RCD3003

MultiFunction Remote Switch

Features

- 1 Servo signal input, control up to 7 devices
- 5-16V AUX Power input, total max 3.5A output
- 7 outputs, 500mA max current per channel
- 7 LED indicate working state
- 9 Preset mode
- 10bit Digital switch, easy to operate
- False trigger protection
- Calibration feature,compatible with all RC system
- Metal shield, reduce EMI and good heat dissipation
- Small size, light weight, only 5 grams

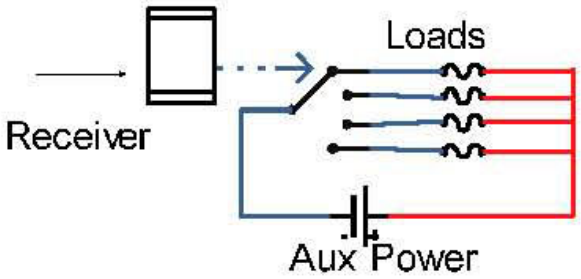
Applications

- RC model rocket launch
- RC model smoke control
- Weapons systems for scale model
- Light control for model airplane
- All kinds of remote control switching system

Description:

The remote switch via a Servo channel to control up to 7 devices. It provides up to 9 pre-set mode for operation, using a digital switch to select work mode. 7 LED indicate the current mode of operation on real-time. We have unique security control, if the accident triggered switch, it will not cause false triggering.

Figure 1



The RCD3003 uses receiver power supply, and Aux battery only powered for loads.

Installtion Notes

1. Connection

Connected your input cable to a free receiver channel.

Before you connected, note the power of positive and negative, as shown below(Figure 3), the red terminal is positive, the black terminal is negative. (Please note that before the calibration, DO NOT connect any Aux power supply, or plug with the loads, otherwise false triggering may be dangerous).

RCD3003 device itself is powered by the receiver,

external Aux power supply is only responsible for the peripheral loads, the red LED lights to indicate Aux power is ready.

2. Calibration

Connect RCD3003 to The Receiver, put Digital Switch to position 0, then power on receiver and your remote controller, then all of the green LED flashes 2 times, Ready to calibrate. Toggle Switch ON-> OFF-> ON several times from your Romtoe Controller, all LED flash once again, calibration complete. Please note that if the power on before setting digital swich on the 0 position, RCD3003 will enter the calibration process, the other position is the normal work mode. Calibrated only once, the system will record the calibration value, if you changed the remote controller, the proposed re-calibration.

3.Select work mode

After calibration, Put digitor switch to the appropriate position, the first all 7 Way LED flashes twice, then repeat the two shows 7 way switch current of the working order. Before the completion of the Demonstration,RCD3003 do not accept any remote control signal, and it will not trigger any load switch. Mode 1 to mode 4 is the most suitable model rocket launch, in these modes, each corresponding to switch closed only 0.5 seconds, and then off immediately. Because the fuse that may short-circuit in the trigger, so to protect the load switch, while protecting the battery is not over discharge, in the above-mentioned four kinds of mode, the green LED light indicates that the channel switch has been triggered, and does not mean that the continued closure of switch status.

4.Trigger

Quickly toggle the switch a loop (OFF-> ON-> OFF)on your remote controller, RCD3003 is trigged, the corresponding LED is light on. Toggle a cycle if longer than 0.5 seconds, are considered invalid trigger, only a single toggle switch (OFF-> ON) or (ON-> OFF) system is also considered a false trigger, this action will be ignored .

