

# Musger MG 19 "Golden Eagle"

## INSTRUCTIONS

## USER

This manual is suitable for any color scheme

• The chosen color scheme in this guide is just an example

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Thank you for purchasing a product of HEPF GmbH! Before commissioning please read this manual carefully.

For questions, please feel free to contact our support: E-mail: info@hepf.at Tel .: +43 5373 570033

#### We hope you have fun with your product!

Your HEPF team!

Musger MG 19 "Golden Eagle" Version 2.0 German - 09/13/2017

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Development prior to their products. The current version of the user manual or the assembly instructions may be shop.hepf.com be downloaded free of charge in the product overview.



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## 1. GENERAL

Congratulations on your purchase of the Musger MG-19 GB models and wish you many successful flights with this model!





Gernot Bruckmann (owner GB-Models)

To successfully build this model and be able to operate, please read the following assembly instructions carefully and follow the safety instructions.

#### **1.1 Specifications**

electric version	
Schleppkupplung	
• Similar model	
Manufacturer:	UK Models
Weight [g]:	from 5000
Kit guide:	ARF
Hull Length [cm]:	198.5
Span [cm]:	400





#### 1.2 Recommended accessories

To take advantage of the first-class flight characteristics of the MG-19 in its entirety, we recommend using a computer remote control and high-grade (digital) servos.

#### 1.2.1 Drive Options

For this model, a drive with 5 cells Lipo from 4000mAh is recommended. Due to the recoverable power surplus of Antribesvarianten this model is strongly recommended that only experienced pilots. It will be appreciated that such models are not suitable for maneuvering at very high speed because of the lightweight construction in combination with the high engine performance.

The following drive configurations have been tested and are highly recommended:

Engine: AX 4130/16 V2 controller: 120 Mezon light, spin Pro opto 77 Propeller: 18,5x10 with a 52mm middle piece

#### Suitable accessory kits are available in our

Online shop:

Propulsion: Style No .:

AXI MG19-5.



shop.hepf.com

Servoset: No .:

RC-MG19 Art.



shop.hepf.com



#### 1.3 Safety

Flight models with remote control are not toys and operation requires responsible persons acting.

The construction and operation requires technical knowledge, craftsmanship and safety-conscious behavior. Improper handling of such models may lead to personal injury and property damage. Note to the dangers that may arise from rotating parts such as propeller safety regulations when handling electrical and electronic components and pay particular attention. Never stand in the rotational plane, and keep in mind that any time you can come to technical defects, such as an unexpected start of the motor.

Before each use, the MG-19 for damage and skim Never persons or livestock.

Always perform a range check by taking note of the manufacturer of your remote control, the specifications.

In many countries it is a legal requirement for the operation of a model airplane to have taken out liability insurance.

#### 1.4 Disclaimer

Since we have no influence on the installation, selection of components and their installation and maintenance, and may also affect the actual operation of the model in any way, is any liability and claim for damages in connection with the operation of this model with explicit reference to this risks excluded. We all liability for loss, damage or costs can be accepted.



#### **1.5 Guiding instructions**

The construction and operation of such a model is a certain amount of building and flying experience requires therefore this construction manual is provided as a resource to the completion of this model - the order of individual sections was created by goal-oriented point of view.

The texts and illustrations are only guidelines and icon images are We reserve last-minute changes to the technical design as part of quality improvement without prior notice -. Claims can from this construction manual or any deviations and changes are derived. The shown accessories, especially electronics and drive are basically not an integral part of the kit.

#### 1.6 Warranty provisions

We guarantee that the kit of the MG-19 is delivered in full and without damage. Before you begin construction of the MG-19, check all components on coming of age and damage. We point out that partially constructed models are non-returnable.

#### 1.7 preparations

Before you start, check the individual components and assign the accessories allotted to each step to the assembly.

Opt for optional building steps before the beginning of the form of realization - Changes in arrears are no longer feasible only with great effort or not.

