BUILDING MANUAL Precios BRAIVO Model



The Precios kit consists of:

the wing where everything is already prepared: servo wells, bell cranks, passage of controls, servo cables and location of the Tpeg are milled. The carbon Tpeg is sanded and ready to install
fuselage with its warhead
rudder
stabilizer

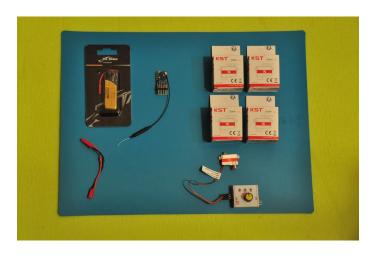
Hardware: 3D printed/carbon servo mounts for the fuselage, 3D printed servo mounts for the aileron servos, control cable, control springs, aluminum hardware, cable and covers for the aileron servos.





The Precios's kit has been designed for the following typical radio equipment:

- 4 KST X08 H servos (horizontal legs) for the fuselage and the wings
- Battery 1S 600 mah long (as Tattu)
- Micro receiver.



- For the assembly you can use medium and liquid CA glue for the 3D printed servo plates and epoxy resin + carbon powder to glue the fin and the T peg.
- Personally I do all epoxy bonding. A servo tester will also come in handy.





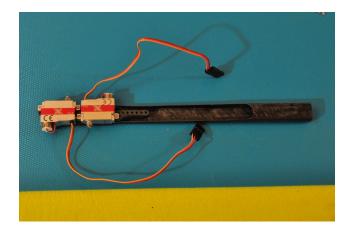
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 I advise you to make yourself a simple support to hold the fuselage and protect the frudder during assembly.

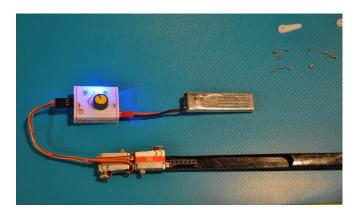


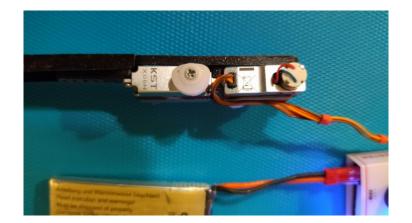
<u>Fuselage.</u>

Screw the two KST 08H on the fuselage plate.



Place the servos in neutral using a tester or receiver before screwing the arms or the pulleys .





<u>Rudder</u>

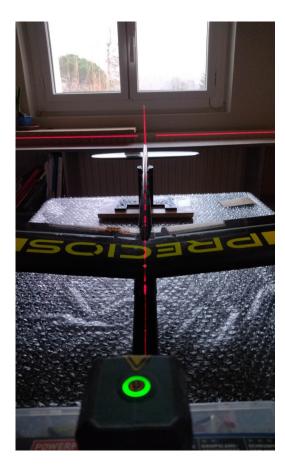
Prepare a little epoxy resin + microballoon or epoxy + carbon powder mixture to lighten the glue.



Using a brush, put some mixture inside the rudder tube. Mount the wing on the fuselage, the stabilizer, then position the fin on the fuselage.

I then use a self-leveling laser level to properly align the frudder/stabilizer-wing assembly so that everything is perfectly square.





Installing the aileron servos in the wing

Start by sanding the two bell cranks so as to remove the cutting burrs. Then enlarge the hole using a drill bit or a 1.2 mm angle milling cutter.





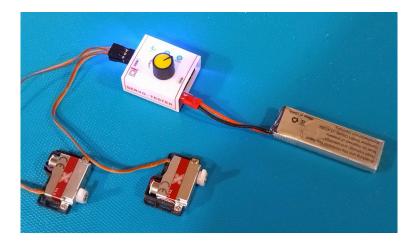
Reduce the size of the spreaders so that you only have the first hole, about 5 mm from the clamping screw.

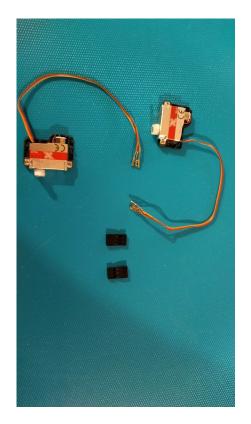
Then enlarge this hole using a cutter or a drill (diameter 1.2mm).





