

**en/DS-16**

3

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# 1 Info

The here described settings and procedures are related to the current version 1.07 Jeti.  
You can download the latest software directly from the homepage of Jeti: [Homepage](#)

Already finished model memories for the DS-16 as well as a suitable setting for the FlightCtrl can be downloaded further below "[Example Setting - Download](#)".

## 2 Jeti DS-16

Shoplink: [Jeti DS-16](#)

The DS-16 is a perfect transmitter for the MikroKopter. With this transmitter you are able to use all 12 channels of the FlightCtrl.

The data:

- 16 channel for switches, buttons and pots
- 2,4GHz transfer technology
- Displays [MikroKopter](#)-Telemetry on the build-in and illuminated 3,8" display (320x240 Pixel)
- Voice output of the telemetry values (via connected loudspeaker or headset)
- 10 switches (5 three-way switches, 4 two-way switches and 1 push-button)
- 4 analog pots
- Future proofed through upgradeability via USB interface
- Recording of the telemetry data
- PC interface
- Different languages can be set (German, Cestina, English, Francais)



Jeti DS-16
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 The transmitter is only available in Mode5-configuration (with spring in the gas-stick also) in this [Online Shop](#).

### INFO:

The Jeti-EX-Telemetry is only supported from **FlightControl V2.1** and **software version V0.90**.  
Informations about the Version 0.90 you can find here: [V0.90](#)

## 2.1 Instruction for the DS-16

The instruction for the currently valid version can be downloaded directly from Jeti: [Jeti DS-16 Instruction manual](#)

## 3 Set transmitter + bind receiver

The easiest way is (for beginners, too) to control the MikroKopter in **Mode2**.

The function "Throttle" and "Yaw" is on the left control stick, "Nick" and "Roll" on the right control stick.

### 3.1 Set Stick Mode

You can get the Jeti DS-16 transmitter either way in mode 1/3 or 2/4. For the use of the MikroKopter the transmitter in mode 2/4 is recommended.

A subsequent change afterwards i.e. Mode1 to Mode2 is via an appropriate software possible. For this purpose the control sticks must be mechanically exchanged against each other. (See instruction: Changing the control mode)

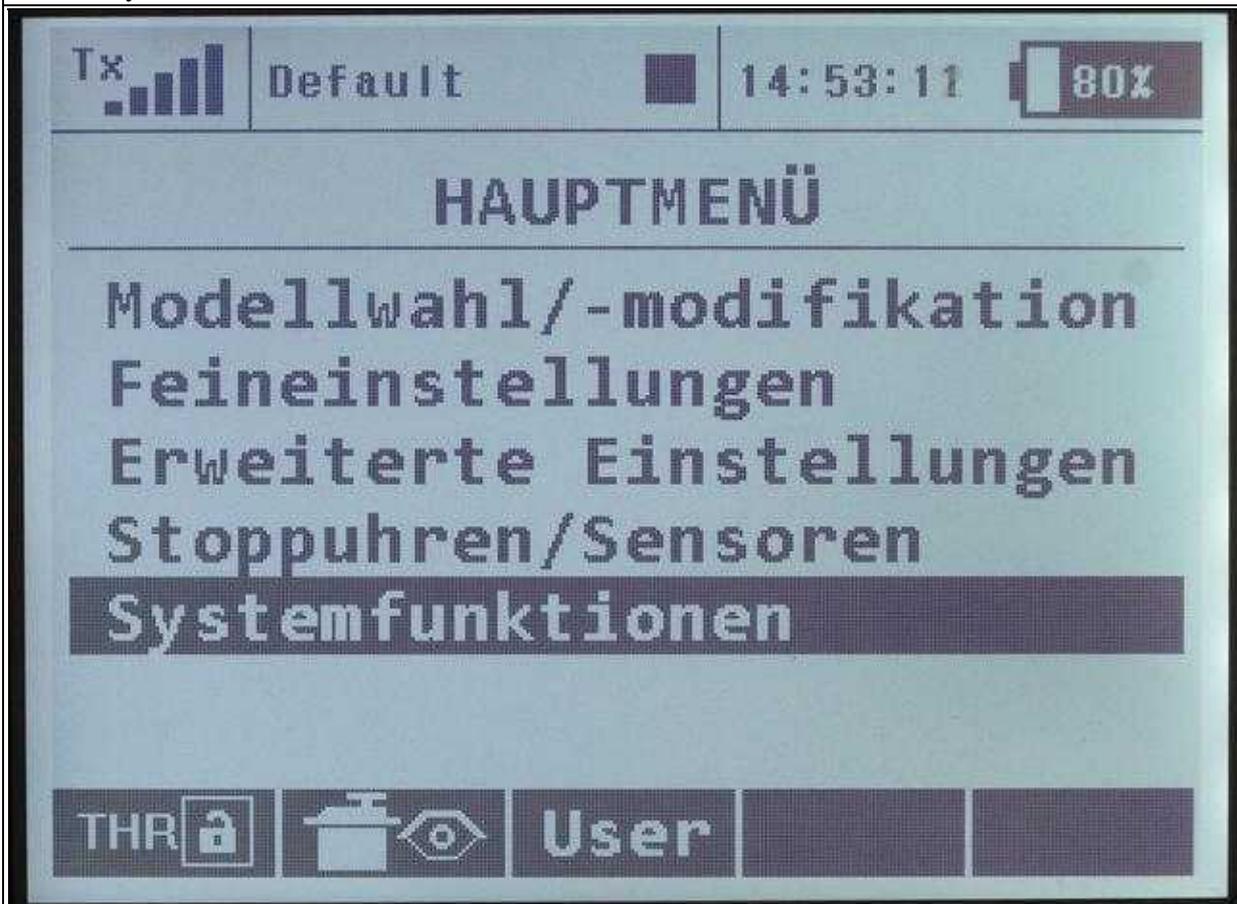
The throttle stick has no spring and cannot be used with a spring in neutral position.

To change the mode you proceed as follows:

#### Step1:

Main menu

choose "System functions"



#### Step2:

and open the

"Transmitter



(To enlarge -> click on the image)

## 3.2 Bind the receiver

The transmitter and the receiver need to be bind to each other.

### IMPORTANT:

For the use on the MikroKopter a receiver with PPM sum signal is necessary. The receiver R9 which comes with the transmitter cannot be used.

Here you can use i.e. the RMK2 Duplex Receiver: [Shoplink](#)

To bind the receiver you proceed as follows:

- Transmitter and receiver are switched OFF.
- Connect the **BIND PLUG** to the plug **EXT** on the receiver.
- Supply voltage to the receiver.
- Now switch ON the transmitter.

The receiver will bind automatically with the transmitter.

This procedure will be acknowledged with an acoustical signal on the transmitter.

## 3.3 Update receiver

It could be possible that older RMK2 receiver provide only 8 channels. That you can change in the settings of the receiver.

If the change to 12 channels is not possible for some reason, you can update the receiver with the following software: [Download](#)

(Description of the Update: [Link](#))

To set the receiver via the transmitter you proceed as follows:

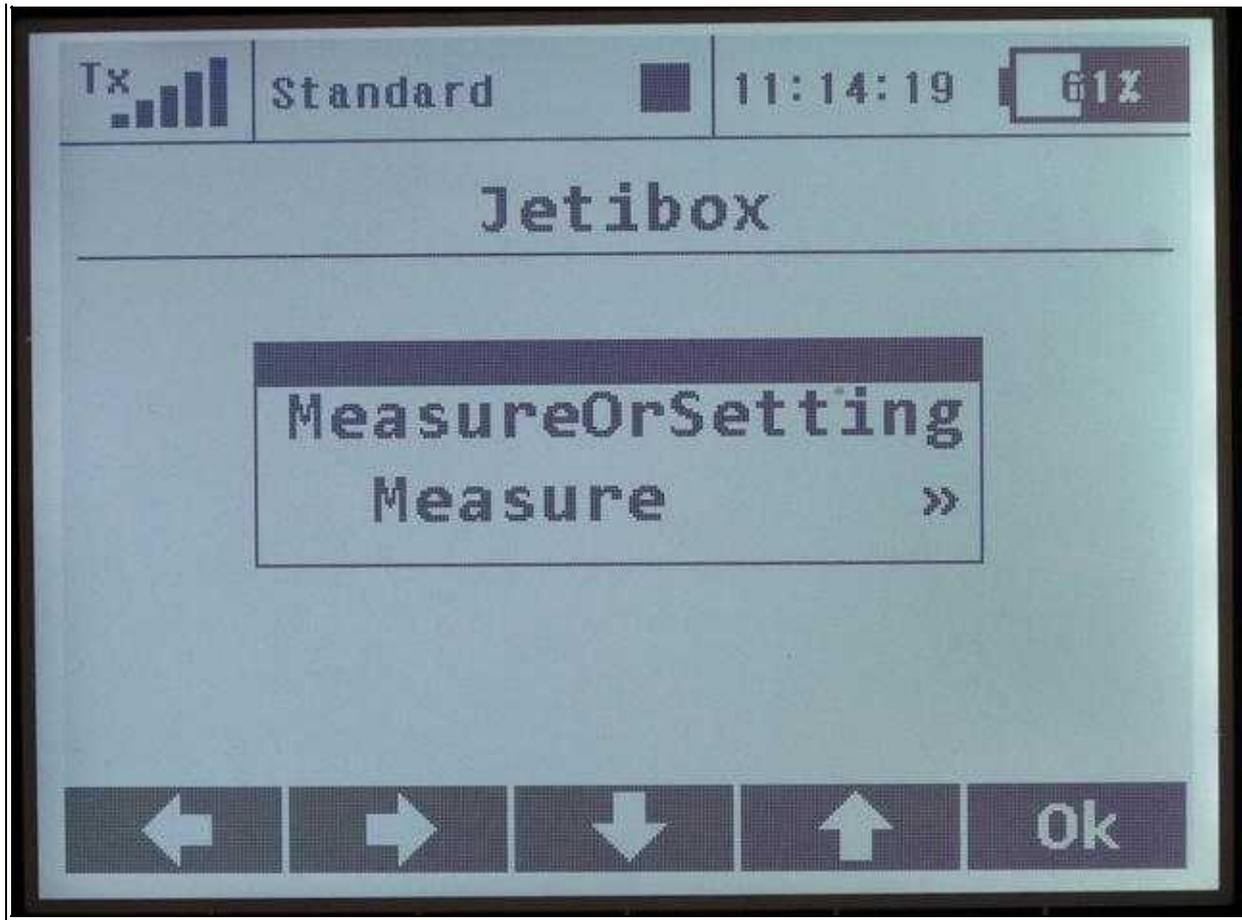
<p><b>Step1:</b> In the main menu choose "System functions"...</p>	<p><b>Step2:</b> ...down to "J" open it with</p>