Check the condition of the clothing. Due to changing climatic conditions during transport and storage is a rarely



Appearance of wrinkles and partial detachment of the Bespannmaterilas possible - in this case it is recommended due to the ease of handling, to smooth it prior to the start of construction by means of heat gun or iron. It is imperative to pay attention to the correct temperature setting to avoid damaging the covering - low temperature and begin inconspicuous border pieces - avoiding delays! Familiarize yourself with the safety requirements of the adhesives and other chemicals used and pay attention to proper ventilation.

Note that in each case the principle: "Light flying light" and "make worse" nothing - this kit is equivalent to 1: 1 of the original design by Gernot Bruckmann and meets all maneuvers despite consistent lightweight construction, which correspond to the model.

#### Much flown to and Happy Landings wishes the entire team

#### HEPF model and GB-Models







### 2. INSTRUCTIONS

#### 2.1 hull

Here you are right in front of the first important decision, because it raises the question of whether you simply want to build a glider version with tow release, or a nose drive to be independent. The following section of the engine installation as well as the installation of the tow release is described.

#### 2.1.1 Schleppkupplung

Here you can see all the necessary components (in this case, a HITEC HS 7245MH) and components for the tow release

On the fuselage underside, a tube is glued into which the enclosed tow hook is glued









Screw the servo Schleppkupplungs- in the front recess provided













,,, and stick them in the previously named pipe on the hull bottom

Finally, connect more linkage and power together. Respect, think highly of you there on the Servo center





2.1.2 Engine Installation

Here see all important components of the combos and AX 4130/16 with a 120 Mezon light and a 18 "folding propeller





Here you can see the mounting points for the rear mounting of the Axi 4130/16

Mount the motor using 4 M4 screws in the hull, the propeller was previously not shortened so that it then not too far from the model projects





Then fit the fiberglass nose, this is simply screwed with an M3 screw from the cockpit fixed



The propeller is easy to clamped the protruding shaft and can be easily disassembled to use the MG-19 as a pure glider

Finally, the Mezon controller is mounted by means of a cable tie to the left side of the fuselage wall and the engine mounting is completed







#### 2.2 Rudder

The next step is to start using the rudder



Begin glued anything with the gluing of the three hinges, this previously still oiled and then glue with polyurethane adhesive. Make sure that the three pivot points are located in a line







Rough the two tiller good ...





,,, and stick them on both sides in the vertical stabilizer

Now glue the Seitenruderstockungsrohr in the rudder damper





if this hardened Glue the rudder to the fuselage

is



damper, first, you lubricate one every 3 hinges, so that nothing can stick

As a next step, the rudder is connected to the

Use PU adhesive to the Glue the hinges. be careful before curing that the rudder is also perfectly aligned





Here you can see all the necessary parts for the Rudder



Screw the ball head with the eye bolt and mount it and the two previously glued rudder levers







The enclosed Anlenkungsseil is plastic coated and can be easily merged with the lighter. For aesthetic reasons, you can still be a shrink tube over the twisted point



Finally, screw the rudder servo (here HITEC HS7245MH) to the right (as seen in flight direction) Servo neck and connect the cables on the same way as already applied at the rear with the servo. Pay attention to the neutral position of the servos



2.3 Elevator

Next, dedicate themselves to the elevator





Again, you start again with the glue the pin hinges in the two rowing





eighth before curing that all three pivot points are in a line.

Grinding before gluing the tiller good. Make sure that you make a left as right rudder and the two tillers have the same distance from the pivot point exactly to get a symmetrical rash later.





