

Dualsky VR-5L Linear Volt. Regulator

Introductions

VR-5L Volt. Regulator is a direct-direct linear regulator. It will convert the input voltage to a safe output voltage which conforms to the demand of the electrical equipment. It has many advantages, such as low voltage difference, large output electrical current, consistent voltage and non-radiation of electromagnetism. It is widely applied to aero models and other model power systems.

Principal Technical Parameters

Environment temperature:	-10-- +40°C
Atmospheric pressure:	860hpa—1060hpa
Input voltage:	DC 6V—8.4V MAX 10V
Output voltage:	DC 5V—6V
Output electrical current:	DC 0--5A (Vin-Vout≤1V)
Regulating rate of power supply:	0.5%
Regulating rate of load:	0.5%
Over heat protection:	IC.Tj:90°C(194F) cut off
Ripple:	≤20mv

How To Use:

There are two Dupont 3P wire connectors on the regulator. The Futaba (female one) is power input end and JR (male one) is power output end. The short Dupont 3P Futaba (female one) is for connecting the included switch.

With DC input voltage of 8V, the indicator LED of output illuminates, providing output voltage of 6V (Default setting). Lower the output to 5V by clockwise turning the Multi-Turns Potentiometer, increase the output by anti-clockwise turning.

When the switch plug connected, turn the switch to "OFF" position, the regulator stops outputting voltage and the LEDs go out as well.

Turn the switch to "ON" position, the regulator starts to output voltage.

Notes: If you don't use the regulator in 24 hours, you'd better disconnect it from the battery because it remains a 4mA quiescent current.

Overheat Protection:

To protect the VR-5L and your aircraft, the unit has a overheat protection built in. When the surface temperature of the IC exceeds 90°C, the regulator will discontinue output current. When the IC cools, the output will resume. Tested safe operation would include use with 10 standard and 5 digital with gyro. If your aircraft exceeds this number of servos, please test before first flight.

When the product of the difference of regulator's input and output voltage, it times output current is under 5W, the regulator works normally; if the product is above 5W, due to the increase of heat dissipation, the surface temperature of the IC will exceed 90°C and the regulator will turn into over heat protection Status by cutting off the output automatically. When it cools down to the limited temperature, the output resumes. Please pay special attention to that.