(To enlarge -> click on the image)

<p><b>Step5:</b> Down to "MeasureOrSetting"...</p>	
--	--

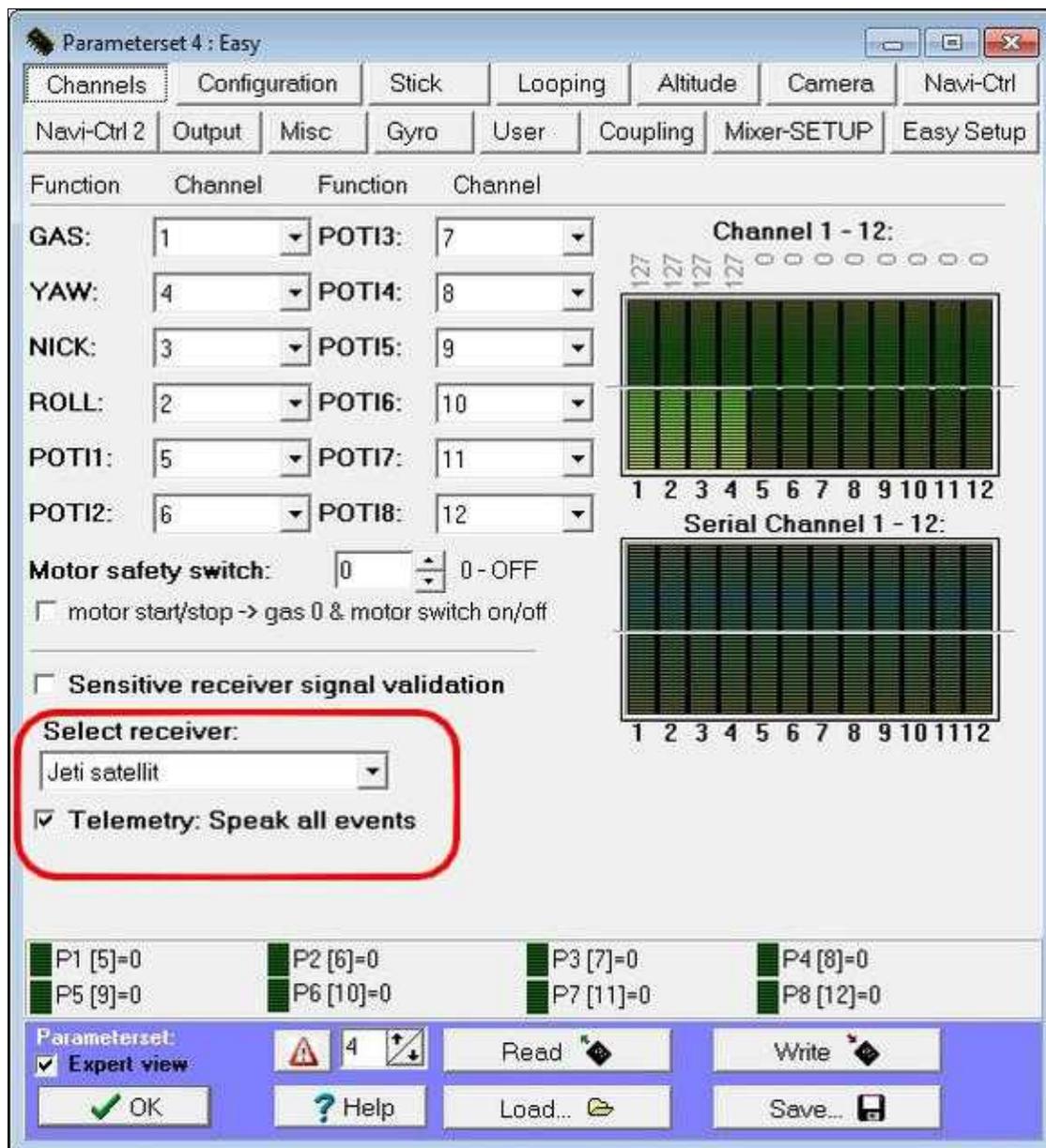
<p><b>Step6:</b> ...right to the sub-menu "M</p>	
--	--



(To enlarge -> click on the image)

## 4 KopterTool

Is the receiver addressed properly and receives the telemetry data, **Jeti Satellite** need to be set in the settings. An additional checkmark should be set at *Telemetry: Speak all events*.



(To enlarge -> click on the image)

## 5 Buttons

On the DS-16 transmitter you go through the menu mainly with the three buttons down on the right side:



(To enlarge -> click on the image)

## 6 New model memory

So that you can use the MikroKopter an appropriate model memory need to be set before. Here you assign the channels to the control sticks, switches, buttons etc.

### 6.1 Channels

This is an example assignment of the channels and is used in the following descriptions. Any other assignment is possible.

- Channel 1	-	=>	Throttle
- Channel 2	-	=>	Roll
- Channel 3	-	=>	Nick
- Channel 4	-	=>	Yaw
- Channel 5	(Poti1)	=>	Function Hold Altitude
- Channel 6	(Poti2)	=>	Function GPS ( <a href="#">PositionHold</a> / <a href="#">ComingHome</a> )
- Channel 7	(Poti3)	=>	Zoom
- Channel 8	(Poti4)	=>	Function <a href="#">CareFree</a>
- Channel 9	(Poti5)	=>	Camera tilt (Nick)
- Channel 10	(Poti6)	=>	Camera tilt (Roll)
- Channel 11	(Poti7)	=>	Trigger camera & LED on/off
- Channel 12	(Poti8)	=>	Function motor safety

### 6.2 Set model memory

To have no mixers or other links in the new model we choose here directly the model type *Truck&Boat*. The switches on the transmitter will be set in the new model memory in that way, that all switches are "OFF" when pointing away from you. To achieve this, the function of some channels need to be reversed with **Rev.**

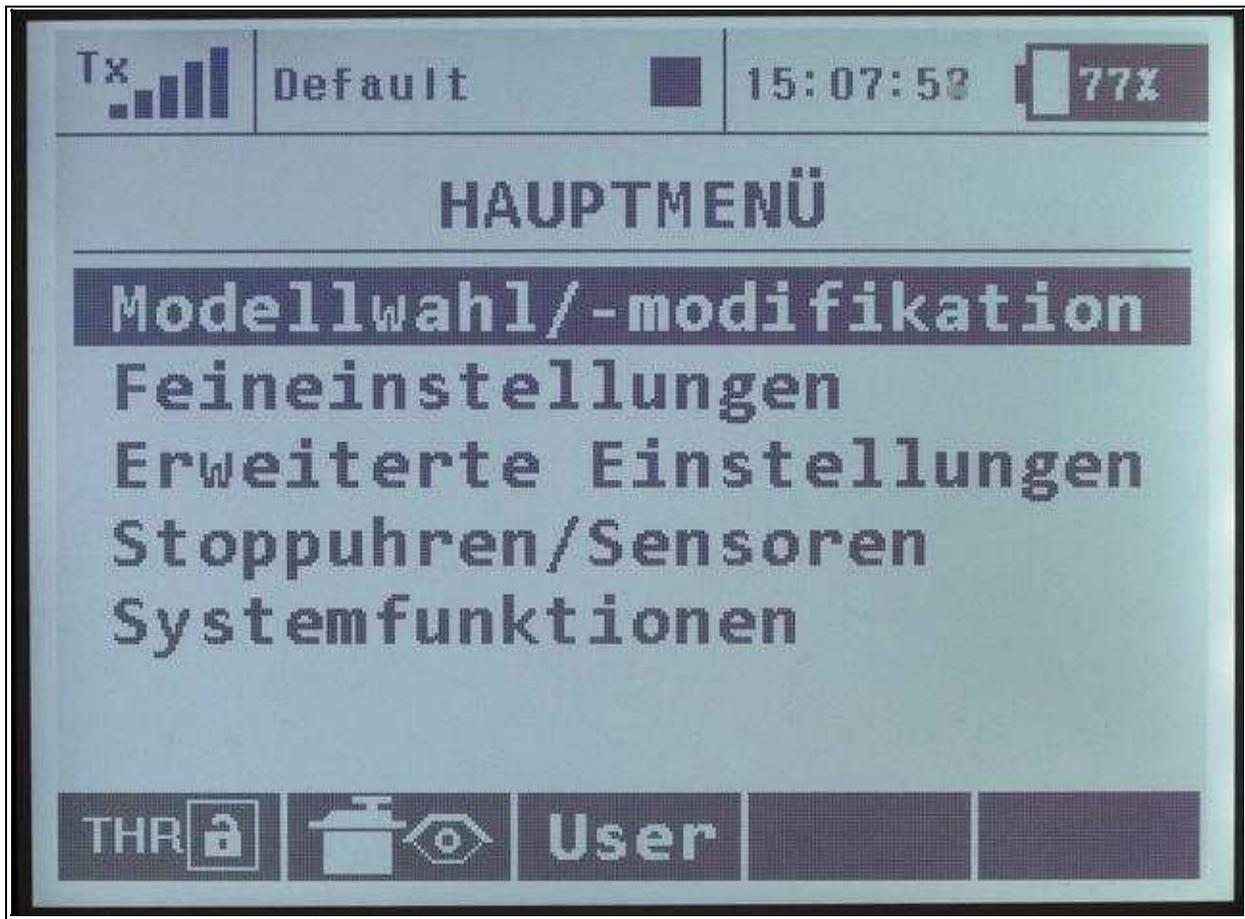
In our example, all channels have been reversed with "Rev." but not channel 1+3.