Figure 2

RCD3003 for airplane smoke control

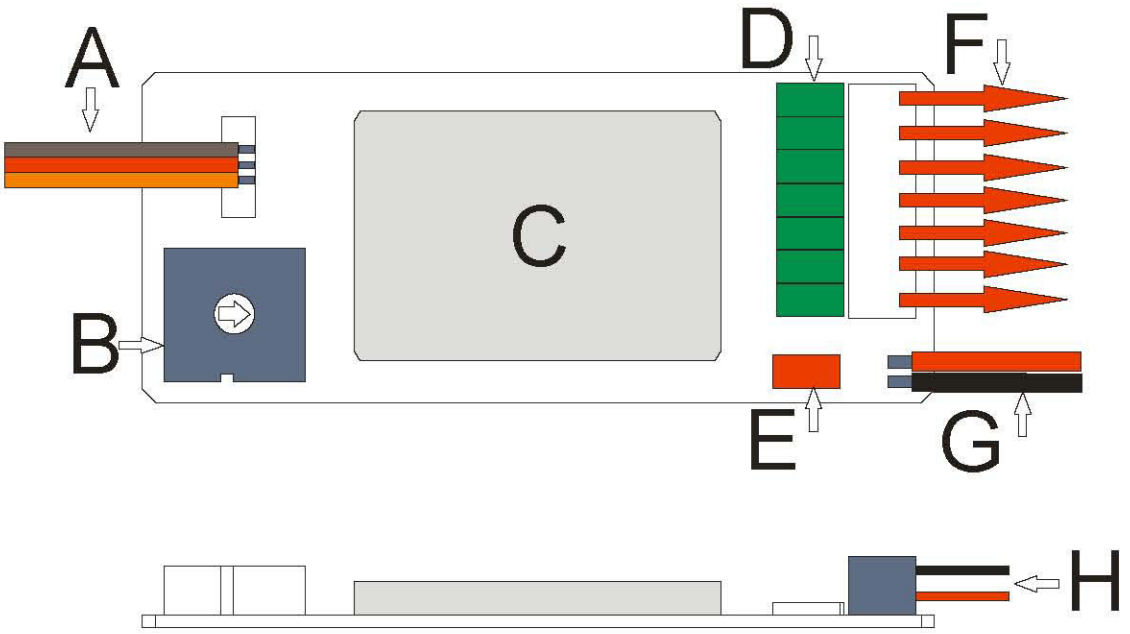


Figure 3

A: Connect to receiver (usually connected to the 5 channel).
B: Digital Switch for select work mode, If power on the position is "0", then restore factory settings, need to re-calibration.
C: RCD3003 driver board.
D: 7 GREEN LED, indicates current switch work state.
E: RED LED, when Aux power is ready ,LED will be light.
F: connector output, each independent output, you can connect up to 7 peripherals.
G: Aux Power supply or battery
H: Each connector on top for the negative terminal, below the positive terminal, please note.

Work Mode table

● that the current switches off
○ that the current switches on
☆●switches on first, after 0.5 seconds then switches off

mode1：

Trigger times	sw1	sw 2	sw 3	sw 4	sw 5	sw 6	sw 7
1	☆●	●	●	●	●	●	●
2	●	☆●	●	●	●	●	●
3	●	●	☆●	●	●	●	●
4	●	●	●	☆●	●	●	●
5	●	●	●	●	☆●	●	●
6	●	●	●	●	●	☆●	●
7	●	●	●	●	●	●	☆●

Mode2:

Trigger times	SW1	SW2	SW3	SW4	SW5	SW6	SW7
1	●	●	●	●	●	●	☆●
2	●	●	●	●	●	☆●	●
3	●	●	●	●	☆●	●	●
4	●	●	●	☆●	●	●	●
5	●	●	☆●	●	●	●	●
6	●	☆●	●	●	●	●	●
7	☆●	●	●	●	●	●	●

Mode3:

Trigger times	SW1	SW2	SW3	SW4	SW5	SW6	SW7
1	☆●	●	●	●	●	●	●
2	●	●	●	●	●	●	☆●
3	●	☆●	●	●	●	●	●
4	●	●	●	●	●	☆●	●
5	●	●	☆●	●	●	●	●
6	●	●	●	●	☆●	●	●
7	●	●	●	☆●	●	●	●

Mode4:

Trigger times	SW1	SW2	SW3	SW4	SW5	SW6	SW7
1	●	●	●	☆●	●	●	●
2	●	●	☆●	●	●	●	●
3	●	●	●	●	☆●	●	●
4	●	☆●	●	●	●	●	●
5	●	●	●	●	●	☆●	●
6	☆●	●	●	●	●	●	●
7	●	●	●	●	●	●	☆●

Mode5:

Trigger times	SW1	SW2	SW3	SW4	SW5	SW6	SW7
1	☆●	●	●	●	●	●	☆●
2	●	☆●	●	●	●	☆●	●
3	●	●	☆●	●	☆●	●	●
4	●	●	●	☆●	●	●	●

Mode6:

Trigger times	SW1	SW2	SW3	SW4	SW5	SW6	SW7
1	○	●	●	●	●	●	●
2	○	○	●	●	●	●	●
3	○	○	○	●	●	●	●
4	○	○	○	○	●	●	●
5	○	○	○	○	○	●	●
6	○	○	○	○	○	○	●
7	○	○	○	○	○	○	○
8	●	○	○	○	○	○	○
9	●	●	○	○	○	○	○
10	●	●	●	○	○	○	○
11	●	●	●	●	○	○	○
12	●	●	●	●	●	○	○
13	●	●	●	●	●	●	○
14	●	●	●	●	●	●	●

Mode7:

Trigger times	SW1	SW2	SW3	SW4	SW5	SW6	SW7
1	○	●	●	●	●	●	●
2	○	●	●	●	●	●	○
3	○	○	●	●	●	●	○
4	○	○	●	●	●	○	○
5	○	○	○	●	●	○	○
6	○	○	○	●	○	○	○
7	○	○	○	○	○	○	○
8	●	○	○	○	○	○	○
9	●	○	○	○	○	○	●
10	●	●	○	○	○	○	●
11	●	●	○	○	○	●	●
12	●	●	●	○	○	●	●
13	●	●	●	○	●	●	●
14	●	●	●	●	●	●	●

Mode8:

Trigger times	SW1	SW2	SW3	SW4	SW5	SW6	SW7
1	●	●	●	○	●	●	●
2	●	●	○	○	●	●	●

3	●	●	○	○	○	●	●
4	●	○	○	○	○	●	●
5	●	○	○	○	○	○	●
6	○	○	○	○	○	○	●
7	○	○	○	○	○	○	○
8	○	○	○	●	○	○	○
9	○	○	●	●	○	○	○
10	○	○	●	●	●	○	○
11	○	●	●	●	●	○	○
12	○	●	●	●	●	●	○
13	●	●	●	●	●	●	○
14	●	●	●	●	●	●	●

Mode9:

Trigger times	SW1	SW2	SW3	SW4	SW5	SW6	SW7
1	○	●	●	●	●	●	○
2	○	○	●	●	●	○	○
3	○	○	○	●	○	○	○
4	○	○	○	○	○	○	○
5	●	○	○	○	○	○	●
6	●	●	○	○	○	●	●
7	●	●	●	○	●	●	●
8	●	●	●	●	●	●	●