Stream NXT - assembly instructions

Recommended settings

CG (measured from root leading edge):	65-70mm
Speed/launch camber (+down, near the wing root):	0mm
Cruise camber (+down, near the wing root):	+2mm
Thermal camber (+down, near the wing root):	+5...+8mm
Aileron deflections (+down, -up):	+12/-12mm
Elevator deflections (+down, -up):	+9/-9mm
Rudder deflections (+left, -right):	+15/-15mm

Kit contents: wing, fuselage, tail feathers, small parts.

Small parts supplied with the kit.

Servo locations have the skin indented for covers. Your kit may have the servo wells already made at the factory. If so, you can skip a few steps.


Start by cutting out the skin inside the servo locations.

Peel off the skin carefully. The cuts should be at least 3mm inside the outline. More if your servo is smaller and you want to reduce the size of the servo pocket.

Pick out the foam inside the servo pockets carefully, first with a regular X-acto knife, then using a spade knife when near the top skin.

Clean the foam out completely, carefully scraping it off the top skin with the spade knife. You need as much depth for the servos as possible. You should see the wire channels in the corners of the pockets now.

If your servos have mounting lugs, you may want to remove them, depending on how you plan to attach the servos inside the pockets.
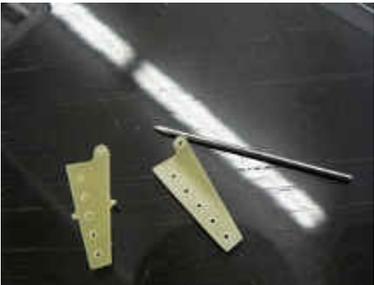
Prepare the aileron control horns by re-drilling the hole with a sharpened piece of the 1.5mm pushrod wire supplied with the kit. If desired, you can use a smaller size wire for aileron pushrods (easier to bend); 1.2mm wire is sufficiently strong for the job, but 1.5mm is stiffer (stiffness helps to reduce your chances of aileron flutter).
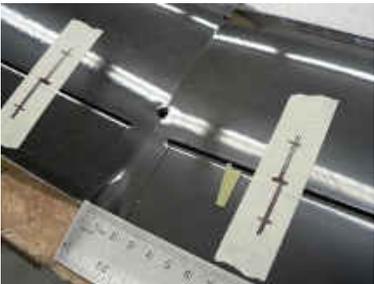
Use masking tape, and mark the locations of the cuts for the aileron pushrod exits and the control horns. The exit slots must be located near the outside edge of the servo pockets. Measure the distance on the bottom of the wings, then transfer the mark to the top. The control horns must be slightly offset to the outside, to allow for the pushrod wire bend radius.

Carefully cut the skin along the marked lines. The exit slots must be about 20mm long.

When the skin is cut, pick the foam out of the slots using an X-acto knife and/or the tip of a needle file.

The vertical wall must be removed completely on the aileron side and about 1/2 way down on the wing side.

Use a sharpened wire to make a guide hole for the pushrod channel.

The wire ideally must exit near the outer edge of the servo pocket, close to the bottom skin.

Use a rectangular needle file to make the pushrod channel by expanding the guide hole. The channel must be elongated vertically to provide space for the pushrod travel up+down during the aileron deflections.

The needle file inside the servo pocket. You can reverse the direction and expand the channel from the pocket side also.

Trial fit the control horn in the slot. Do not glue at this time.

Sharpen slightly the end of one pushrod wire. Then make a sharp bend about 3mm from the end.
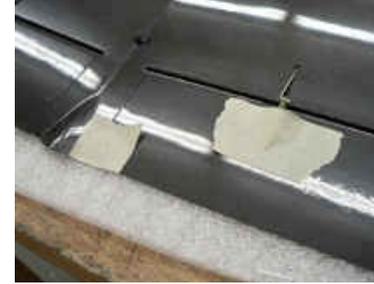
Tape the aileron ends to the wing root tabs to keep them at zero deflection. Insert the long end of the pushrod wire into the channel. Install the control horn into the slot and temporarily tape it down.

Prepare the servos and servo arms. Set the servos to the neutral position. Attach two servo arms as close to 90 degrees as possible. Draw a line on each arm at exactly 90 degrees. Mark locations of the new holes, about 4.5-5.0 mm from the axis.
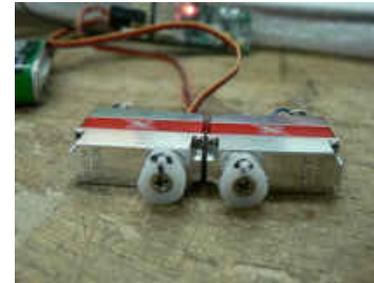
Drill new holes in the servo arms. Cut off all excess material around the holes to make two nice looking very short servo arms. The objective is to hide the entire servo and its arm under the cover.

Important! Electronically deflect both servos equally about 20-25 degrees towards the leading edge. This will be the neutral point for the ailerons. This will provide more down travel for the ailerons (when used for landing). Drop the servos into the pockets and center them between the fore/aft walls of the pockets. Mark the location of the bend on the pushrod wire.

Remove the pushrod wire and the control horn from the wing. Cut the wire about 3 mm past the mark. Sharpen the end of the wire slightly. It is much easier to do this BEFORE bending the end.


Bend the pushrod end at the mark.
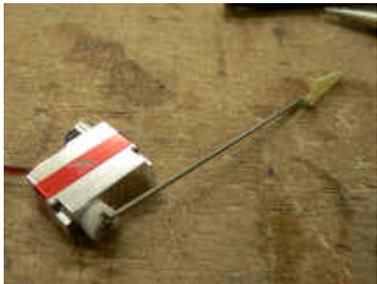
Insert the pushrod into the servo arm. Verify that the servo and control horn are square to each other, otherwise the servo will be forced to angle slightly when inside the pocket. Correct the pushrod if needed.

Insert the aft end of the pushrod through the channel carefully. The 3 mm bend should fit inside the vertically elongated channel. Install the control horn into the slot again temporarily.
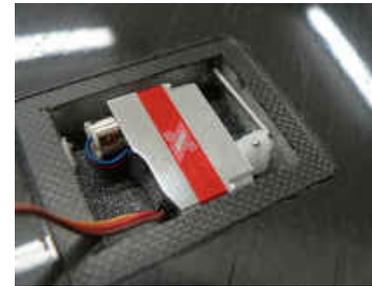
Drop the servo into the pocket again. Insert the pushrod into the arm. Verify that the servo is sitting flat and has some space at both fore/aft walls of the pocket. Temporarily tape the servos into the pocket to prevent them falling out during the next step.

Lift the control horn off the slot. Apply medium CA or epoxy into the slot.

Install the control horn permanently now. Remove excess glue if needed. Try to avoid getting glue onto the hinge line!

Important! Keep the servo arms in their exact offset position by plugging the servos into the receiver with a battery, and keep the ailerons taped to the wing roots. Make balsa shims that will go on both sides of the servo and wedge the servo inside the pocket slightly. Do not use excessive force or the top wing skin will warp at the pocket and you will have a visible bad spot there, both visually and aerodynamically.