**Step1:**

Choose in the main menu "Choose model/  
-modification"...

**Step2:**

...and choos



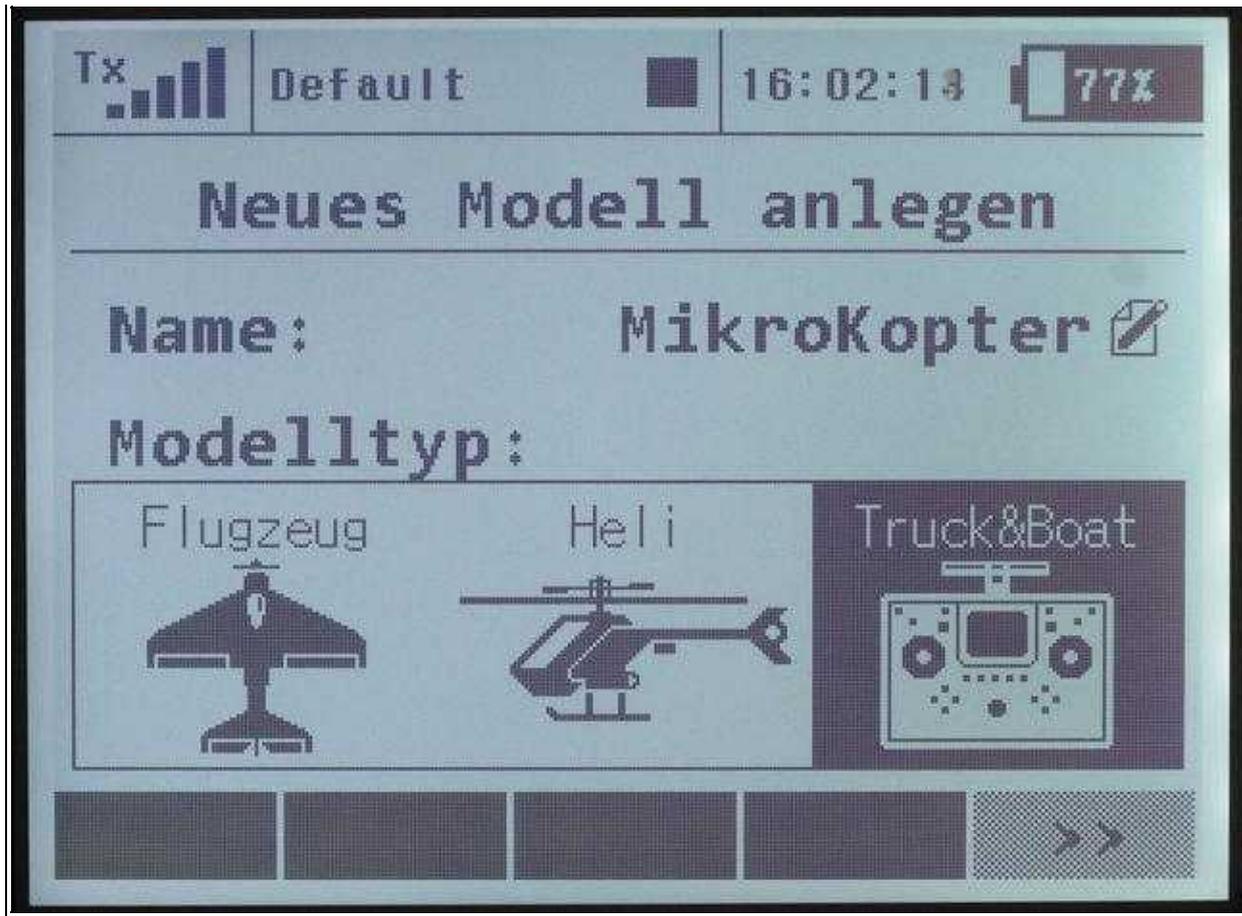
(To enlarge -> click on the image)

**Step5:**

Choose now "Truck+Boat"  
and with the double arrow  
to the next window...

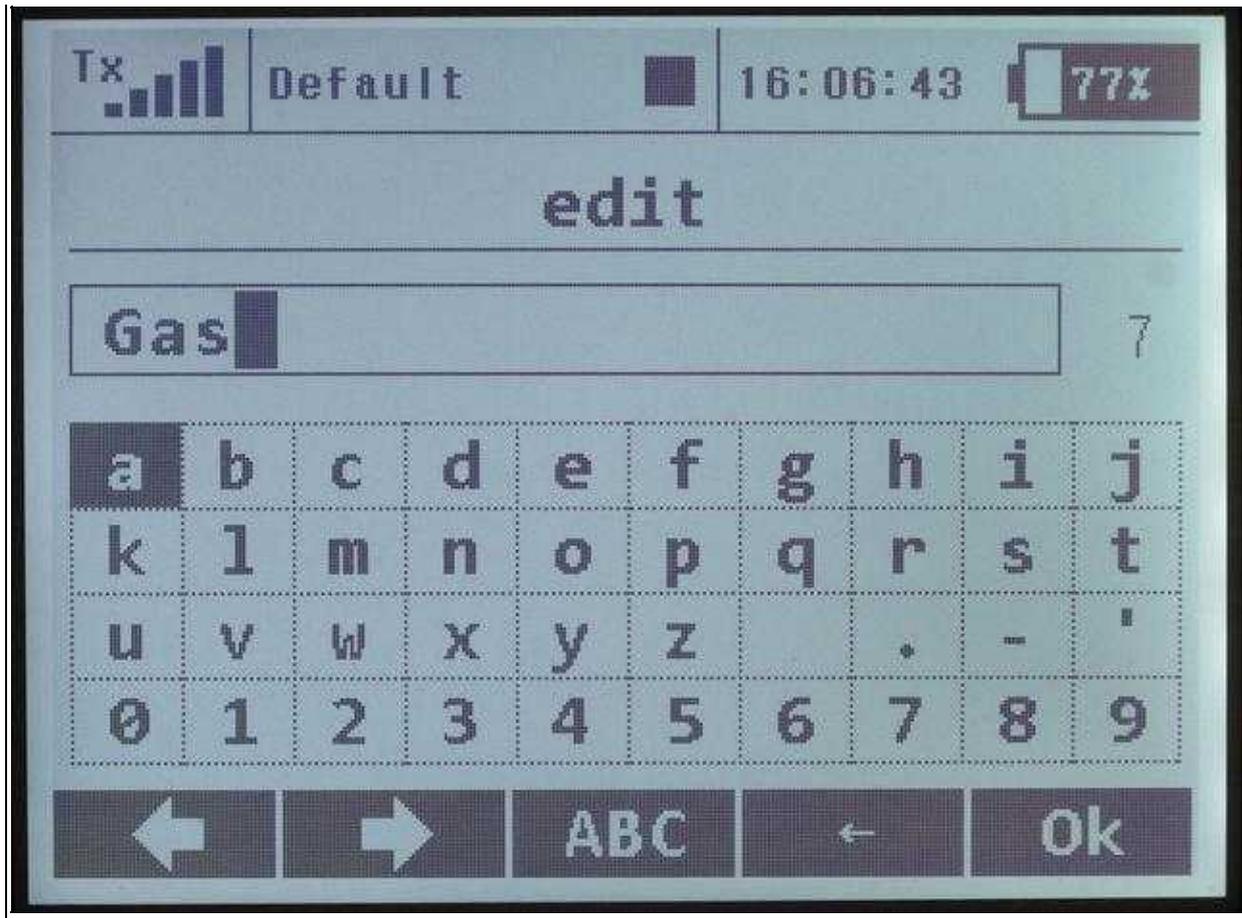
**Step6:**

...do not mal  
continue wit  
to the next w



(To enlarge -> click on the image)

