RC-02 Servo control
User Manual

33 DEVICES

RC-02 Servo control system is designed to change the position of servomotor on RC models via independent radio channel. The system can be used as parachute activation system, control of the mechanism of lifting and lowering the load and so on. Operation using separate radio channel lets you to control the servomotor independently of the main RC.
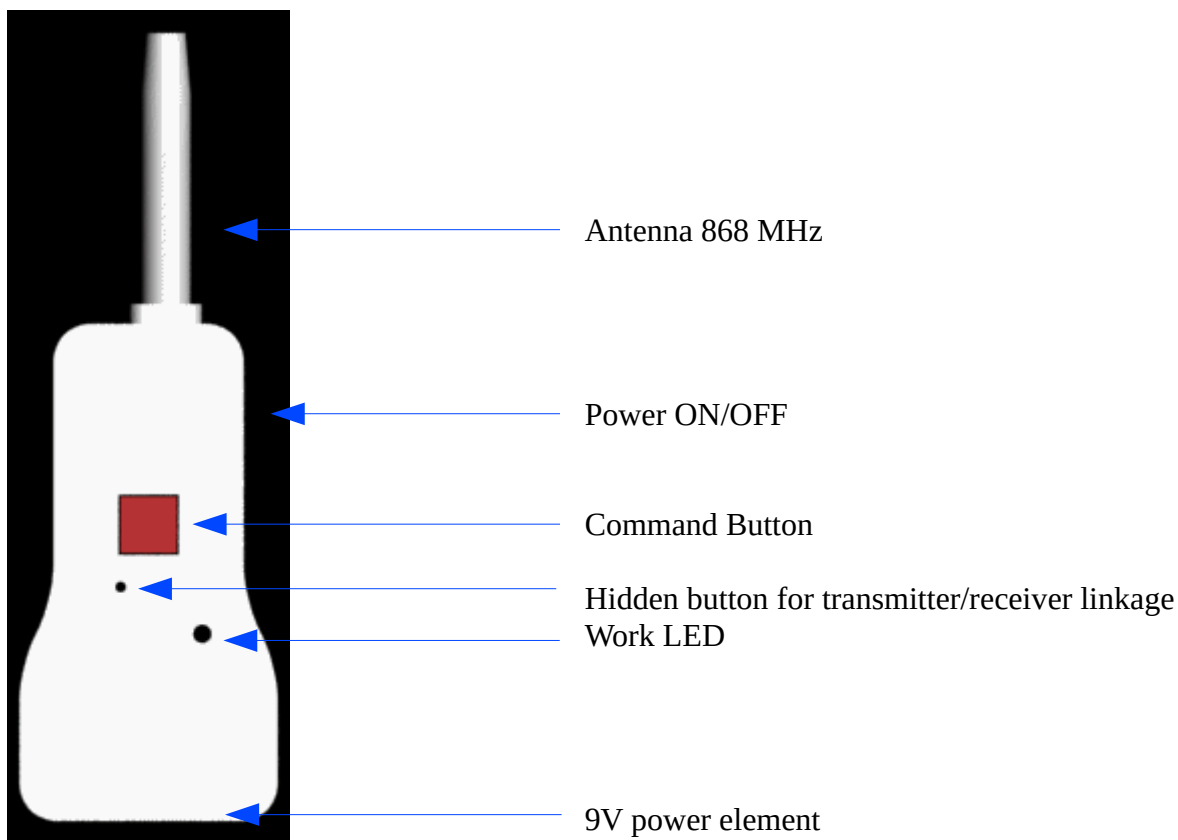
Technical specs:

Receiver:

Input voltage	DC 5 V
Output signal	PWM, 1000-2000 us, 5V
Power consumption	10 mA
Frequency	868 MHz
Weight	4 g
Dimensions	26x20x7 mm

Remote control:

Input voltage	DC 9 V (CR9V)
Power consumption	205 mA
Frequency	868 MHz
Dimensions	211x64x26 mm
Working distance	Up to 3km/1.9miles (depends on landscape)

