



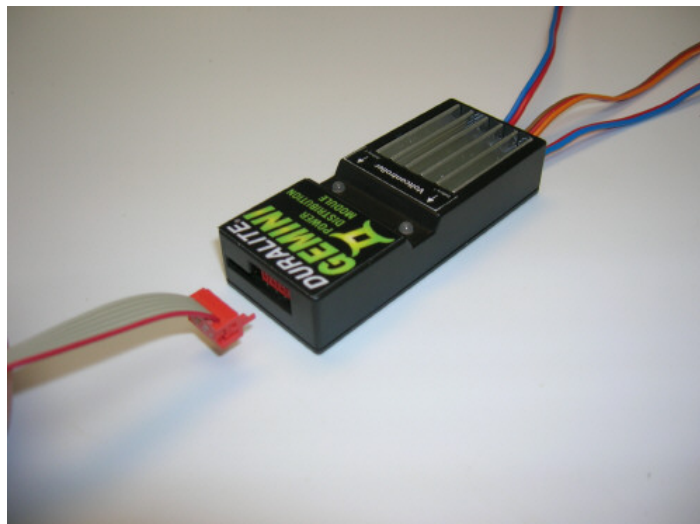
NEW! Gemini Power Management System (PDM)

- 2 independent micro controllers for complete redundancy
- 2 connections for attaching 2 batteries
- 2 high output 7.5 amp regulators
- 2 - 5.9 volt out put leads for RX
- 2 - high intensity low voltage LED's
- Output 5.3 lead for the gyro tail servo
- Remote fail safe switch w/separate arming for each battery

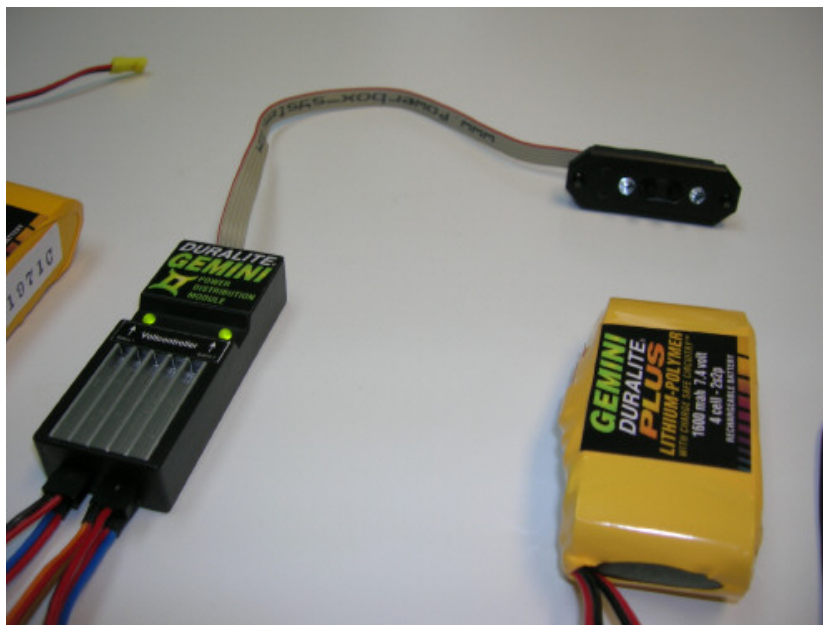
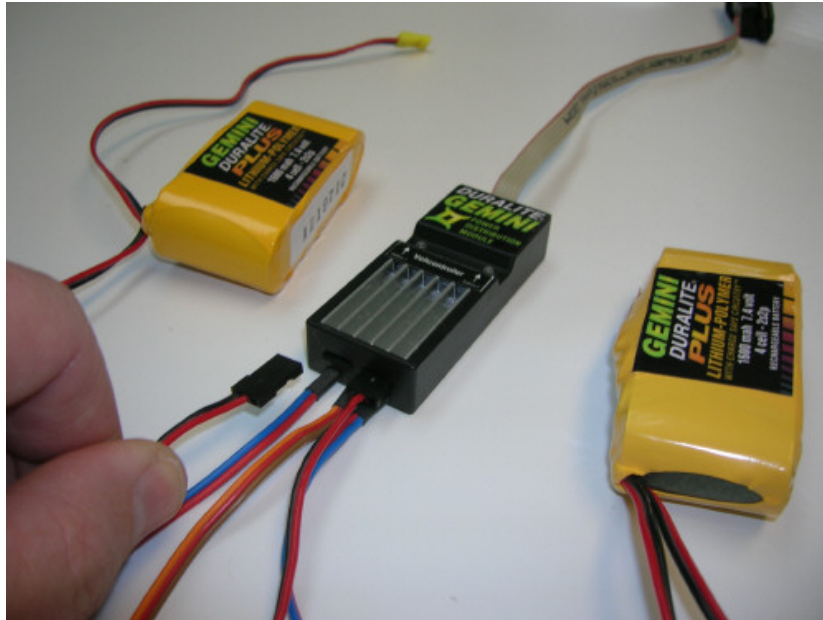
Is the Gemini a Power Box? It has some of the features of a power box but in miniature. Due to the fact that it is designed for helicopters and smaller aircraft it does not need pulse amplifiers. It does however offer 2 different voltages, 5.9 volts for the servos and 5.3 volts for the gyro. This is useful for helicopters and jets that utilize a gyro. It is capable of 15 amps or 7.5 amps per side. It has LED's for voltage monitoring. It has a rugged purpose built failsafe arming switch with power on lights and low voltage warning LED strobe lights.