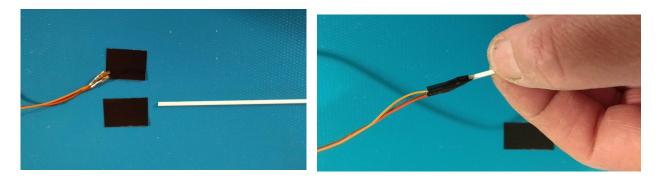
Put the servos in neutral then screw the arms .





Remove the servo sockets.

Prepare two small pieces of electrician's tape and a piece of plastic rod (fall from a control sheath).



Once the cables are taped to the rod, thread the rod through the passage already made in the Rohacell foam of the wing so as to bring out the cables at the level of the leading edge of the wing.





Take the servo and its support , pass the control rod through the wing following the original hole in the Rohacell, then fit the aileron control on the rudder.



Prepare the epoxy resin + carbon powder mixture and fill the well of the bell cranks.





After cleaning the excess glue with a cotton swab soaked in alcohol, let the glue polymerize quietly.

You can also glue the bell cranks using CA medium !





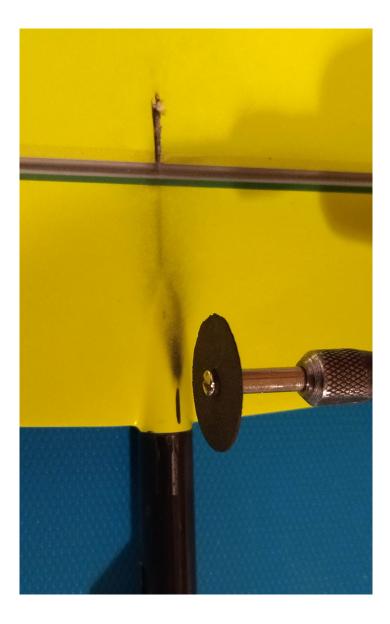
Installing control cables and rudder and stabilizer horns

<u>Rudder</u>

Make a 15 mm long slit, aligning yourself with the axis of the fuselage, then cut cleanly with a cutter.



Mill the passage for the control cable.



Cut the fin control cable to a sufficient length as well as a small piece of plastic tubing to prevent the cable from rubbing against the fuselage at the level of the opening made with the Drémel.

Pass the cable through the groove in the fin foot to bring it to the end of the fuselage. Thread the piece of tubing over the control cable and stick it in the right place.

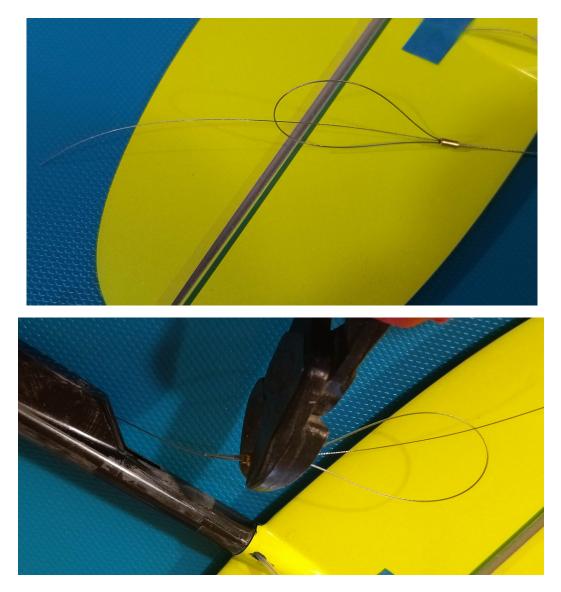


Tape the cable at both ends. Cut the elevator control cable to the correct length.