Remote control

Antenna 868 MHz

Power ON/OFF

Command Button

Hidden button for transmitter/receiver linkage
Work LED

9V power element

Receiver

Antenna

Button for
transmitter/
receiver
linkage

1

service cable socket

+ − − + S
5v IN   servo
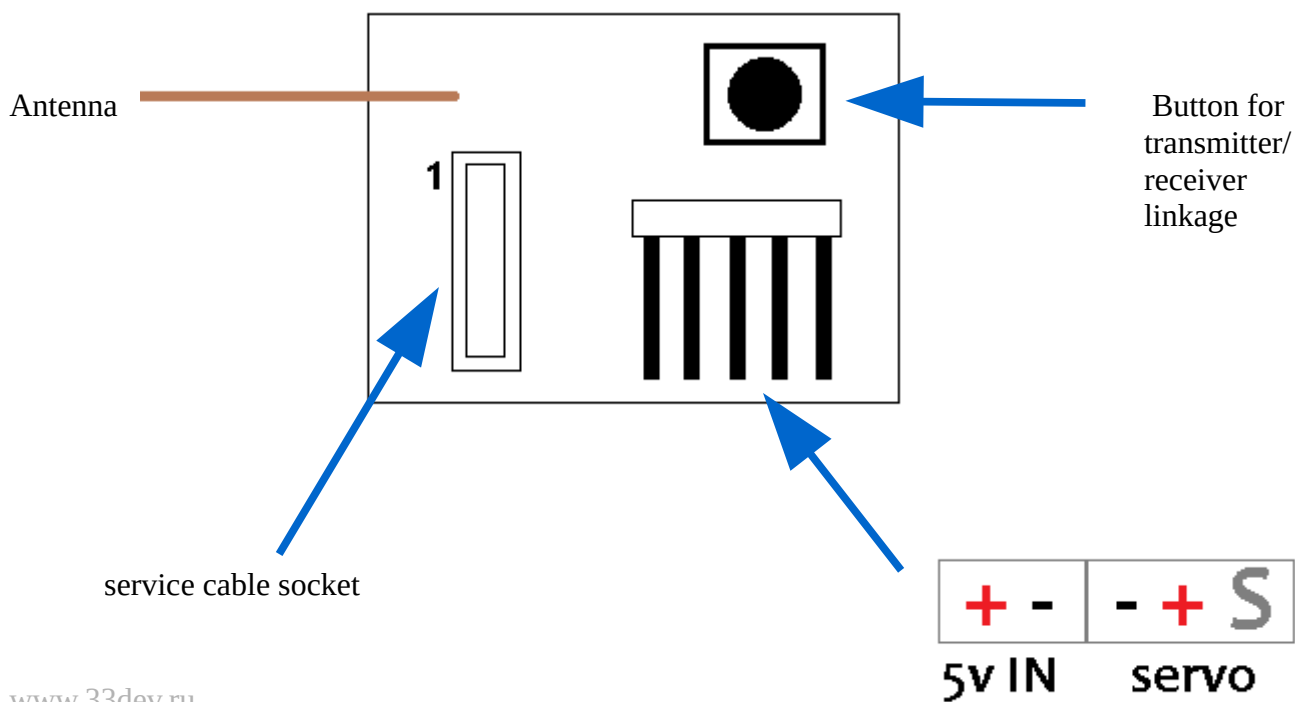
RC User Manual

It's recommended to switch on the RC only when you need to press the Command Button to save battery and avoid unwanted discharge. Delay after switch ON = 1 second.

To send command switch ON the RC, green LED will blink once.
Press once Command Button, green LED will blink once.

After command is received RC-02 moves the servo from position # 1 to position # 2, then sleeps for some time (timeout, by default - 3 seconds). After the timeout if new command is received RC-02 will move the servo back to position #1 and sleep again. After the timeout, RC-02 is ready to receive new command.
Timeout is set to avoid repeated presses on RC and duplicate commands.
Positions #1 and #2, as well as the timeout can be configured with the service cable and PC.
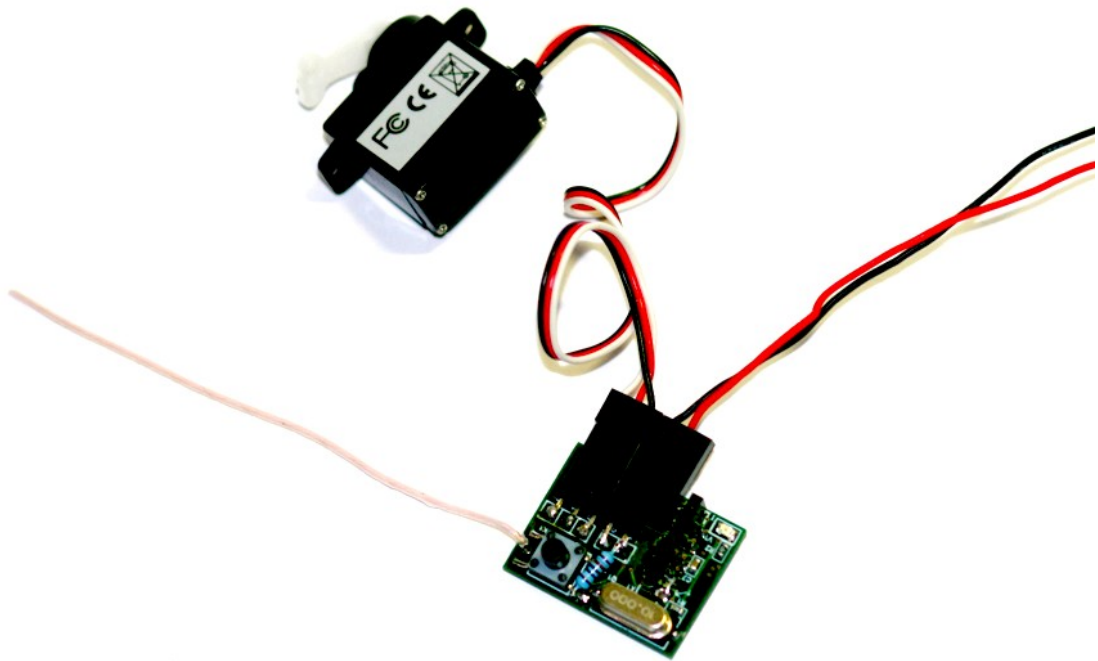
Changing settings with service cable

