



## **MODES OF OPERATION:**

By default, the Rx is set up to drive six servos in what is called 'Mode 1'. The Rx can also be configured to drive external Fet's when set to 'Mode 2'. Both modes have options:

### Mode 1 (default):

Pad1: Throttle	PPM (for servo/external ESC) (default) or pwm to drive external FET (for brushed motor/A1442)
Pad2: Aileron	PPM (for servo)
Pad3: Elevator	PPM (for servo)
Pad4: Rudder	PPM (for servo/external gyro)
Pad5: Gear	PPM (for servo)
Pad6: Aux1	PPM (for servo)

### Mode 2:

Pad1: Throttle	PPM (for servo/external ESC) (default) or pwm to drive external FET (for brushed motor/A1442)
Pad2: Aileron	pwm to drive external A3901 (for actuator) - Rudder optional
Pad3: Aileron	pwm to drive external A3901 (for actuator) - Rudder optional
Pad4: Elevator	pwm to drive external A3901 (for actuator)
Pad5: Elevator	pwm to drive external A3901 (for actuator)
Pad6: Aux1	PPM (for servo)

The pwm output for throttle only requires an external Fet/protection diode to drive a brushed motor or A1442-type single-phase brushless controller. The output acts like an ESC; ie: close throttle to arm on startup and 3.0v LVC which can be disabled.

## **PROGRAMMING APPROACH:**

Modes and other options are selected over radio link using the Elevator stick. High/Low selects alternatives and mid-stick then confirms a choice and moves on. 'High' means pushing the elevator stick towards the top of the Tx (if not reversed).

The led flashes the option currently being set (eg: single-flash 1sec apart).  
The Rx assigns a value to each option (Low elevator=0; High=option number).  
The Rx flashes the sum of all options once complete to confirm settings (eg: High on options 3 and 4 will yield 7 flashes after Tx switched off).

**PROGRAMMING PROCEDURE ('Auto' mode):**

1. Bind Rx to Tx and led will come on solid.
2. Keeping the Tx ON, switch the Rx OFF then ON until it reconnects again (led on).
3. Perform step 2 three times until led flashes the first program option (single-flash).
4. Use High/Low Elevator to make choices and mid-stick to confirm and move on
5. Switch Tx off at any time to save settings.
6. The led will then flash the sum of new program settings; switch Rx off when done.
7. Switch Rx off before Tx at any time to exit without saving changes.
8. To restore defaults, perform steps 1-3 and switch the Tx off (or select Low elevator on all options). The led will not flash after switching the Tx off because all options are reset to 0/Low.

**PROGRAMMING PROCEDURE ('Manual' mode):**

To enter program mode 'manually', Rx must already have been bound to Tx:

- 1B. Connect Pad1 to Pad2 while switching Rx ON; led will stay off.
- 2B. Switch Tx ON and wait for Rx to flash the first program option (single flash).  
(the led will stay off if Tx is not bound or on wrong model memory)
- 3B. Perform steps 4-8 above.

**PROGRAM OPTIONS/FLASHES (L=0=Default or not applicable):**

1. L = Mode: 1 = PPM outputs (to drive servos/external esc's)  
H = Mode: 2 = PWM outputs (to drive external actuator/esc board)
2. L = Pin1: PPM Throttle output to drive servo/external ESC  
H = Pin1: PWM Throttle output to drive external FET (eg: for A1442)
3. L = Mode2 Pins2/3: AILERON (Pins 4/5=Elevator)  
H = Mode2 Pins2/3: RUDDER (Pins 4/5=Elevator)
4. L = ESC low voltage cutoff: ENABLED  
H = ESC low voltage cutoff: DISABLED
5. L = Bind & Program mode entry: AUTO  
H = Bind & Program mode entry: MANUAL