Euro Disc Building Instructions



The Euro Disc ("the flying Euro") has to be classified as a Slow- or Parkflyer due to its low weight.

Since it is light in weight it shows astonishing flight characteristcs. It is extremely easy manageable and perfect for aerobatics.

The model is kind to the less experienced user. It can be landed nearly vertically without stalling. The Euro Disc does not compromise when it comes to fun.

Accessoiries (not included in kit)



Micro speed controller No. 160533



Receiver battery pack No. 67499



Use a standard 4 channel remote control system with a delta mixer as well as micro servos and a micro receiver.

Assembly

Please read the following instructions carefully before you start to built the Euro Disc.

Attention: Take your time to read the instructions for the glue used and for the construction of your new flight object:

Cyanoacrylate glue

This glue needs to be kept away from children. It works in seconds and glues skin and eyes. After eye-contact please rinse carefully and see a doctor immediately. Do not use with Styrofoam parts.

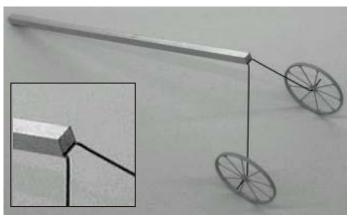
UHU-Por

This is a contact type glue. Cover both surfaces meant to be glued together as thinly as possible with the glue and leave to dry 10-60 minutes before carefully joining the surfaces together.

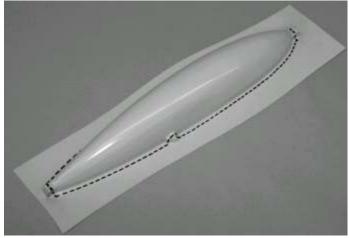
Euro Disc kit contents



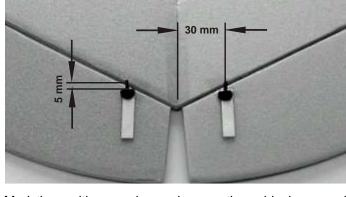
Assembling the fuselage



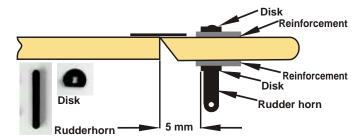
Assemble the wooden block 10x10x30mm together with the wire for the chassis/undercarriage in the aluminium fuselage and glue it together with Epoxyglue. Widen the holes of the wheels until they have 1, 5 mm in diameter. Slide the wheels onto the wire and secure them with the silicon parts.

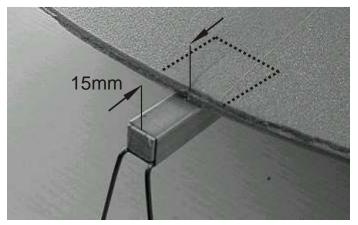


Cut the body with scissors and a knife along the marked lines. Smooth the edges afterwards using fine sandpaper. Please leave some room for this when cutting along the lines.



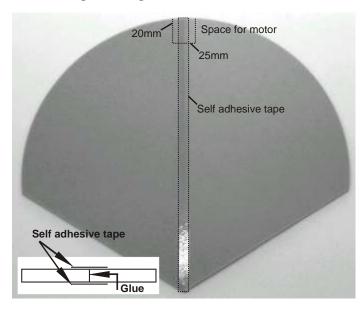
Mark the positions as shown above on the rudder horns and drill a 3 mm whole at this mark. Glue the rudder horns at this point in connection with the disk of the rudder horn and the reinforcement.





Now the completed wing can be attached to the fuselage bar. The wing needs to be attached in a manner that leaves a 15 mm space for gluing the engine holder on the fuselage. It is important to find centre of the wing for balancing the plane. You can use the edge of the wing halves as points of orientation.

Assembling the wing



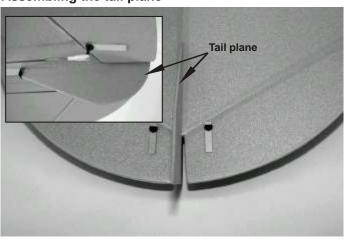
Glue the wings with contact glue on a flat plate. Use self adhesive tape for reinforcement on both sides. Cut a rectangular space 25x 20 mm for the engine into the wing as shown above.

Self adhesive tape Rudder 30° bevel

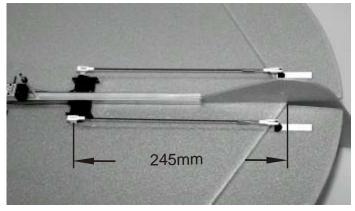
Bevel the rudder 30°. Adhere the rudder as shown in the picture to the wing using self adhesive tape.