1. Connect service cable to USB port and wait when New device (usbuart, SiLabs, FT232 , etc…) will appear and drivers will be installed. If the device is unknown, go to **www.33dev.ru** and download drivers pack. After successful installation new virtual COM-port will be added.
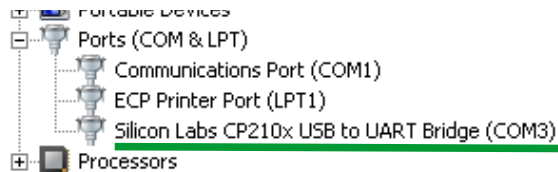

2. Start COM-port terminal software (Hyperterminal or Teraterm for Windows, Coolterm for Mac, etc.) .
3. Choose your virtual port, select 4800 baud rate, connect to COM-port.
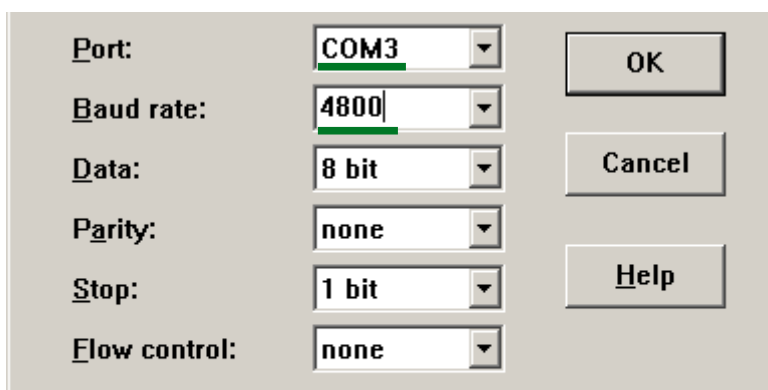
4. Connect RC-02 Receiver to 5V power source and connect service cable to the socket shown on RC-02 scheme on previous page. Check the marks on service cable and the receiver to avoid reverse connection.
5. The following menu will be shown in terminal window:
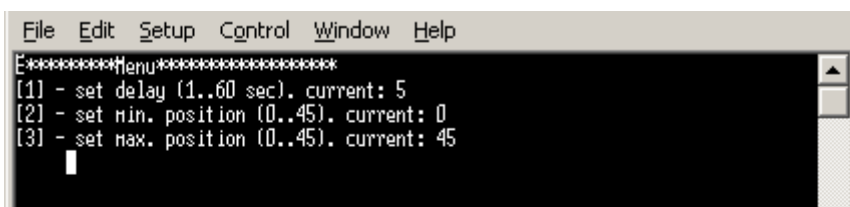
6. Enter the number of necessary option (for example, "1") and enter new value, then press Enter to save this value into receiver's memory.
Set delay – delay, timeout after each command is received and servo moved, in seconds, 1 to 60 sec
Set min/max position – positions of servomotor, in points, from 0 to 45 (corresponds to PWM signal from 1000 to 2000 us)

RC and receiver linkage

To link RC-02 transmitter and receiver switch off all other transmitters, receivers, motors and other radio noise electronics on your UAV, connect the battery and follow these steps:

1. Connect receiver to the power. Green LED on receiver will blink once.
2. Switch on the RC. Green LED on RC will blink once.
3. Press once the link button on receiver. Green LED will light continuously.
4. Press once the hidden link button on RC (use the needle). Green LED on RC will blink once.
5. Check the receiver LED status. In case of good link the LED will blink several times and turn off. If the LED does not blink and lights continuously then switch off the power and try steps 1-4 again.

FAQ

RC-02 Transmitter

Question: After Command Button is pressed the LED is on and don't switch off.
Reason: Radio noise in the air
Solution: Switch off and then switch on the RC. If this problem occurs during linkage RC and receiver try to switch off and back on the receiver. Check that all other transmitters and motors are switched off.

If you have any questions, feel free to contact info@33dev.ru
Website: www.33dev.ru