

FlightPower™



FT5AVR Linear Regulator Instructions

The FT5AVR Regulator is a linear regulator. It will convert the input voltage of a flight battery to a safe output voltage which conforms to the demand of the on-board electronics of a radio control model. It has many advantages such as adjustable voltage output, 5A current output, thermal protection, and no interference. It is purposely designed for high performance model power systems.

Principal Technical Parameters

Environment temperature	-10 — +40°C
Atmospheric pressure	860 hPa — 1060 hPa
Input voltage	DC 6V — 8.4V Max 10V
Output voltage	DC 5V — 6V
Output electrical current	DC 0 — 5A ($V_{in} - V_{out} \leq 1V$)
Regulating rate of power supply	0.5%
Regulating rate of load	0.5%
Overheat protection	IC.Tj: 90°C (194F) cut off
Ripple	≤ 20mv

Instructions for Use

There are two 3P wire connectors on the regulator. The Futaba® connector (female) is the power input lead and the universal connector (male) is the power output lead. The short 3P Futaba connector (female) is for connecting the included switch.

When the input battery is connected, the indicator output LED will illuminate and the regulator provides an output voltage of 6V (Default setting). Lower the output to 5V by turning the Multi-Turn Potentiometer clockwise; increase the output by turning counter-clockwise.

When the switch plug is connected, turn the switch to "OFF" position. The regulator stops outputting voltage and the LED will turn off. Turn the switch to "ON" position and the regulator will start to output voltage.

Note: If you don't use the regulator for 24 hours it is advisable to disconnect it from the battery as there is a 4mA quiescent current that could drain the battery below its minimum voltage after extended periods of time.

Overheat Protection

To protect the FT5AVR and your aircraft, the unit has a built-in overheat protection. When the surface temperature of the regulator IC exceeds 90°C, the regulator will turn off the output current. When the regulator IC cools back down, the output will resume. The regulator has been tested to work successfully with 10 standard servos and 5 digital servos with gyro. If your aircraft exceeds this number of servos, please test before first flight.

The maximum power output of the regulator is 5W. At this level and below the regulator will work normally. If the output is above 5W then the surface temperature of the regulator IC will exceed 90°C. This will trigger the overheat protection mode by cutting off the output automatically.

Technical support for pilots and retailers

Contact our expert technicians at FlightPower USA Support by calling toll-free at **888-598-8037**

or by email at fpsupport@hobbyservices.com

We will be pleased to assist with answers to your questions on the use of FlightPower products.

Warranty Support for FlightPower products purchased and used anywhere in North America (USA, Canada and Mexico)

All FlightPower products carry a 90 day limited warranty commencing at the date of purchase. If you are a retailer or pilot, please feel free to contact FlightPower USA Support if you feel you have purchased a FlightPower product that does not perform as advertised. You can expect to receive courteous and immediate assistance. Proof of your purchase date will be required.