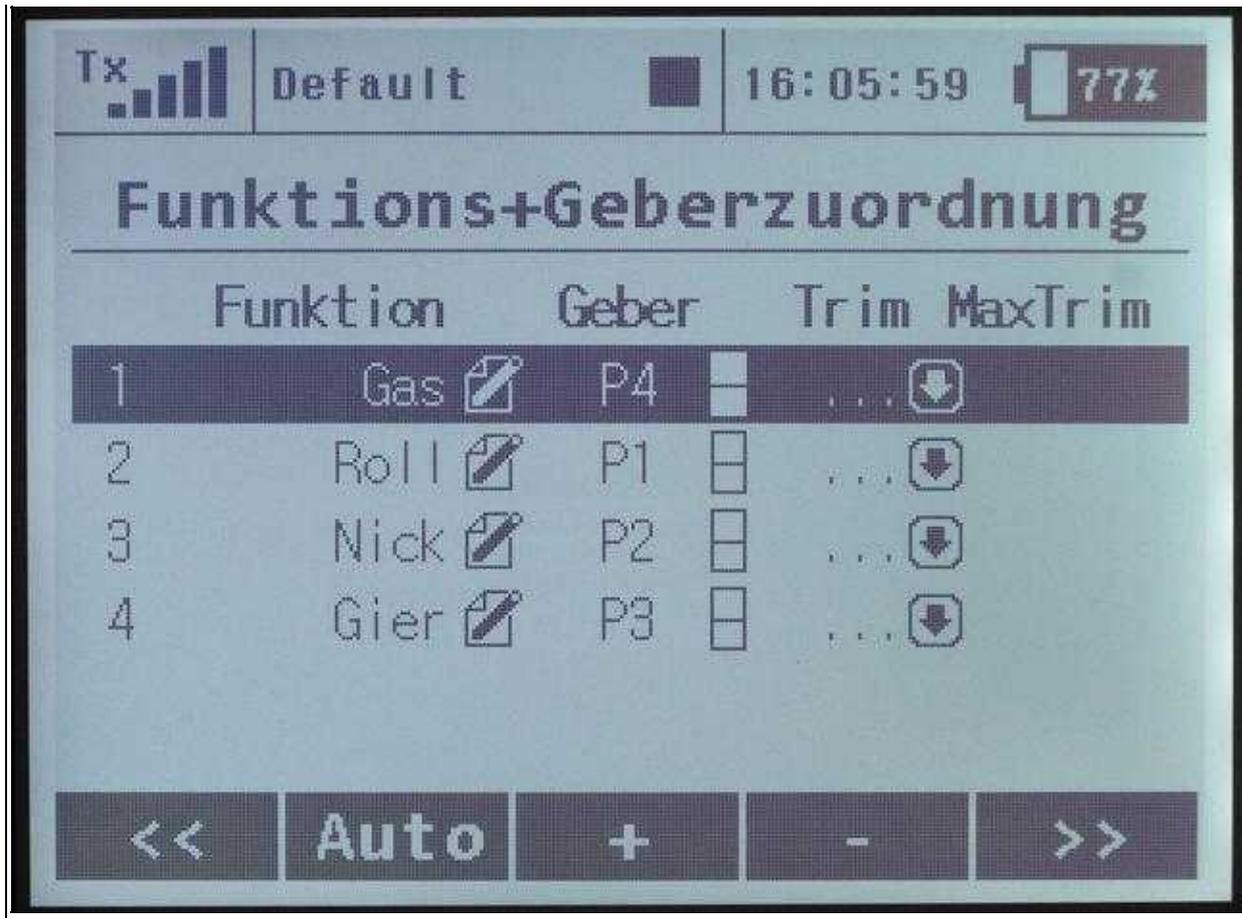
<p><b>Step9:</b> First the name need to be set and confirmed with "OK"</p>	<p><b>Step10:</b> then change Control and can assign it</p>
Empty content area for Step 9	Empty content area for Step 10



(to enlarge -> click on the image)

**Step13:**  
With the "+"  
you set new Geber  
as shown here

**Step14:**  
Are all 12 ch  
assigned, it s  
look in that



(To enlarge -> click the image)

# 7 Telemetry Settings

With this transmitter, like the Graupner HoTT System, you are able to get warning messages for the individual functions via voice output.

The necessary voice file need to be downloaded to the transmitter.

The voice files need to be copied in the transmitter to \Audio\en and \Voice\en.

(Different languages need to be copied correspondingly, i.e. \fr \nl \es)

## Download

Here you can download the appropriate voice file: [Deutsch - Download](#) + [English - Download](#)

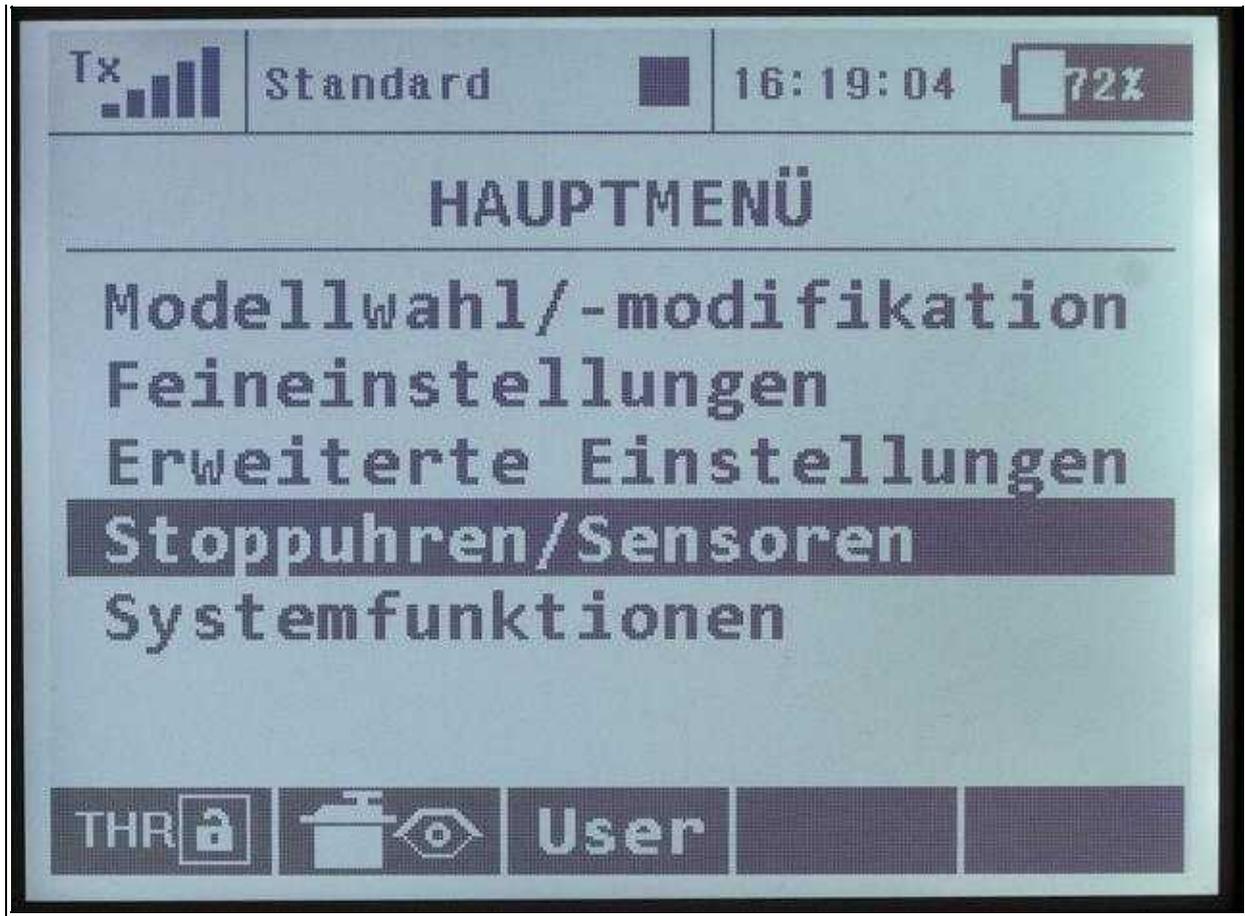
The voice files are listed here:

- |                                     |  |
|-------------------------------------|--|
| <a href="#">_MK_A_MK.wav</a>        | <a href="#">_MK_N_CF_ON.wav</a>        |
| <a href="#">_MK_B_CALIBRATE.wav</a> | <a href="#">_MK_O_ERR_CALIB.wav</a>    |
| <a href="#">_MK_C_STARTING.wav</a>  | <a href="#">_MK_P_ERR_RECEIVER.wav</a> |
| <a href="#">_MK_D_MK_OFF.wav</a>    | <a href="#">_MK_Q_ERR_DATABUS.wav</a>  |
| <a href="#">_MK_E_GPS_HOLD.wav</a>  | <a href="#">_MK_R_ERR_NAVI.wav</a>     |
| <a href="#">_MK_F_GPS_HOME.wav</a>  | <a href="#">_MK_S_ERROR.wav</a>        |
| <a href="#">_MK_G_GPS_OFF.wav</a>   | <a href="#">_MK_T_ERR_COMPASS.wav</a>  |
| <a href="#">_MK_H_WARNING.wav</a>   | <a href="#">_MK_U_UNDERVOLTAGE.wav</a> |
| <a href="#">_MK_I_CF_OFF.wav</a>    | <a href="#">_MK_V_ERR_GPS.wav</a>      |
| <a href="#">_MK_J_MAX_DIST.wav</a>  | <a href="#">_MK_W_ERR_MOTOR.wav</a>    |
| <a href="#">_MK_K_GPS_ON.wav</a>    | <a href="#">_MK_X_WP_REACHED.wav</a>   |
| <a href="#">_MK_L_ALT_ON.wav</a>    | <a href="#">_MK_Y_NEXT_WP.wav</a>      |
| <a href="#">_MK_M_ALT_OFF.wav</a>   | <a href="#">_MK_Z_GPS_FIX.wav</a>      |

