Features

■ Powered by receiver directly
■ Working voltage: 4.5V-8.5V
■ Red and blue LED lights indicates the present working status
■ Power consumption of stability supporting mode is less than 600mA
■ Monitoring and checking power on and off from the glow plug
■ Time limit, short circuit and low voltage protection
■ It can connect a buzzer from outside.

Application

All kinds of engines with glow plug
Helicopter and fixed wing airplanes for stable 3D flight supporting

Function Description

RCD3002 is a kind of remote controlled driver for glow plug, customers can control RCD3002's working status through the switch channel on the transmitter. The device shares the same battery pack with the receiver.

Time limit and low voltage protection, in order to ensure safe flying, the device will stop working when the trigger time is more than 5 minutes or the voltage is lower than 4.5V. Short circuit and over-heat protection work effectively when the system is short circuited and over-heat after long time flying, as soon as it returns to normal, the device resumes working.

It can adjust output current automatically according to the working status of the glow plug, to ensure the glow plug's working temperature the best, even if the glow plug is drowned into the fuel, it still can keep on a normal working temperature.

The device is high efficiency and less interference as it is driven through low frequency impulse width directly, but the resistance of the battery can also influence its working state, in some cases, the glow plug won't become hot and red because of the high resistance of the battery.

USAGE

The device gets two working ways (1)Start Mode, output power is the maximum, the glow plug is driven to hot-red state and the engine is ignited easily. (2) Stable Mode, that is the output power is half, the glow plug is driven to very near hot-red state, it can increase and stabilize the speed by combining with the engine's own momentum, it is the most power saving mode.

when the impulse width is less than 1.4ms, the device triggers off; when the impulse width is between 1.4ms and 1.6ms, it is under stable mode; normally, we can control the device by identifying two or three idle switches on the transmitter. After the device has been operated for 30 seconds as soon as it enters Start mode, it will enter the Stable Mode, the trigger switch is repeated and the time counting is resumed, it will turn off automatically when the time is more than 5 minutes under Stable Mode, in this case, the receiver battery won't be drained even the switch is not turned off accidently.

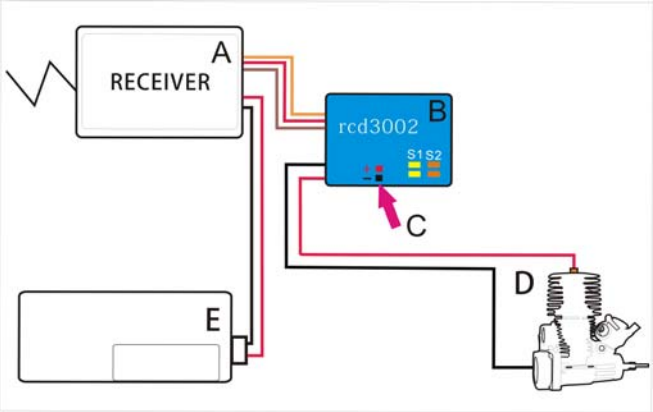
LED light description：

- Red LED light is off: no supply power, please check the connection.
- Red LED flashes slowly（ on for 0.25 second, off for 2 seconds）: The power is all right, control signal for receiver is normal, the device is under shut off mode.
- Red LED light flashes quickly(on for 0.5 second, off for 0.5 second)： No control signal or the supply voltage is abnormal.
- Red LED is on constantly and also the blue LED, the device is under Start Mode, the buzzer would have sounded constantly if it were connected with a buzzer outside.
- Red LED is on constantly and also the blue LED, when it enters Stable Mode, the buzzer would sound intermittently if an outside buzzer were connected.
- Red LED is on, blue LED is off, it indicates the glow plug is damaged (The fuse is melted broken or bad circuit connection)

5 minutes of time limitation under the Stable Mode would be canceled if DIY S1 soldering pad were short connected.

Low voltage protection level will be highlighted and increased once DIY S2 soldering pad is short connected.

Typical application



A: Receiver B: RCD3002

C: Buzzer connected outside

D: Glow plug, the black wire connects the engine shell, the red wire connects glow plug.

E: Receiver battery pack 4.8~8.4V