

BLITZ



www.freeair.cz

Dear customer, congratulations on the purchase of the **Blitz** model. To enjoy building and flying the model most, please read carefully the building instructions before you begin and make sure that you understand the building process.

DESCRIPTION OF THE MODEL:

The Blitz model is completely made of the expanded polypropylene (EPP) and carbon composite components. Its light weight (from 170 grams) makes it an ideal model for both indoor and calm-weather outdoor flying. It is suitable not only for experienced pilots, but also for the first introduction to the model aerobatics.

We suggest that you use our Microtex AC motors, either the Microtex 20/8/14 (for two LiPol cells) or 20/8/18 (for 3 LiPol cells). Thanks to the model's well-engineered design the assembly would take only about 90 minutes. All parts fall in place, puzzle-like, and all compartments and openings for the RC equipment are already there, too. You can order the model in a painted version, or you can decorate it yourself, using e.g. the textile spray paints. Only your fantasy and the weight of added paint are the limits to the scheme you may choose.

BUILDING:

The whole model is built using the medium-thick CyA glue. Start with gluing the side panels to the fuselage as shown on (Fig. 1). Once this is done, insert (do not glue) the servos to the prepared openings in the fuselage (Fig. 2). If different servos are used, modify the openings accordingly. Once the servos are in place, glue the other fuselage side panel (Fig. 3) in place. Do not glue the servos because the fuselage structure fixes them in place. Glue in place the bottom wing (Fig. 4) and the wing struts (Figs. 5 and 6). Glue together the top wing halves (Fig. 7) and then glue the assembly to the fuselage (Figs. 8 and 9). Glue in place the slab elevator bushings (Figs. 10 and 11). Using the carbon tube as a core drill, drill the hole in the elevator (Fig. 12). According to the (Fig. 13) insert the carbon tube into the assembled bushings, threading onto it also the elevator control lever; at the moment do not glue the control lever in place. Glue the elevator to its carbon tube axle (Fig. 14), taking care to prevent glue from coming in contact with parts that must remain movable. Cut the groove for the hinges of the rudder and glue the hinges in place. (Fig. 15). Then glue the rudder control lever in place (Fig. 16).

Using the (Fig. 17) as a guide, glue in place the motor mounting and its reinforcement (Fig. 18). Drill a 2mm hole in the undercarriage leg and attach the wheel to it, using the Figs. 19 and 20 as a guide. Glue the wheel pant in place (Fig. 21) and insert the undercarriage into the fuselage. Then attach the other wheel and its pant and glue the undercarriage assembly to the fuselage. Check that the model sits square on the undercarriage on the ground before the glue cures fully!!

Attach the motor (Fig. 22) and, using the 1,6mm drill, open up the holes in the support pillars to hold the elevator and rudder push-pull rods (Fig. 23). Slide the pillars onto the rod and glue the pillars to the fuselage (Fig. 24); set the elevator to neutral position and glue the control lever in place. In the same way glue the pillars onto the rudder control rod (Fig. 25). Take the aileron joiners and glue them in place as per (Fig. 26); install the interconnecting rod (Fig. 27).

Glue the aileron extension lever and secure it by a set screw (Fig. 28), then insert the servo into the wing and attach in place by screws (Fig. 29).

Cut the grooves into the ailerons (Fig. 30), then glue into them the levers. Install the aileron control rods (Fig. 31) and solder the controller (Fig. 32). Glue the wing cross braces (Figs. 33 and 34). The centre of gravity should be 60 mm from the top wing's leading edge (Fig. 35). Balance the model by shifting the battery so that the C of G is in the required position and then cut out the battery compartment above the side stiffener.

Your Blitz is now complete. Set the deflection of the control surfaces to maximum, adding exponential displacement as required/used to, taking into consideration your own piloting skills.

When finishing the model in colour, consider the presumable weight increase, caused by adding the paint; bearing this in mind, any paint could be used. We recommend the alcohol-based permanent markers or the spray - on textile colours as the lightest.

To tune-up the model, you may order the wing leading edge liner (slows the model down and improves its handling), or a set of floats for water operation.

Many happy landings!
Your FreeAir.

PARTS LIST

Part name	Pcs	Part name	Pcs
Fuselage of EPP	3	Undercarriage wheel	2
Elevator and rudder control rod	2	Set of bolts	2
Wing of EPP	3	Set of nuts	4
Aileron, elevator and rudder of EPP	3	Undercarriage carbon leaf spring	1
Undercarriage base	2	Push-pull rod lever	3
Aileron push-pull rod	2	Motor mounting	1
Plastic hinge	2	Elevator joiner (carbon 5x100 mm)	1
Aileron joiner (1,6x150mm)	2	Aileron joiner lever	4
Plastic tube (3x20 mm)	4	Instructions	1
Motor bulkhead	1	EPP wing stiffeners	2
Undercarriage wheel pant (EPP)	2	Slab elevator set (bushings and control lever)	1

You will need the following tools and materials:

CyA glue, CyA glue accelerator, 1,6 and 2 mm dia drill bit, sharp (modelling) knife, sandpaper, 3M contact glue in a spray can. To complete the model you need the following: Penta receiver (MZK), servos (Dimond), controller (TMM 0710-3), battery pack (2-3 LiPol cells of 720-1500 mAh), motor (Microtex 20/5/18 or 20/8/18), propeller.









