

FlightPower™



FT8AVR Linear Regulator Instructions

FT8AVR Regulator is a linear regulator with built-in battery status LED gauge. 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, 8A current output, thermal protection, and no interference. It is purposely designed for high performance model power systems.

Technical Specifications

Environment temperature	-10 — +40°C
Relative humidity	≤ 80%
Atmospheric pressure	860 hPa — 1060 hPa
Input voltage	DC 6V — 8.4V Max 10V
Output voltage	DC 5V — 6V Adjustable
Output electrical current	DC 0 — 8A ($V_{in} - V_{out} \leq 1V$)
Regulating rate of power supply	0.5%
Regulating rate of load	0.5%
Overheat protection	IC.Tj: 90°C (194F) cut off
Ripple	≤ 20mv

The battery status monitor is located on the top left of the FT8AVR. Indication of input voltage: Red LED is illuminated when the input voltage is less than 6.5V; Yellow LED is illuminated when the input voltage is equal to or greater than 6.5V but less than 7V; Green LED is illuminated when the input voltage is equal to or greater than 7V.

Instructions for Use

There are four 3P wire connectors on the regulator for input and output. The power inputs are Futaba® connectors (female) and the power outputs are universal connectors (male). The short Futaba connector (female) is a switch plug. The FT8AVR can be powered by two batteries for maximum duration. To maximize the current of the FT8AVR,

plug both output leads into one receiver. This will allow for 8-10A of current. There is also a charge lead (longest universal male connector) allowing charging without the removal of the battery from the model.

Note: If you don't use the regulator for 24 hours it is advisable to disconnect it from the battery because 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 FT8AVR 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 maximum power output of the regulator is 50W. At this level and below the regulator will work normally. If the power output is above 50W 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.