





## **en/Firmware-0.82**

10

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# Firmware 0.82

 Seite in [Deutsch](#)  Page en [français](#)  Pagina in [italiano](#)

-  This page as PDF-Document
- 
- Inhaltsverzeichnis

1. [Firmware 0.82](#)
  1. [Version for ACT-2.4GHz S3D-Receiver](#)
2. [MotorSafetySwitch](#)
3. [Camera servos](#)
  1. [smoother control of the servos](#)
  2. [Camera Orientation](#)
4. [reset of single settings](#)
5. [Koptertool-OSD](#)
  1. [Variomode: Visibility of rise and fall](#)
6. [Events on reaching the waypoints](#)
7. [GPS](#)
  1. [Auto-configuration of GPS-Modules through Navi-Ctrl](#)
8. [Jeti](#)
  1. [JetiBox Simulation](#)
  2. [Firmware Update of the RMK2-Jeti-Receiver](#)
9. [Others](#)
10. [V0.82b \(FC V2.1 only\)](#)


**Release date:** 09.11.2010

**License:** [LICENSE.TXT](#)

- **Forum-Link:** <http://forum.mikrokoetter.de/topic-20228.html>


## Download:

- [FlightControl V0.82a \(FC1.0 bis FC2.0\) \(MEGA644\)](#)
- [FlightControl V0.82b \(ab FC2.1\) \(MEGA1284\) \(08.12.2010\)](#)
- [Navi-Ctrl V0.22a](#)
- [MikroKopter-Tool V1.72a](#)

 The Settings will be overwritten after the update to this version. Mixer settings, channel assignment, etc. must therefore be controlled and adjusted if necessary. Do not load old on the PC stored settings-files

## Version for ACT-2,4GHz S3D-Receiver

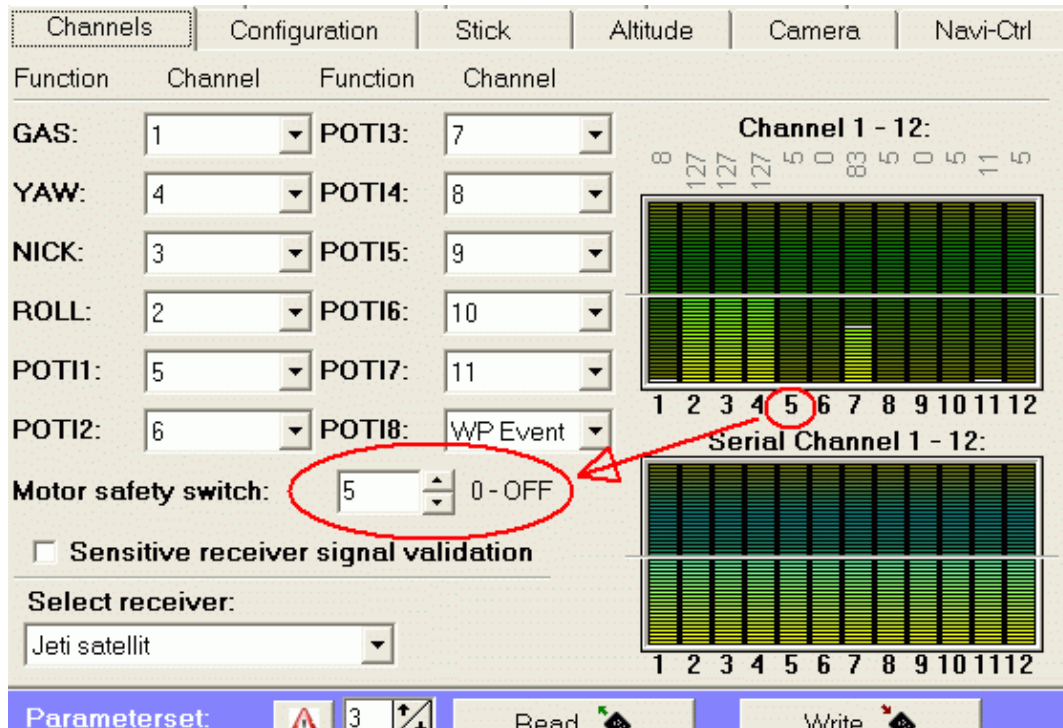
- [FlightControl bis FC2.0 V0.82a - nur für ACT-S3D 2.4GHz Empfänger](#)
- [FlightControl ab FC2.1 V0.82b - nur für ACT-S3D 2.4GHz Empfänger](#)

 only for this receiver-version

# MotorSafetySwitch

In the past it happened that users switched off the MK during flight by moving the gas/yaw stick into the left corner. Especially in the vario-altitude control mode that could happen

