

# ARIZONA REGULATOR

## FROMECO DUAL VOLTAGE OUTPUT HELICOPTER REGULATOR AND SWITCH

### INSTRUCTIONS:

The Arizona Regulator has 5 leads, labeled as follows:

- BTTY - Battery lead, plug into Li+ battery, observing correct polarity.
- CHK - Male JR plug, can be used for charging and checking the attached battery.
- SW - Male JR plug, may be used for a switch. Closed contacts turn the regulator OFF, and open contacts turns the regulator ON ("failsafe" configuration).
- GYRO RDDR - Connect to rudder channel on RX. This takes signal from the RX and also provides power (adjustable voltage) to the RX.
- GYRO GAIN - Connect to gain channel on RX. Takes signal from RX, also provides power to RX.

The Arizona Regulator has 2 three-pin connectors, for plugging the gyro leads into the regulator. One is labeled "GYRO GAIN", and the other is labeled "GYRO RDDR". When viewing the regulator from the top, and with the wires pointing toward you, ensure that the gyro plugs are oriented so that the wires are "NEGATIVE", "POSITIVE", and "SIGNAL", as viewed from left to right:

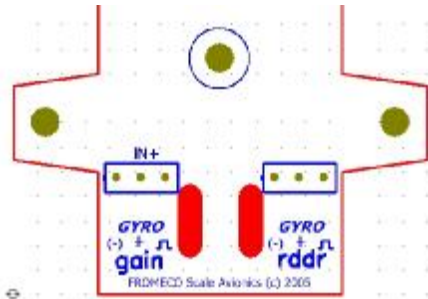


Fig. 1: Plug gyro leads into Arizona Regulator so that the conductors are (-), (+), and (SIGNAL) as viewed from left to right.

VOLTAGE for the gyro is set to 5 volts, and cannot be changed.

VOLTAGE to power the RX (and other servos) can be adjusted between 4.95 and 6.25V, as follows:

Turn on the Arizona Regulator. Observe the RX voltage on a meter. Observe that there are two pins sticking out the right side of the regulator, near the top. By carefully bridging the two pins with a conductive object (e.g., paperclip), the voltage will start to cycle up and down across it's range. **When you stop adjusting for > 2 seconds, the new setpoint voltage is saved.** Verify the new setpoint is saved, by turning the regulator off and back on again, and observing the desired voltage. **Please do not touch the pins to the heatsink while adjusting.** This may cause damage only if the protective blue anodized finish has been scratched.

### PLEASE NOTE:

Arizona Regulator draws a small amount of power in the OFF position, if it is being used as a switch.

This current is  $\leq 85$  microamps, or 0.000085A. The battery will deplete by roughly 2 mA-h per day, when the regulator is used as a switch. Batteries should be unplugged for extended layups or idle periods (i.e., several months or longer).

Questions? Answers! [www.fromeco.org](http://www.fromeco.org), or [flyfromeco@fromeco.com](mailto:flyfromeco@fromeco.com), or 503.310.5194

### Legal Stuff:

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