en/Transmitter

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Inhaltsverzeichnis

1 Transmitter

To control your !Mikrokopter you need a transmitter and receiver with up to 16 channels.

The receiver should be able to send one of this signals:

- PPM Summ signal (Multi signal)
- S.BUS (Futaba)
- Seriell (Spectrum Satellit)

A standard receiver with only single servo outputs can not be used!

Examples of how to connected a receiver can be found here: Receiver connections

How to use the control- and switching commands at the transmitter is illustrated here: **Bedienung**

2 Channels

The number of functions you can use on your MikroKopter depends on the used transmitter/receiver. Each function need a channel. If you use e.g. a transmitter/receiver with 8 channels you can use max. 8 functions.

With the FlightCtrl you can handle up to 16 channels (= max 16 functions) on your MikroKopter.

The functions you can use are:

- control - throttle	- control- Gier
- control - Nick	- control - Roll
- GPS (PositionHold / ComingHome)	- AltitudeControl (auto altitude hold)
- CareFree (Headless Mode)	- Camera - Zoom
- Camera - Trigger	- Camera - REC start/stop
- Camera-Gimbal - (Nick)	- Camera-Gimbal - (Roll)
- Camera-Gimbal - (YAW)	- Auto Start/Land
- Motor start/stop	- Motor safety switch
- (Single) Waypoint Speed	- Single Waypoint REC/Load
- Single Waypoint next (REC/Load)	- Servo3 (free to use servo connection)
- Servo4 (free to use servo connection)	- Servo5 (free to use servo connection)
- uvm.	

INFO

If you use a *Graupner HoTT* or a *Jeti* transmitter you can find here a ready set model memory and more informations how to use the transmitter:


Graupner HoTT


Jeti

Tip

Each transmitter usually has got more model memory in the settings and assigned channels can be saved. Those model memories can be saved in your transmitter as "Heli" or "X-Wing".

Even if the MikroKopter is a "Kopter" you should **not** use Heli model in your model memory!
Here you could use mixer which negatively affect the functions of the Kopter.

For that reason the MikroKopter should be saved as X-Wing.

Tip2
The control-stick for the function "Throttle" should be reworked to "neutralizing".
Then the throttle stick will be centered automatically when you release him.
Here you need to open your transmitter carefully and insert (or activate) a spring at the appropriate control-stick.
Further information about the rebuild you will find in the instruction manual of the transmitter.

3 Range

The range (and also the altitude) you can fly your MikroKopter depends on the transmitter/receiver you use.
All Functions (With the exception of the waypoint flight) can be used in this range.

Detailed information on the range you can find in the manual of the used transmitter/receiver.
If not you can also ast the manufacture of the transmitter/receiver about this informations.

Tip
To get a maximum of range the receiver shouldn't be covered with something.

4 Check the channels with the KopterTool

If all channels are set in the transmitter you can now check them with the KopterTool.

For this connect the copter with your computer (e.g. with MK-USB or RangeExtender).
After the transmitter is switched on and the copter is connected with the Lipo you can start the KopterTool.

If you now see in the KopterTool an error ("err7: Kein Empfängersignal") and the copter is beeping the whole time this can be the reason:

- Transmitter is OFF
- The receiver is not bound with the transmitter
- The receiver is connected wrong with the FlightCtrl
- If you use a Graupner Hott receiver, the sum signal (SUMO 16) is not set
- The connected receiver does not send a ppm sum signal
- The right receiver is not set in the KopterTool (Settings -> Channels)

If the receiver is set and connected correctly you can open the "Settings" in the KopterTool. Here you can open **Channels**. At the right side you see there a bar for each channel.

When you now move the sticks for throttle, yaw, nick, roll or you move a switch/potentiometer the bar of the set channel should move Above the bar you see numbers. When you use the sticks or move a switch/potentiometer tha value should be change from "0" up to "254".

If you can not reach "0" or "254" you have to change the "travel adjust function" for each channel in your transmitter.
The value for the "travel adjust function" is normally set with 100%. Here you can change the value until you reach "0" and "254".

This is necessary to ensure a fault-free function when switching a Kopter function.