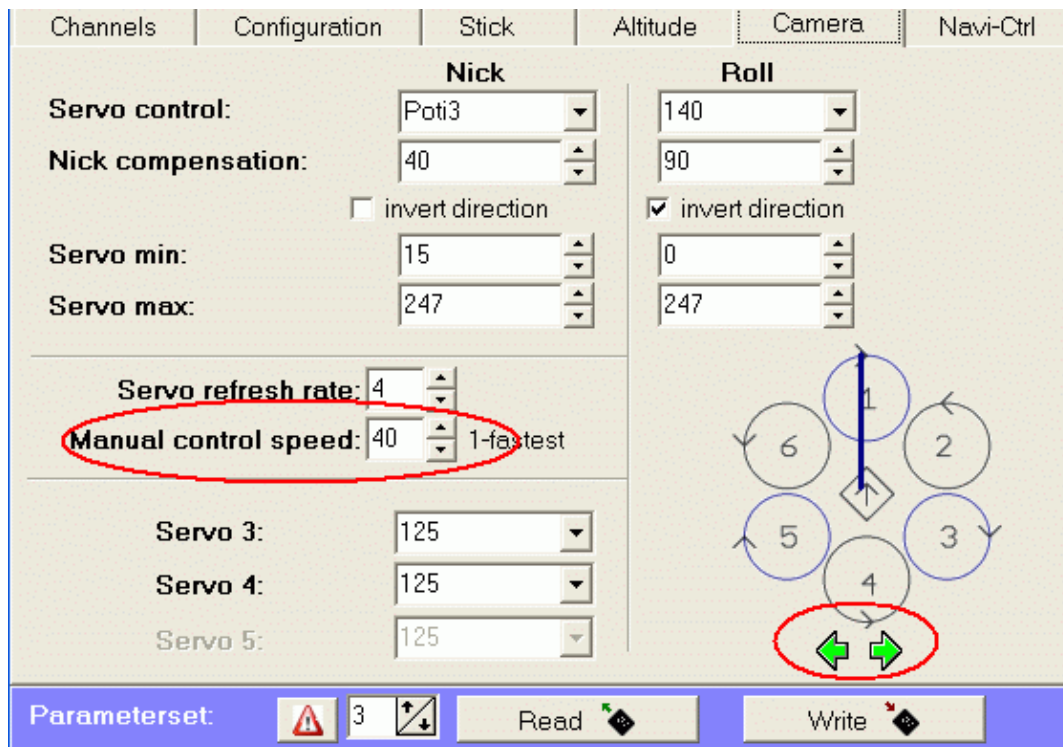
Now this can be avoided via a seperate channel.



On/off is disabled if the value of this channel is below 35

**i** Tip: you can put this onto the channel of the altitude controller. So you can't switch off with enabled hight-control

# Camera servos



## smoother control of the servos

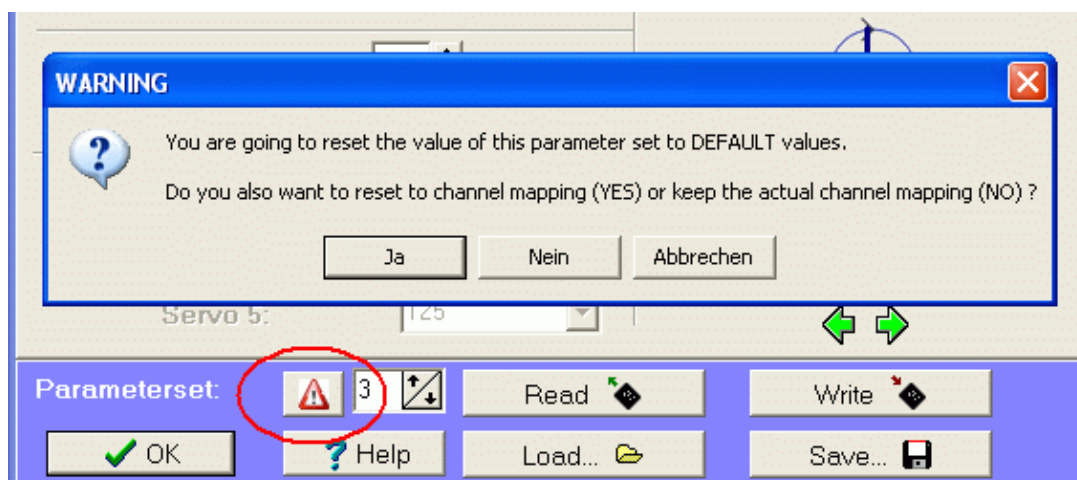
This slows down the movement of the Cam-Servo