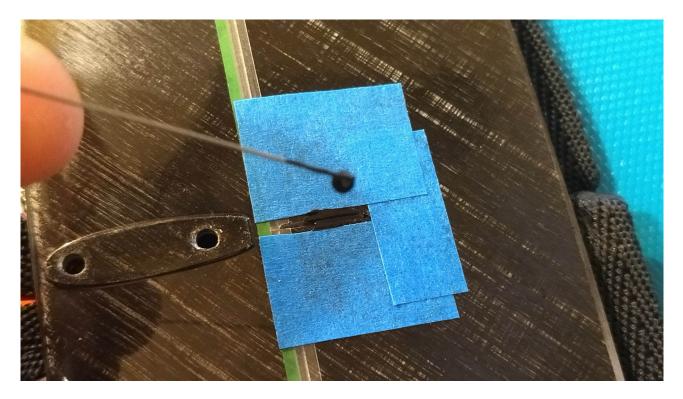
Make a loop and add a piece of cable in the crimp tube. Before disassembling the stab, all you have to do is tape this cable to the fuselage to prevent the control loop from falling into the tail tube!

Crimp the elevator control cable, using pliers.



Bonding of the elevator and rudder control horns.

Protect the gluing area by applying pieces of masking tape. Using CA medium or an epoxy + carbon powder mixture, glue the rudder and elevator bell cranks.



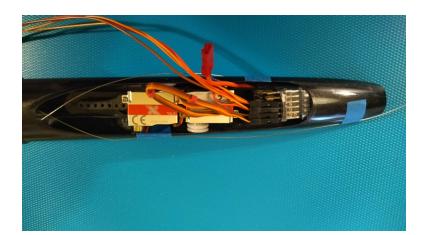
Check with a wedge that the two horns are at 90°.

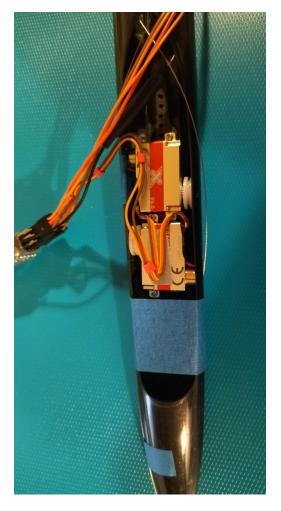


Proceed in the same way for the rudder horn!

Gluing the servo plate in the fuselage

Set up the servo support plate, the 1s 600 mAH battery and the receiver, so that you can move the plate forward as much as possible while still being able to easily remove the receiver.





Remove the fuselage plate, then put a little thick CA or epoxy + carbon mixture on the bottom of the support.





Bonding the TPEG

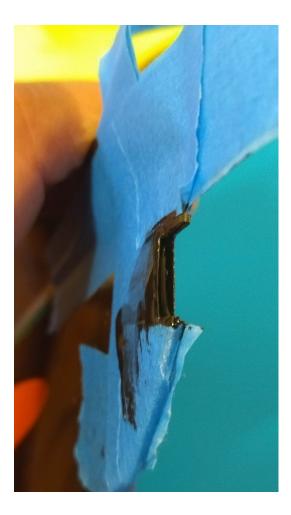
The bonding of the TPEG must be done only with epoxy resin loaded with microballoon or carbon powder, to ensure a perfect TPEG/extrados-intrados bond and to last over time.

The housing of the TPEG has already been milled by the manufacturer, present the TPEG to find the correct position.

Put masking tape all around the cutout.

Using a syringe fitted with a large needle, inject the epoxy + carbon powder mixture until it is flush with the edges of the opening.





Position the TPEG by pushing it in all the way. Some mixture must come out, if this is not the case, it is because there is a lack of resin in the wing. Then remove the excess epoxy resin.





Now all you have to do is connect the control cables as usual, glue the ailerons's covers and program your radio.

And center your Precios by following the instructions below!

PRECIOS Basic settings			
Start (Preset)	1,5	0,5	
Normal	0		
Thermal 1	-2		
Thermal 2	-4	-0,5	
Deflexion	-6/+14	-10/+10	-15/+15
Wing mixs			
Aileron/rudder	-6/+14		-7/+7
Flap Mix (elevator/aileron)	-3/+2	-10/+10	
Buttterfly	-35 40	-4	
	CG 68	à 69 mm	
	Flap do	own (+)	
	Flap	up (_)	

 These settings are a working basis and depend on the time and experience of the pilot !

Realization of the centering lead



Fill a container with a thick mixture of plaster of Paris or better still MAP glue for placo. Coat the front of the warhead with WD 40, then push it in slightly, wait a few seconds then slowly pull it out.



Leave the mixture to dry to the core. Then , melt the lead gently !



Then stick the lead made using neoprene glue and adjust your centering.