Now before connecting rudder with damper, oil the hinges 6 to prevent a sticking. Now you can attach the two oars with the damper, reuse PU glue here



be careful before curing of the adhesive that both rudders have a constant distance, and then later to allow the same rash



With the following points, we conclude the elevator installation



In order to thread the Distraction rod easier to make, staple the two ends together with an adhesive tape



It must look at both sides of each part of the

push rod from the fuselage

Now install the elevator to the fuselage





When the elevator at the appropriate place, you screw the elevator cover to the elevator and the fuselage using the included M4 screw



Now screw the ball joint to the push rod and screw it to the tiller. Do this on both sides and check that both oars are in the exact same position



Check you before the The servo neutral position as the rudder. Now screw the elevator servo (here HITEC HS-7245MH) To the left of the rudder servo, connect the ball head with the push rod and screw it to the servo arm.





#### 2.4 wing

The next step is to mount the ailerons





hinges

Begin here again with the glue of the four

Again take care that all four hinges have pivot point exactly in line





It follows the glue the Ruderhebel: Rauen this previously well and then stick them in the front of the openings provided in the aileron



To prevent sticking, do not forget to oil the hinges before connecting the aileron to the wing. Now you can attach the ailerons to the wing.



Prior to curing, align the aileron to match the wings and make sure that the trailing edge forms a line





Prepare all the parts for the aileron linkage before (here used a HITEC HS-5085)













Mount the servo arm centered on the servo and unscrew the cap with 4 screws in the wing



Lengths the aileron pushrods down so that it fits perfectly when the ailerons are just as the power center



#### 2.5 spoilers installation

Now you can decide whether you want eibauen spoilers in the wing or not, there are three options:

First set both ailerons up to the curb, this is not ideal, but saves weight

- 2. They build only on the upper wing surface spoilers electric one (this is enough)
- 3. Or build above and below a spoiler, it would then scale and also has the best effect



With a sharp knife cut the hole in the wing, it is already pre-marked and well visible through the film.





electrical spoilers perfectly into the cut

fit

With the internal thread you can pull through the wing the cable easy





Now you can stick the spoilers in the wings. Kontrolieren before curing if the enclosed covers fit on the door and do not survive



Finally can the stick covers on the doors, make sure that the glue no wrong spot comes so that the flaps will not stick



During curing, complain the cover with Gewichtern so that they form a perfect line with the wing





## You can then proceed with the Flügelsteckung





Rough the torso portion good

Put the two surface belts in the two fuselage openings ...









Now dismantle the two wing spars again and grind them to good





Now you can mount the two beams back to the hull





Now try to put the two faces sample Half of the hull to see whether they also fit

Now glue the tubes with the wings, only in the infected state, so that the surfaces also fit perfectly to the hull. Also make sure that does not adhere to the surfaces to the fuselage





#### 2.6 cockpit

The enclosed cockpit is just a simple replica of the original, with little effort you can beautify this course something again. Here are all the enclosed cockpit to see parts at a glance



Glue the instrument Enclosed pictures with the boards







The rear instrument panel is sticked on the central board, be sure that can be both canopies still slept



The front instrument panel is simply screwed with two screws to more easily get subsequently to motor and controller. The two seats are simply held by the already glued magnets, thereby easy access to battery and receiver is possible



#### 2.7 RC Fittings

The receiver is placed just under the rear seat, as it has very good space and is not visible through the seat then



The drive battery sitting directly behind the engine. Here it serves as a focal point weight and the front seat still fits perfectly into





#### 2.8 RC settings

As used herein the drive battery 4400mAh 5s is perfectly achieved using the ideal center of gravity without additional lead. However, if you build a pure glider version, you must of course make up for the lack of weight in the snout with lead.

Recommended focus measured from the leading edge is 130mm. This can of course be adjusted as desired according to your wishes after the first flights.

#### Rudder deflections (which are totally insensitive):

above 25mm below 18mm Expo 25%

aileron

elevator above 35mm below 30mm Expo 25%

#### rudder

25mm measured below the rudder Expo 25%

Before your first flight we recommend now again to control everything: Look whether the focus and the rashes fit, of course, do not forget a range test and choose a quiet day so the first flight works as intended!

#### We hope you GB MODELS many great flights with your new Musger MG 19th





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