## 7.1 Assign voice files

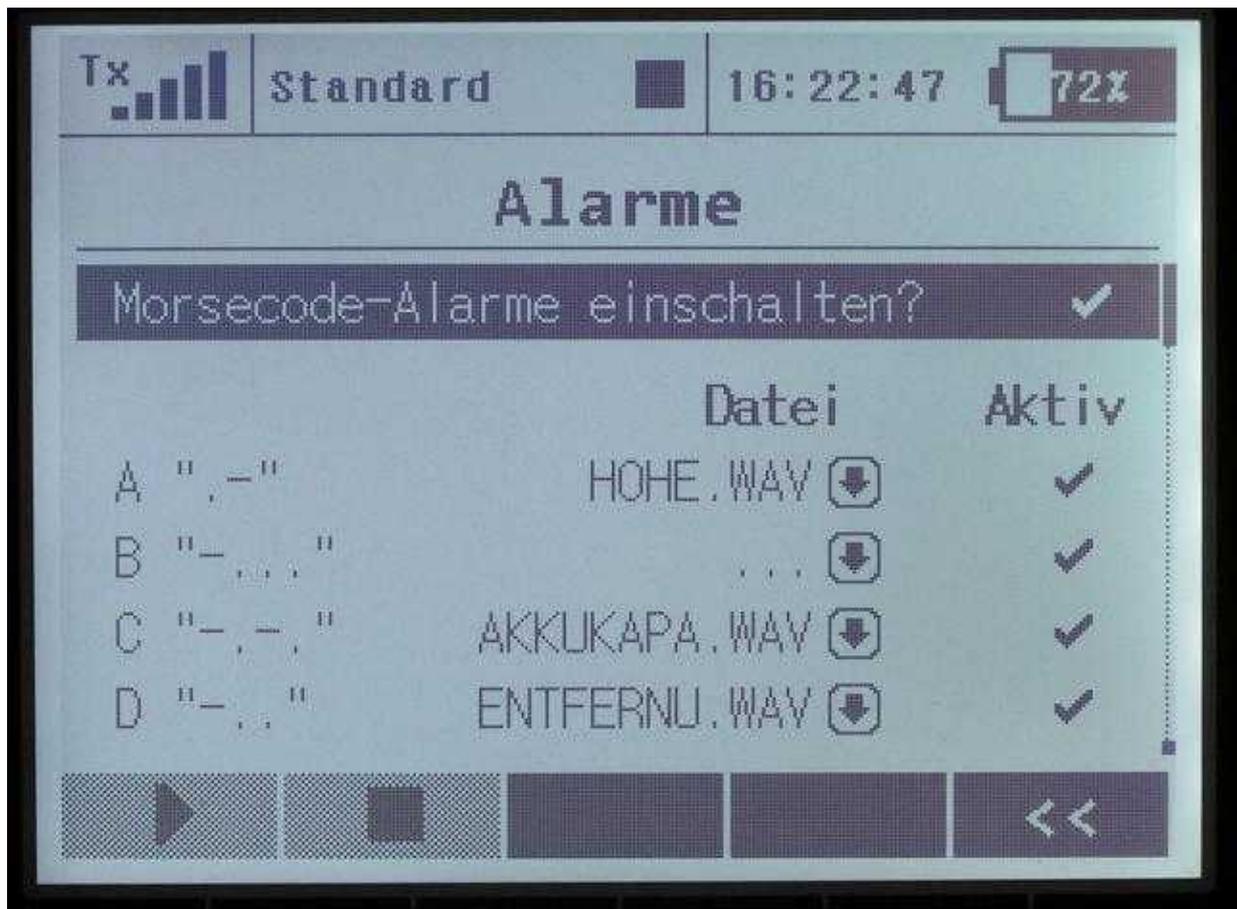
The voice files are assigned to the functions via a morse code. So that they are announced accordingly, you have to assign the newly copied voice files in the transmitter.

<p><b>Step1:</b> In the main menu choose "Stopwatch/Sensors" ...</p>	<p><b>Step2:</b> ...and the en "Alarms" -</p>



(To enlarge -> click on the image)

Now each morse code sign from **A** to **Z** will be displayed with the appropriate voice file:



(To enlarge -> click on the image)

Now you need to assign to each morse code the before copied voice files new.

You proceed as follows:

Morse code **A** ".-" contains the voice file "\_MK\_A\_MK.wav.

Morse code **B** "-..." contains the voice file "\_MK\_B\_CALIBRATE.wav.

Morse code **C** "-.-." contains the voice file "\_MK\_C\_STARTING.wav.

.

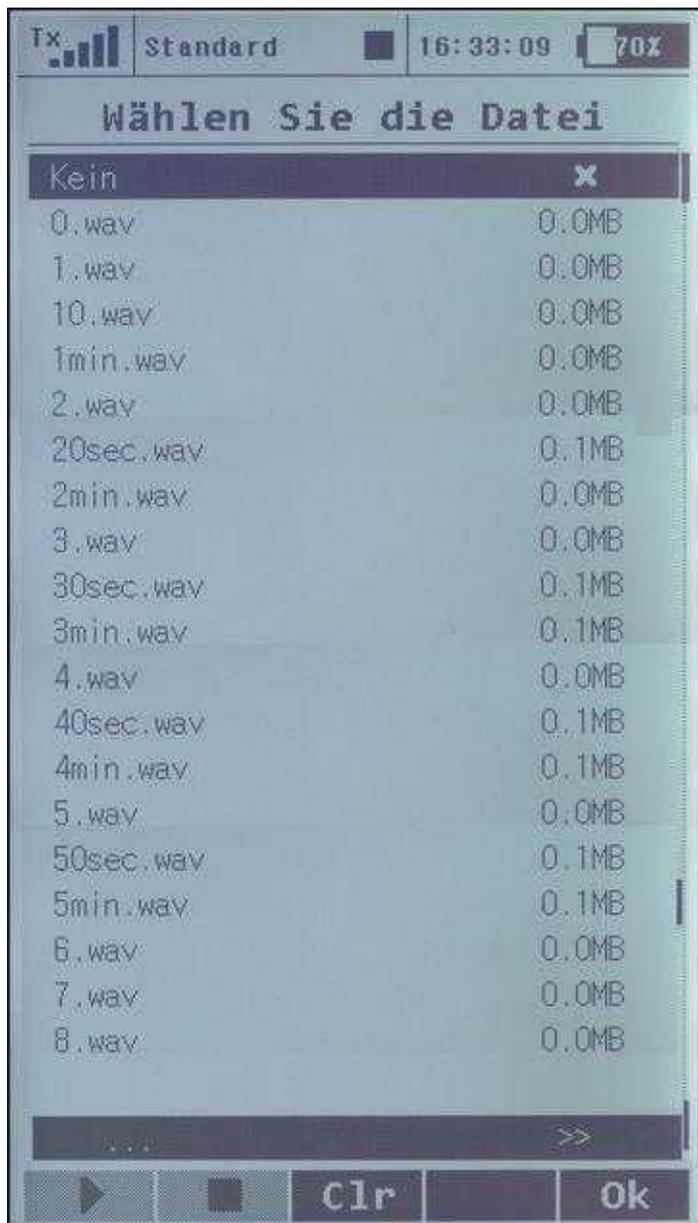
.

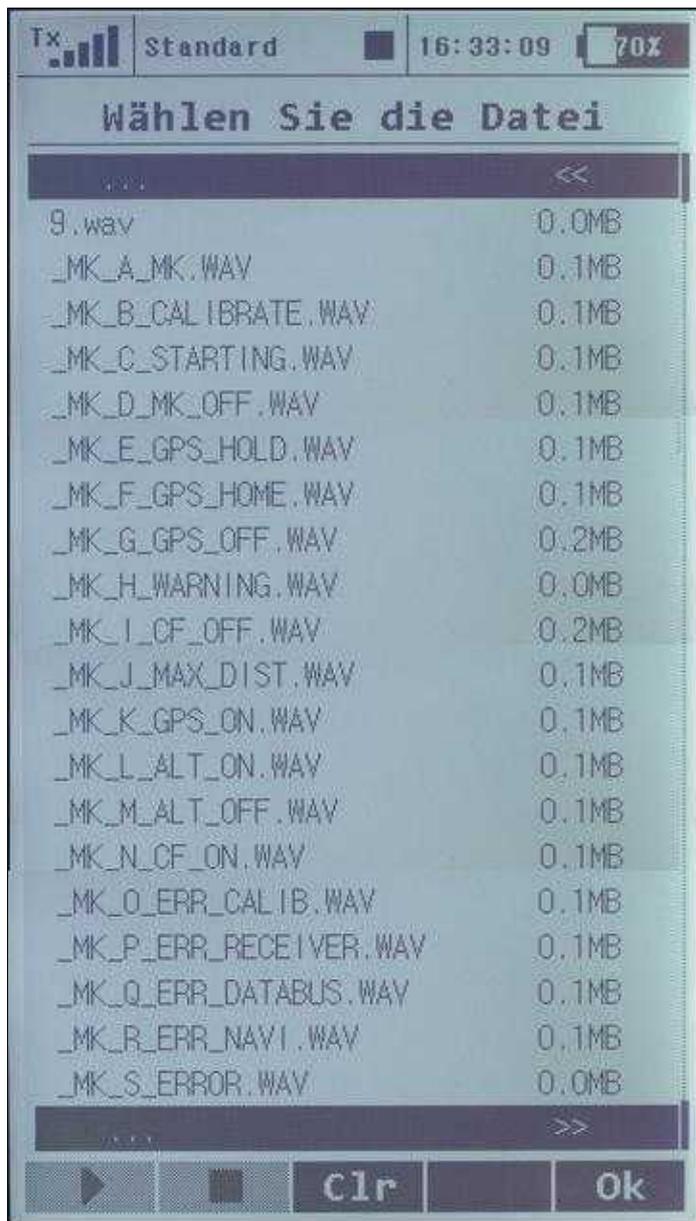
.