Instructions for Use

Connect the arming switch to the top of Gemini using the red connector making sure the alignment tab is seated properly. The Gemini has a fail safe switch ensuring that it remains powered up if it was to fail or become detached from the Gemini.



The Gemini is designed to operate with two 7.4 volt lithium receiver packs. Connect the battery output leads to the bottom end of the Gemini taking note that the receptacles are JR radio configured and can only go in one way with the black negative wire to the left of the center red positive wire. The two green LED's on the Gemini will now illuminate and the two strobe LED's on the arming switch will start to flash.



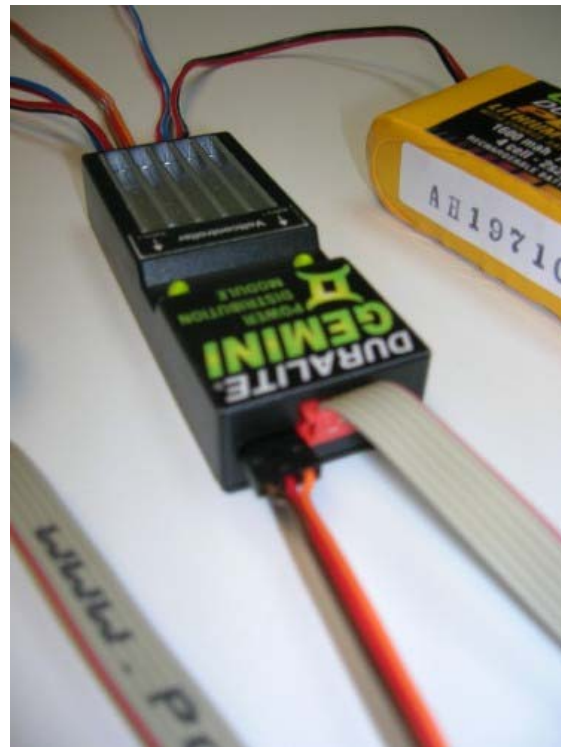
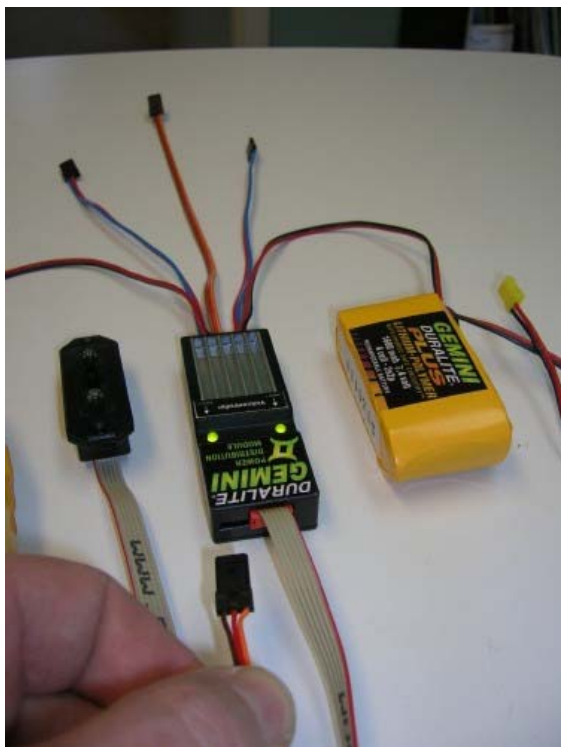
The receiver is powered by the two blue (negative) and red (positive) output leads that are on the bottom end of the Gemini. Connect one lead to the battery port of your receiver and the other to any open port that you may not be using. The Gemini has two independent 7.5 amp regulators which are now able to deliver a total of 15 amps of power to your aircraft. The regulated voltage to your receiver will be operating at 5.9 volts.

