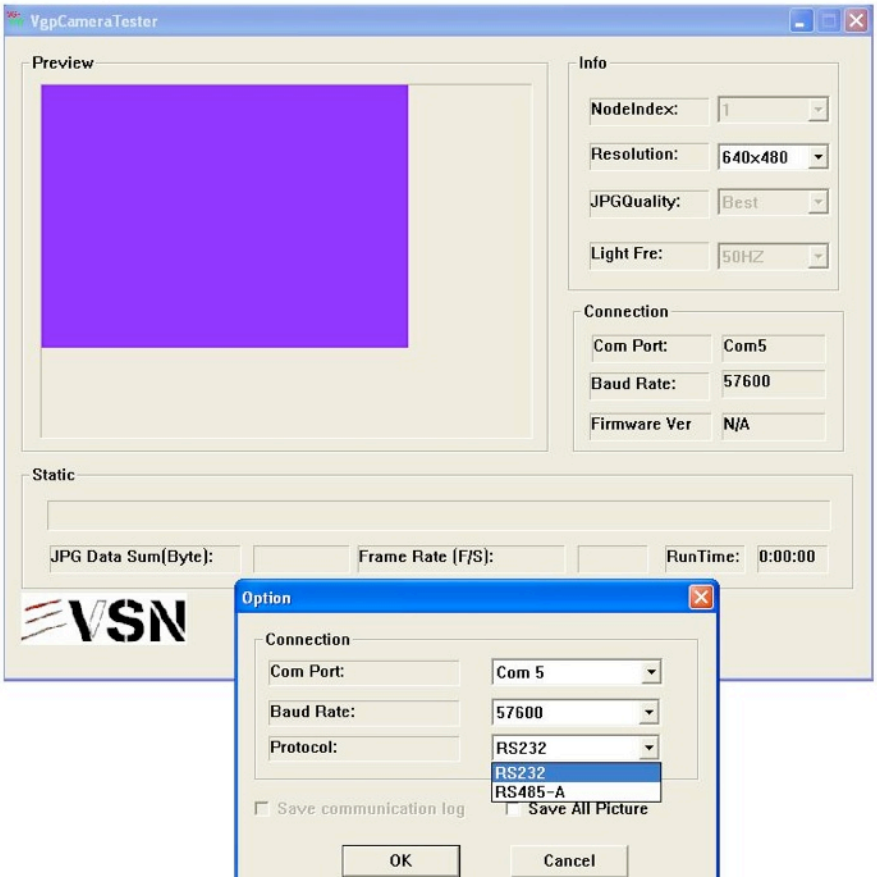
How does it work?

The camera is fully controlled through a group of commands sent by your Micro-controller or Arduino board or PC and respond to this commands. This commands are called protocol and you have to program them. The specific protocol for this camera is the famous protocol OV528.

Applications:

- Robots
- Vehicles (cars or airplanes)
- security
- Industrial monitoring process.

12- **Camera Testing:**
You can test the camera on your pc serial port using our testing software as shown in picture. To download testing procedure , please click here and for a copy of our testing software, please send us e-mail (info@fut-electronics.com).



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