Glue the reinforcement parts of the rudder onto the interior side of the steering using contact glue according to the following picture.

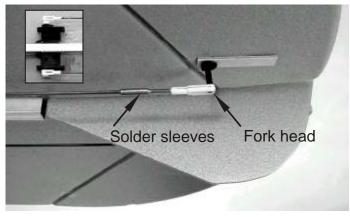
Assembling the tail plane

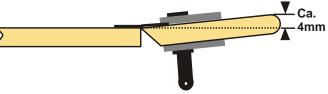


Place the tail plane in the middle of the fuselage and attach it with glue.

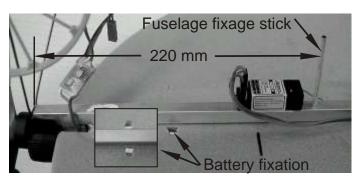


Glue the servos in a flat position on the wing using UHU-Por. The distance has to be 245 mm measured from the end peak of the wing to the axis of rotation of the servo. Roughen the surface of the place before the fork-heads are glued on the carbon-fibre sticks using CA glue.

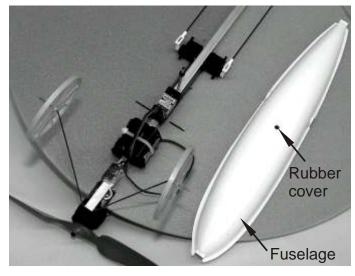




Screw the two remaining fork-heads on the solder sleeves until the middle of the thread. Attach the fork-heads to the horns of the rudder and adjust the rudder that the rudder deflection points upwards 4 mm at the deepest point. If necessary shorten the carbon-fibre sticks that they reach into the solder-sleeves 1 cm. Use CA-Glue to attach the sticks to the sleeves.



Use a 3 mm borer to drill a whole for the fuselage fixage stick in the aluminium fuselage stick. Attach this in a 90° angle.

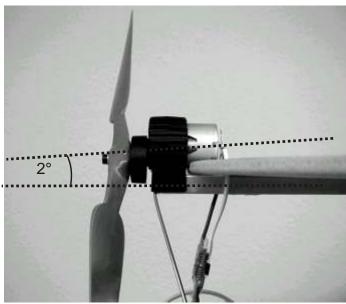


At the same position a 4 mm boring needs to be made. At this point the rubber cover has to be inserted to fix the fuselage.

Depending on what kind of battery is intended to be used, cut a opening for the cable-binder that is thought to affix the battery.

Now cut the decoration sheet. Moisten the wing with water and put the sheet onto the wing. The water film gives you the possibility to position the decoration foil. Now press the water that is not needed out by using a rubber spattle. The remaining water will have vaporise within 24 hours and the plane is ready to be used.

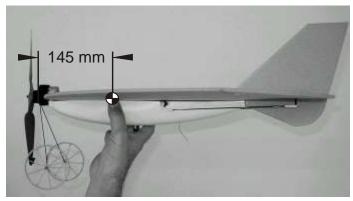
Installation of the engine



Slide the engine-socle onto the fuselage stick that was roughened and glue it with CA-glue. The axis of the engine should have a 2° downward tilt which is predetermined by using the Ikarus Engine Set (No. 160611).

Please connect the Micro speed controler 2000 (No. 160533) to the motor.

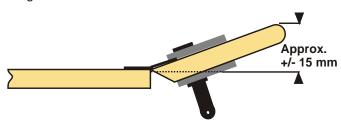
Centre of gravity



Mark the Centre of Gravity () and hold the model at this point on a fingertip. It should be horizontal now. If this is not the case, use the batteries to balance until the correct horizontal position is achieved. Now switch on the transmitter, and switch the gear stick to low throttle position. Switch the flight battery on. Now test the rudder and the mixture, a delta set is necessary.

Now switch on the transmitter, and switch the gear stick to low throttle position. Switch the flight battery on. Now test the rudder and the mixture, a delta mixer is necessary. (check the manual of your transmitter)

Now pose yourself behind the model and test the altitude rudder. Both rudders should move upwards. If you test the direction and give right, the right rudder should move upwards whereas the left rudder should point downwards. Control the angle of the rudder movement. 15mm deflection are a good result.



Pre flight checks

All RC-components need to be fully tested before trying the first practice flight. Especially the reach of the components is of importance. Test this by switching on the transmitter, then the batteries and then move 30 m away from the model with inserted transmitter antenna. There should be no malfunction. If this is not the case, check for the cause of the irritation. Are the batteries recharged? Are the right quartz in the receiver and transmitter?

The first start can be tried from hand or an even ground. Do not use the steering extensively since the model reacts with sensitivity.

The Ikarus team wishes you all the fun in the world!