Final Adjustments - Radio Setup

Now that the servo installation into the helicopter is finished the following pages should be reviewed. As various types of radios can be used to setup the helicopter, some of the following information may not apply.

Servo Direction (Servo Reversing)

Check that all servos move in the correct directions, see the diagrams on pg 31-34.

Dual Rates

For beginners (using the flybar weights) the dual rate values should be set at 100% for both switch positions until hovering has been mastered.

Normal position: (high rate) 100%
Switch position 1: (low rate) 75%

Exponential

The exponential function allows adjustment of how sensitive the cyclic controls are when the machine is hovering. This should be left at 0% (linear) until all trimming is complete.

Sub Trims

The sub trims on the outside of your transmitter are used to fine tune the servo center positions while testing or in-flight. If the trim has to be moved more than 2-3 divisions then readjust the linkage length to set the trim back in the center.

Pitch & Throttle Curve Adjustments

The ultimate goal for adjusting the curves on your helicopter is to reduce how much the tail rotor moves during flight and aerobatics. This leads to maintaining a consistent main rotor RPM which can only be achieved through adjusting the individual values which control the pitch and throttle at a given stick position.

Pitch Curve Adjustment

The following chart shows the values for the collective pitch measured in degrees which are made on the helicopter using a pitch gauge. The Travel Adjustment function (if available makes these settings easy).
For the beginner it is recommended to set the low stick position to 0 degrees to avoid damaging the helicopter while reducing the power during the first few flights. These settings will need slight adjustment to keep the helicopter at a consistent height at mid stick.

Pitch Curve Values (by degrees)

Flight Mode	Setup Method	Low Pitch (low stick)	Hovering (mid stick)	High Pitch (high stick)
N	Beginner	0	5	9
N	Hovering	-2	5.5	9
1	Stunt & Aerobatics	-10	5.5	10
2	3D**	-10	0	10
H	Autorotation	-10	5	12

(N - Normal flight mode, 1 - Stunt mode one, 2 - Stunt mode two, H - Throttle hold-autorotation)

Note In order to avoid binding at high pitch angles the flybar control arms need to be reset at an angle of 10-15 degrees down from parallel.**

Travel Adjustment (endpoints)

Using endpoints to adjust to the limits of how far the servo is allowed to move is very convenient for fast set-up. If binding occurs simply reduce the travel in that direction. ** Note: by changing one side only (high or low stick) the servo travel is no longer linear which will tend to make that control surface unstable. It is better to set the high/low adjustments the same, or make actual pushrod adjustments.