## Camera Orientation

Distorted camera servos are supported now

## reset of single settings

Parameter reset of individual settings possible

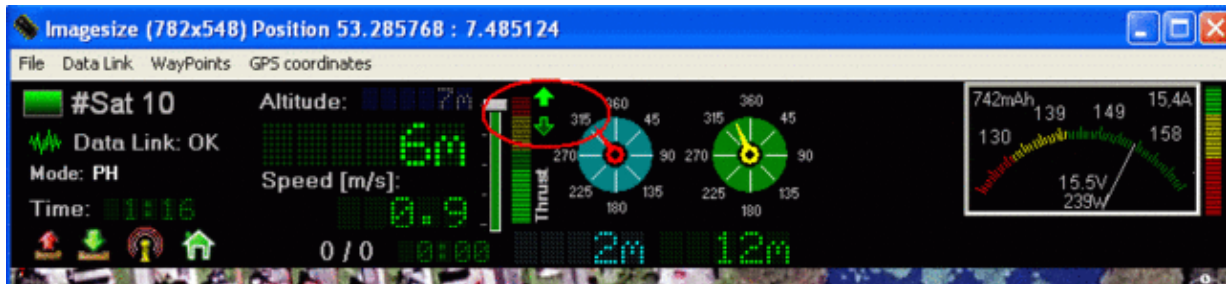


After clicking the  in the settings dialoge, there will come a question if the channels should be reset also

- Yes: channels will be resetted
- No: the channels will not be changed

## Koptertool-OSD

### Variomode: Visibility of rise and fall



Im

Variomode kann man jetzt sehen, ob der Sollwert steigt oder fällt - entspricht +/- im Jeti-Display

## Events on reaching the waypoints

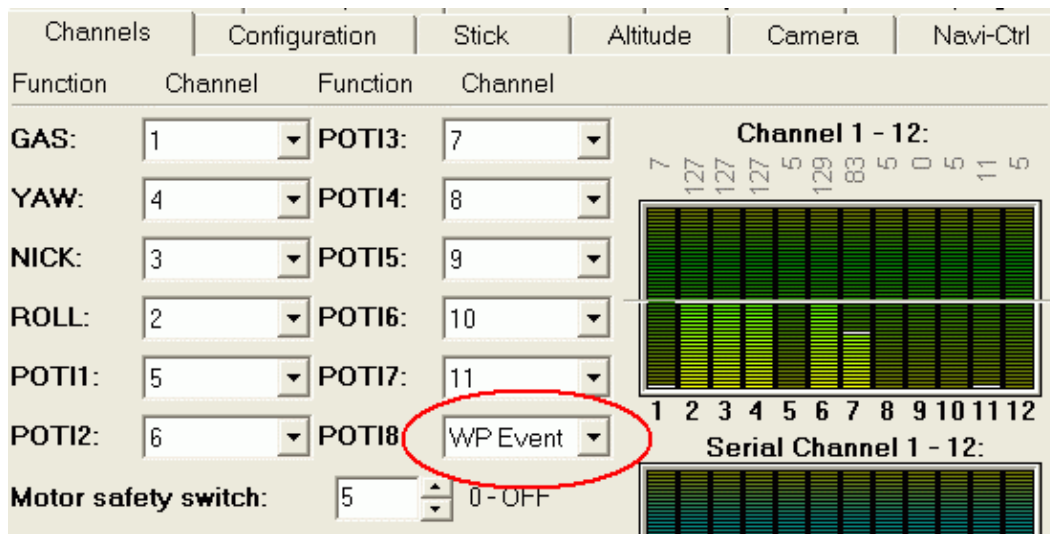
The idea is, to trigger a camera (or similar) if the waypoint is reached. The camera can be connected on the blinking-outputs or can be controlled by a mechanical servo.