The Gemini (when used in a helicopter or jet with a gyro) has a separate 5.3 volt output for the gyro/tail servo. Connect your gyro lead into the top end of the Gemini next to the switch connection. The 8.5" JR lead (brown, red, orange) on the bottom of the Gemini is then plugged into your gyro channel on your receiver.

The gyro and tail servo will now operate at 5.3 volts while the rest of your system is operating at 5.9 volts.

Note: When using a Futaba 601 or 611 Gyro it is necessary to remove the red wire from the connector on the AUX lead that comes from your governor and plugs into the receiver. Place a small section of heat shrink on the lead then back loop it and secure it to the AUX lead. This will ensure that the Futaba 601 or 611 Gyro is operating at 5.3 volts including the tail servo. Without the red and black wires isolated from the AUX lead, the tail servo will be supplied with the 5.9 volts that is delivered to the receiver from the Gemini.

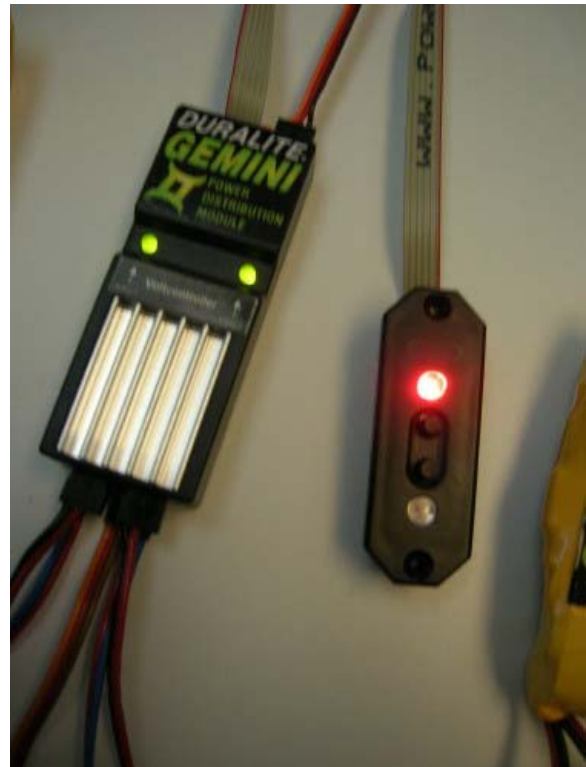
Note: Checking the voltage of your Duralite RX packs will need to be done through the yellow charging lead on each pack. The "stop fly" voltage is 7.0 volts under 1 amp load.



Arming the Gemini

The Gemini fail safe switch is armed by pressing one of the arming buttons for 3 seconds until the LED on the switch illuminates solid red and then it is pressed again once more to arm that side of the Gemini. If properly armed, the corresponding switch LED will emit a high intensity red flashing light. This same sequence on the Gemini will emit an orange LED when the arming switch is pressed for 3 seconds and then will emit a green LED indicating that side or regulator of the Gemini is on.

Repeat the above sequence again on the other arming button and the Gemini will now be fully powered with the arming switch emitting two flashing LED's. The Gemini will be displaying two green LED's.



Disarming the Gemini

As in arming sequence, press one of the arming buttons until the flashing LED becomes solid red. Within 2 seconds press the arming button again and the LED will no longer be illuminated. The same sequence on the Gemini will display an orange LED when the arming button is pressed for 2 seconds then will turn off when the arming button is pressed once again. Repeat this process with the other arming button to completely turn off the Gemini.

Mounting the Gemini and Arming Switch

The Gemini has a heat sink that needs to remain unobstructed while in use. It is recommended that the Gemini be mounted using double sided tape or stick on Velcro to the underside of the Gemini. If you should need to use a strap to secure the Gemini in your set up, it is recommended to use a Velcro strap (not zap straps) and do not cover the LED's or heat sink.

The arming switch can be mounted either directly on the frame of a helicopter/plane using the supplied backing plate on the arming switch. Access to the arming buttons is required to operate the Gemini.

Gemini Warning Indicator LED's

The Gemini arming switch LED's are able to let you know of the condition of the Gemini or battery packs while in flight by omitting a high intensity lights. Depending on the condition of the batteries the Gemini arming switch will display the following on the arming switch LED's.

Note: The following voltage readings are established from the yellow charge connector on the batteries which is typically .2 of a volt higher than the black connector power outputs.

Battery and Gemini operating normally = Long duration (3 second) red LED flashes on arming switch / Solid green LED on Gemini module

Battery Reserve (7.4 volts) = Solid red LED on arming switch / Solid orange LED on Gemini module

Low voltage warning (6.9 volts) = Short duration (½ second rapid) red LED flashes on arming switch / Flashing red LED on Gemini module



LITHIUM POWER SOLUTIONS FOR EVERYTHING YOU FLY
www.duraliteflightsystems.com • toll free 877-744-3685