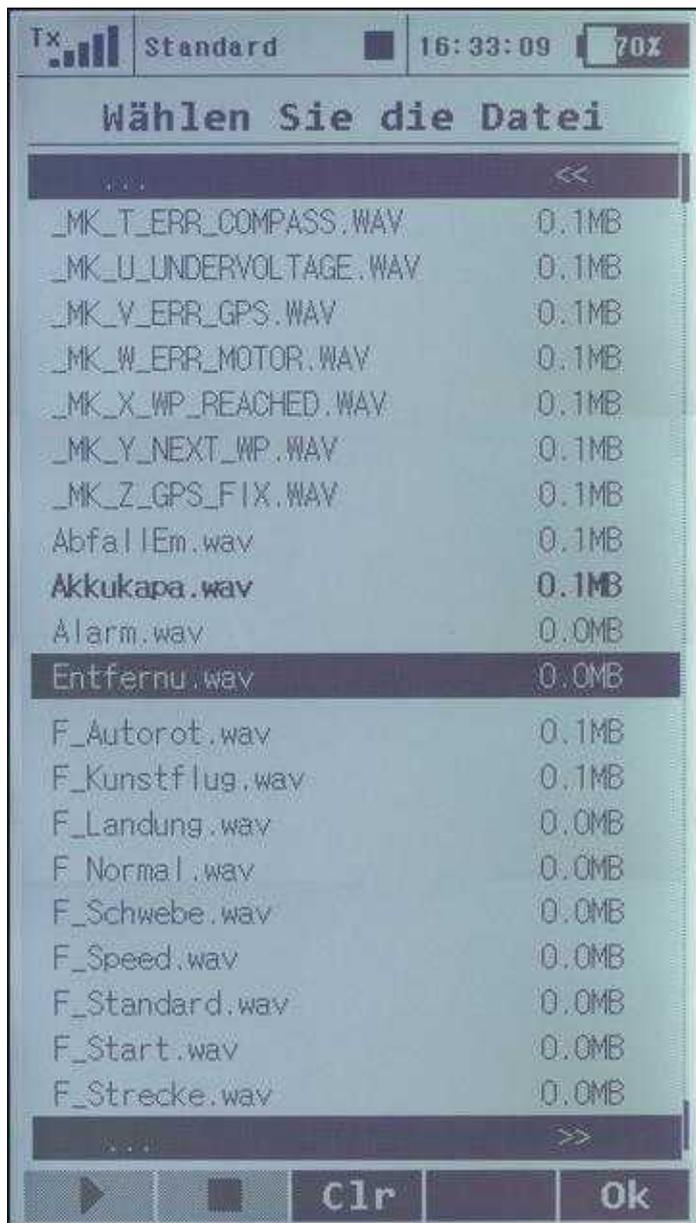
Morse code **Z** "--.." contains the voice file "\_MK\_Z\_GPS\_FIX.wav.

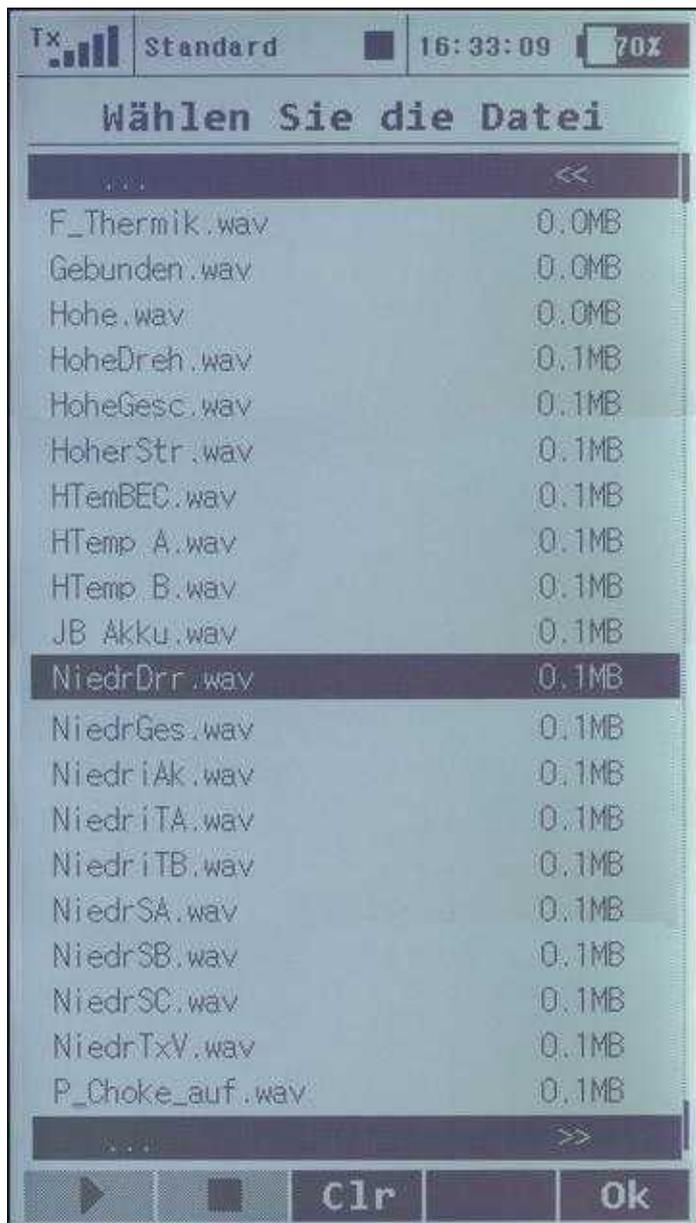
After selecting the file which need to be modified the available language files appear. Now you can look through all files using the double arrow.

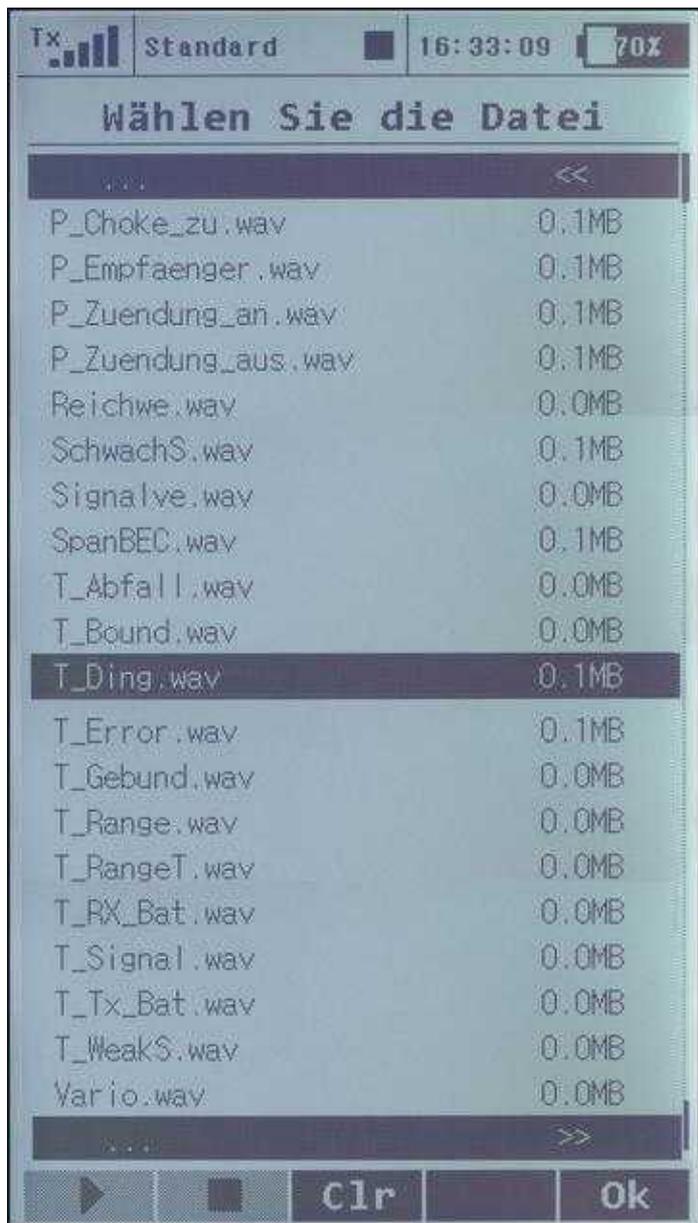
Here are all voice files listed:

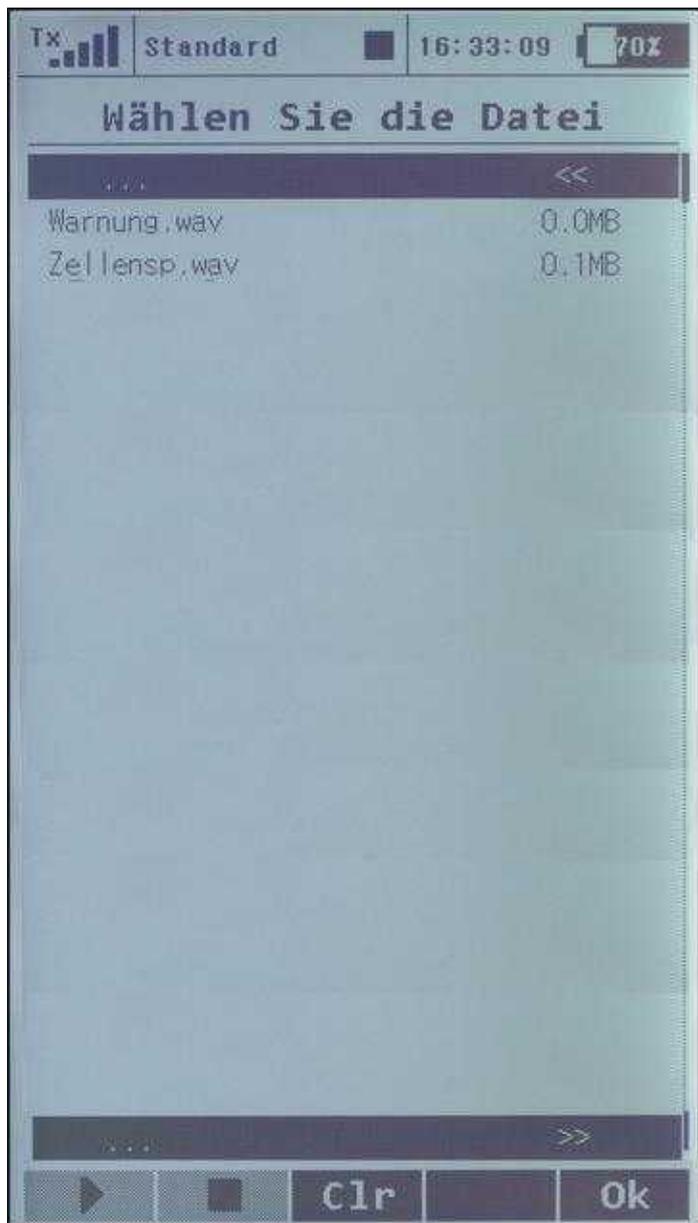












(To enlarge -> click on the image)

## 7.2 Create voice files by yourself

For that reason that the voice file is in *wav*-format you can create files by yourself.

This you can do i.e. with the Windows Audiorecorder and a microphone.

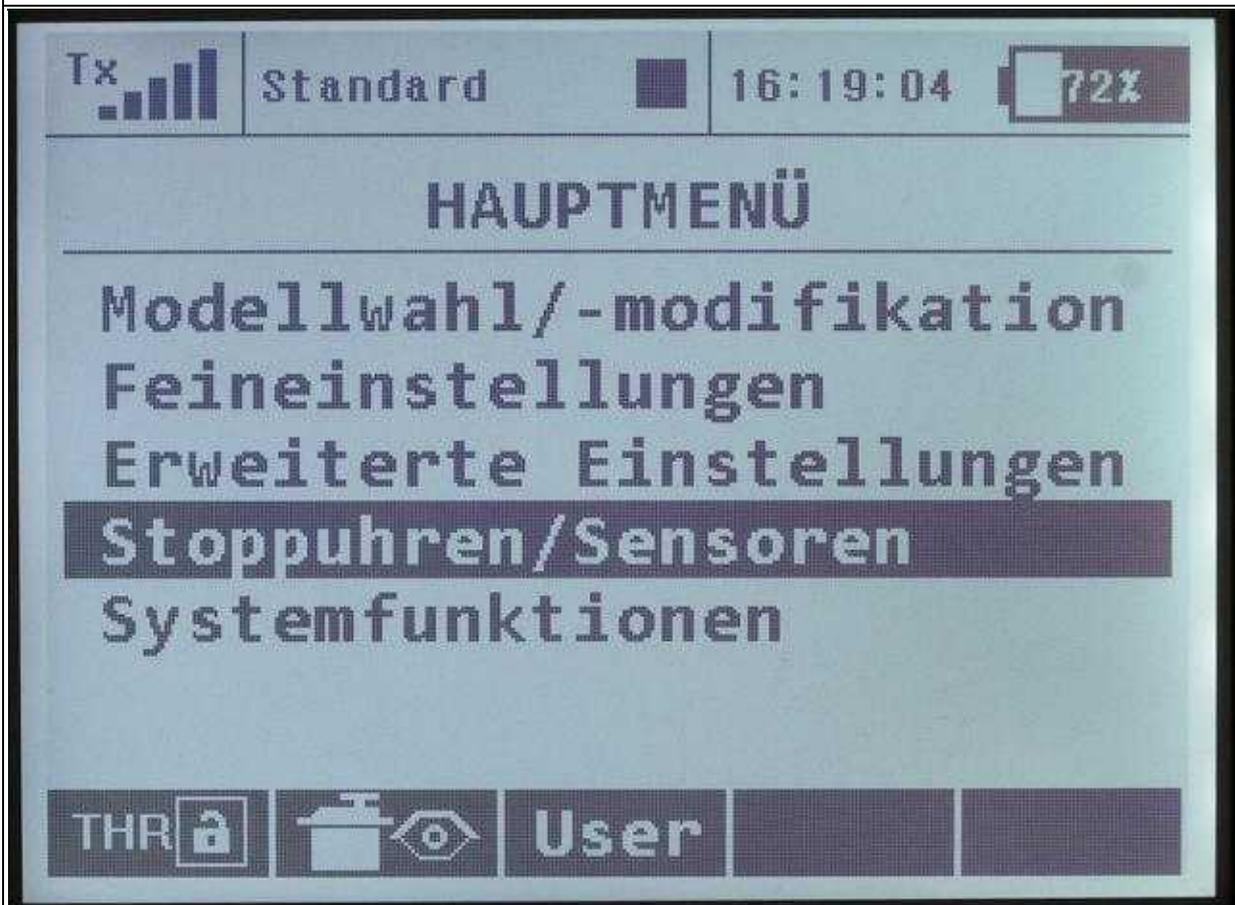
You can do those files also with a "Text-To-Speech" generator from the Internet (i.e.: [Link](#)).

## 7.3 Play VARIO-altitude regulator via loudspeaker

Like the voice output, a tone can be played via the loudspeaker automatically with switched on altitude regulator on the transmitter for climbing and falling.

### Step1:

In the main menu choose  
"Stopwatch/Sensors"



### Step2:

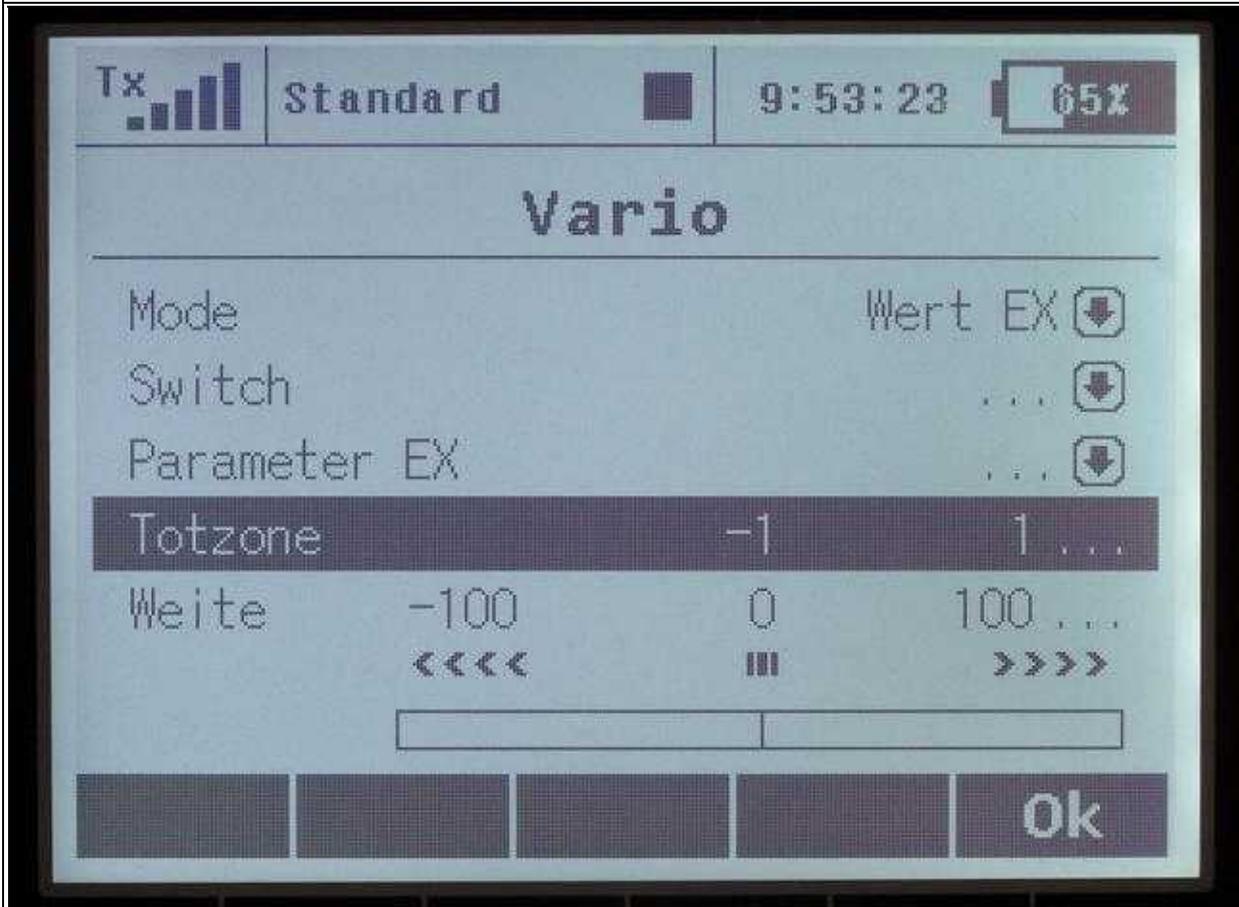
Choose the  
"Vario"