Dazu wird beim Erreichen eines Wegpunktes quasi ein Wert auf einen Kanal "WP-Event" gelegt.

If the waypoint is reached, a selectable value will be written into one virtual channel "WP-Event" - this can be used for blinking outputs or on a servo-output.

| Zeit | Radius | WP-Event | Steigrate | Höhe | Richtung |
|------|--------|----------|-----------|------|----------|
| --   | --     | --       | --        | 1    | --       |
| 10   | 10     | 0        | --        | --   | POI      |
| 10   | 10     | 50       | --        | --   | POI      |
| 10   | 10     | 100      | --        | --   | POI      |
| 10   | 10     | 200      | --        | --   | POI      |
| 10   | 10     | 0        | --        | --   | POI      |
| 10   | 10     | 0        | --        | --   | POI      |
| 10   | 10     | 0        | --        | --   | POI      |
| 10   | 10     | 0        | --        | --   | POI      |

This value will be sent from the [NaviControl](#) to the [FlightControl](#) when the waypoint is reached.



The value is active during the waiting time on the waypoint. In the other time the value is zero.

A manual how to set this function and how to use it you can find in our Wiki: [WaypointEvent](#)

## GPS

### Auto-configuration of GPS-Modules through Navi-Ctrl

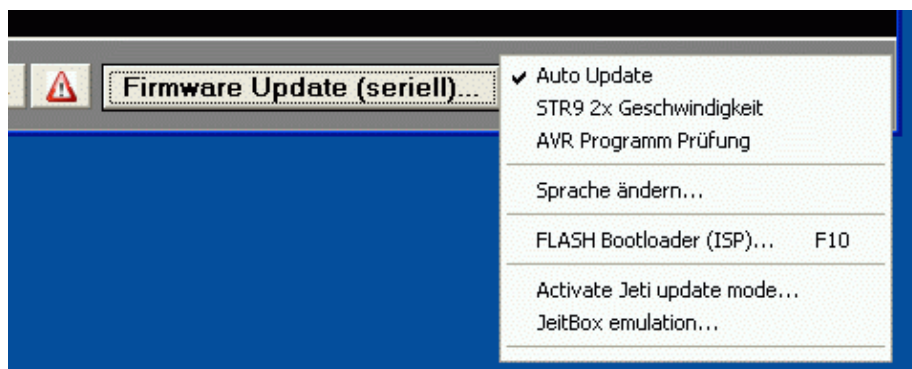
After switching on the MK, the NC will write a new -temporary- setting into the MKGPS.

If the NC shall not do so, you can disable that by adding a value "GPSAUTOCONFIG = 0" into Settings.ini (on the SD-card in the NC) GPSAUTOCONFIG = 0

## Jeti

### JetiBox Simulation

Use the right mouse-button in the Update-Window to open the Jeti-Menu





⚠ Please note

- **Do not use that during flight!**
- The receiver "JEtI" must be selected as receiver type in the settings
- only possible if the MKUSB is directly connected to the FC - not via the [NaviControl](#)
- Switch off/on the MK when finished

## Firmware Update of the RMK2-Jeti-Receiver

If a firmware-update of the RMK is necessary, it is possible now. See: [JetiUpdate](#)

## Others

- Twitches" of the servos resolved in short reception failures
- Fix: Fix short beep when, but less than 6 Sats (was not in 0.80)
- Fix: Koptertool failure of communication in certain circumstances
- PH possible, even if there was still no startup Satfix (which allowed 0.80 then no PH)
- Better behavior when the records come from the GPS irregular (> 12 Sats?)
- The parameter [GyroStability](#) can be set up to the value of 16

## V0.82b (FC V2.1 only)

More information regarding undervoltage settings here: [UndervoltageSettings](#)

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