(To enlarge -> click on the image)

**Step5:**

Change here the "Dead zone" in "-1" and "1"



**Step6:**

Next step as "Parameter I" -



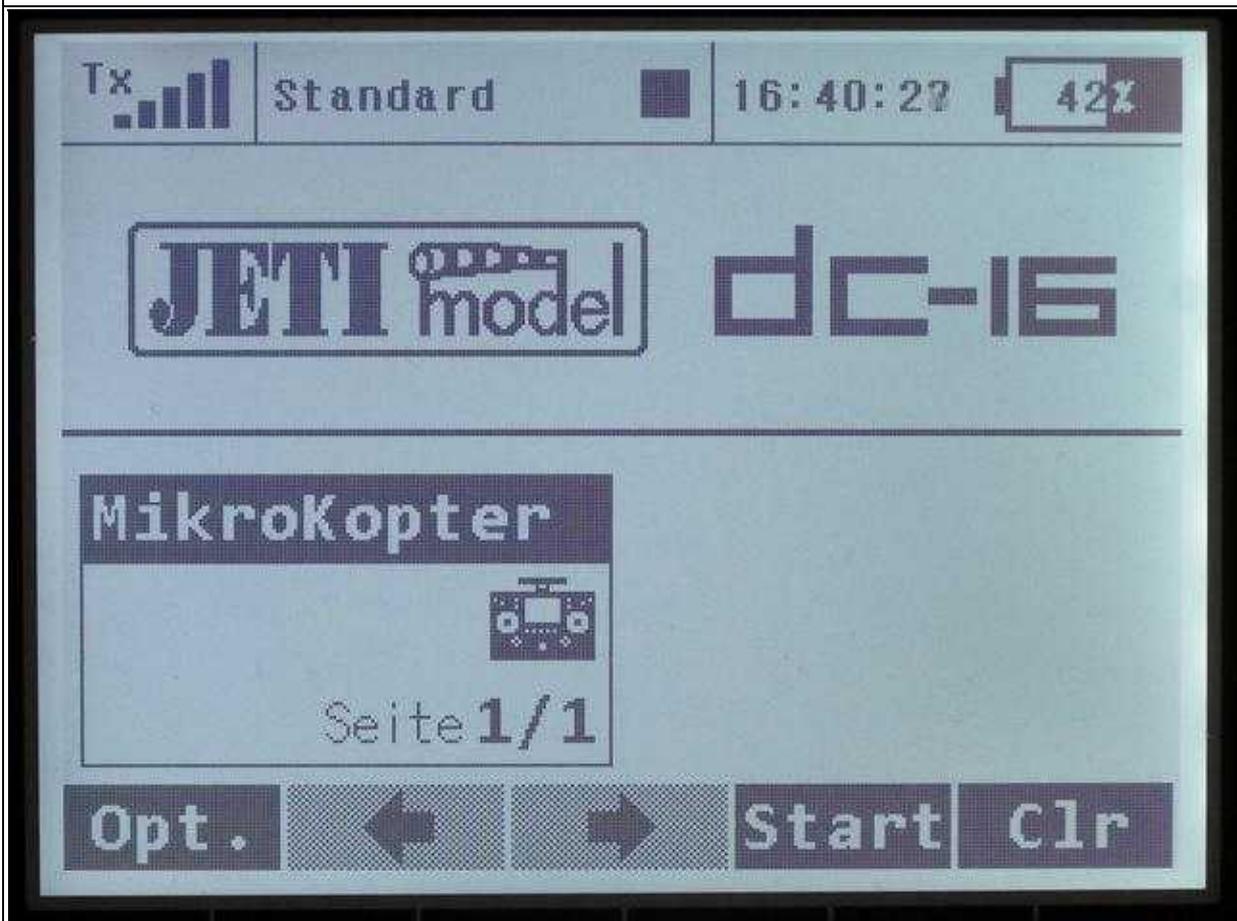
(To enlarge -> click on the image)

## 7.4 Telemetry ads in the display

Like with the Graupner HoTT System, you can display telemetry values on the main screen. The data which need to be displayed in the main screen you can put together by yourself.

### Step1:

The main menu looks like in that way without displayed telemetry



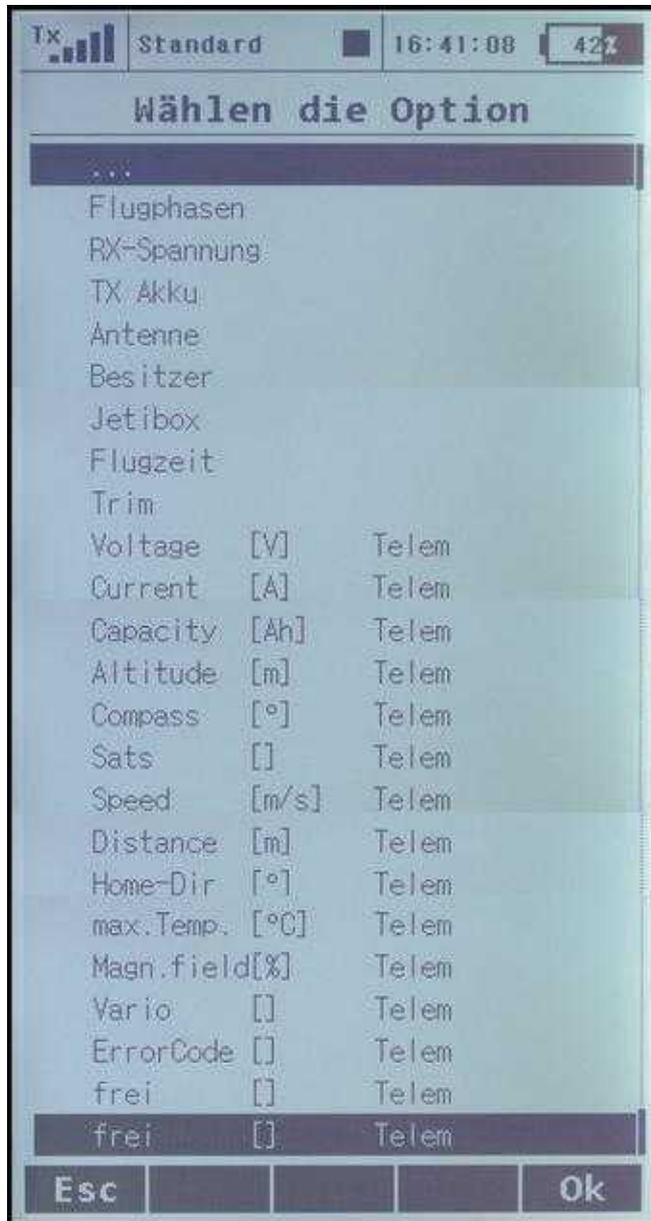
### Step2:

In the main menu  
"Stopwatch/  
-



(To enlarge -> click on the image)

Then select the following telemetry values:



(To enlarge -> click on the image)

The example settings look in that way:

**Page1:**  
Display with:  
Voltage, Capacity, Current,  
Altitude, Distance, Home-Dir

Tx	Standard	16:53:15	40%
Rec: Voltage	15.8V	Rec: Capacity	0.16Ah
Rec: Current	0.5A	Rec: Altitude	0m
MikroKopter	Seite 1/3	Rec: Distance	8m
		Rec: Home-Dir	230°
Opt.			Start Clr

**Page2:**  
Display with:  
Jetibox, rev  
Speed

(To enlarge -> click on the image)

# 8 Example Setting - Download

## 8.1 Model memory for transmitter

💡 Already pre-made model memories with the above described channel- and telemetry settings can be downloaded here.  
The model memories 1+2 differ only in the use of the camera triggering (3-way switch for LANC or button for the Shuttercable).  
Everything else is identical.



<a href="#">Download Model memory 1</a>	<a href="#">Download M</a>
---	----------------------------

(To enlarge -> click on the image)

After downloading the files (0001Mikr.json or 0002Mikr.json), you can copy them directly in the transmitter into the folder **/Model**.

If you use a camera with the trigger on a button as well as the LANC, you can save both model memories in the transmitter.

Here you need to switch only between the both model memories, depending on the use.

How to read or import model memories from the transmitter can be read in the instruction manual on page 93.

 The channel assignment is like listed above.

Using this model memories you must set the functions / channels in the FlightCtrl.

(Or download the setting for the FlightCtrl listed below)

**TIPP:** Who uses a different mode rather than **Mode 2**, can also use the model memory.

After the import of the model memories you need to set the desired mode (1,3,4) by yourself.

## 8.2 Settings FlightCtrl

An appropriate setting for the FlightCtrl can be downloaded here: [Download](#)

The settings for the channels and the model memories need to be adjusted accordingly for the DS-16.

To import the settings into the FlightCtrl, open the settings in the [KopterTool](#).

Here you "click" now on the button **Load** in the lower bar and open the downloaded setting.

With a click on the button **Write** you transfer the setting into the [FlightCtrl](#).

 **ATTENTION:**

The FlightCtrl has 5 memories (Settings). If you want to use the downloaded setting in all memories, you need to choose every memory (1-5) and save the setting with **Write**.

After writing the setting into the FlightCtrl you must (if not already done) set the right mixer ([Link](#)).

## 9 SinglePoint + Fixed/Relative Waypoints save/load with the transmitter

With Jeti remote control you have the option to:

- save or load **SinglePoint Waypoints** during flight  
or
- an to open an already existing **Fixed/Relative Waypoints-flight** .

How to do this, can be read here: [SinglePoint + Fixed/Relative Waypoints](#)

- 
- [KategorieFernsteuerung](#)