

# **F3 Distance Tool**

## **TaskB**

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# Einleitung

This is a short introduction to configure a widget for distance measurement based on GPS data, named TaskB. It is a Lua script implemented on base of ETHOS reference guide.

Technical requirements to use this Lua script are in „technical-requirements.txt“ (<https://github.com/andreas-f3g/f3-distance/blob/master/doc/technical-requirements.txt>), as known, described.

The use and operation of this Lua script is on one's own responsibility without claim to anything.

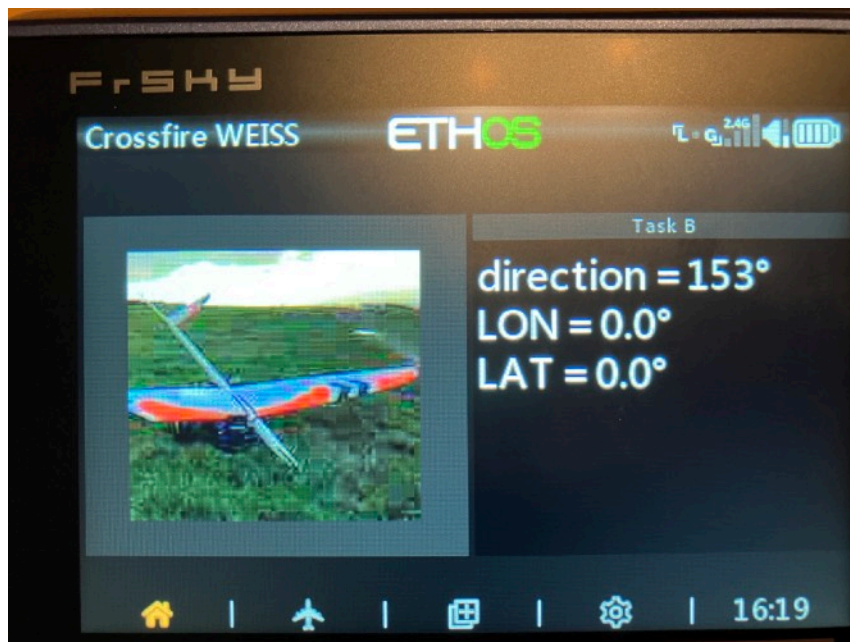
The distance measurement is implemented to practice distance tasks described in FAI F3 Regulations.

Via configuration different distance tasks may be set up. In foreground are F3B, F3G and F3F. The calibration of track based upon a initial GPS point placed on „Base A“. The direct course to „Base B“ is selectable. With this the track is described completely.

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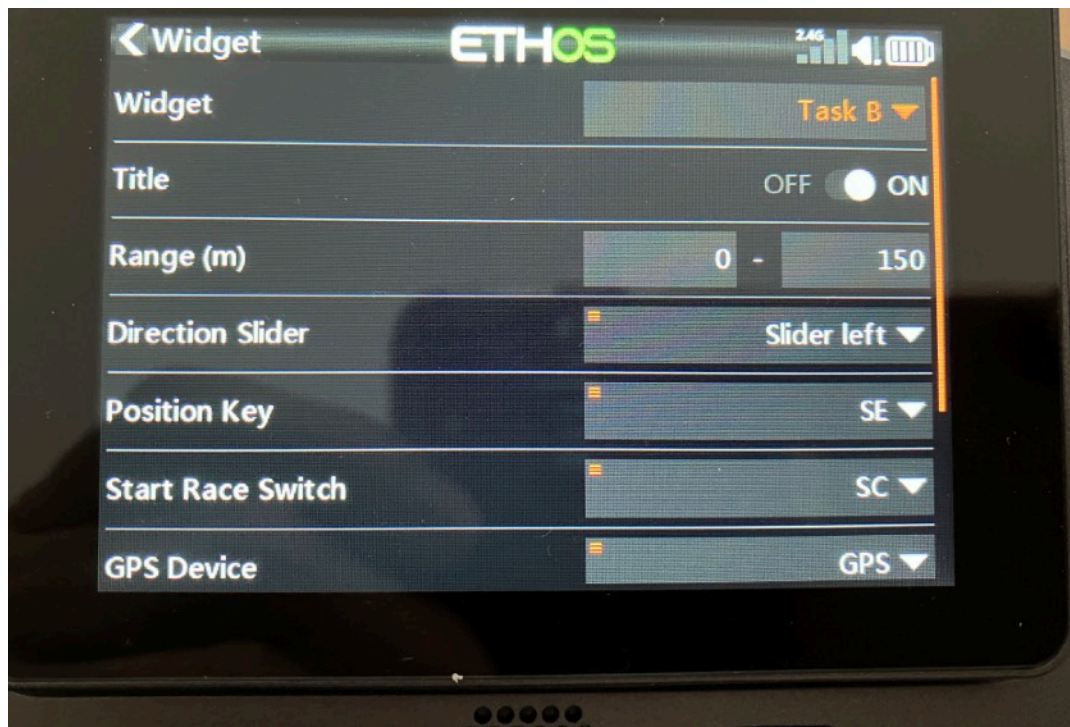
## Configuration



The TaskB Lua script operates on base of the ETHOS system. It is embedded as a standard widget. The script consists of three parts. This scripts has to be placed in a subfolder in the „script“ folder. Then a selection in the widget configuration is possible.



The layout of TaskB is a widget layout at least half of screen wide. This has to be set for comfortable sight.



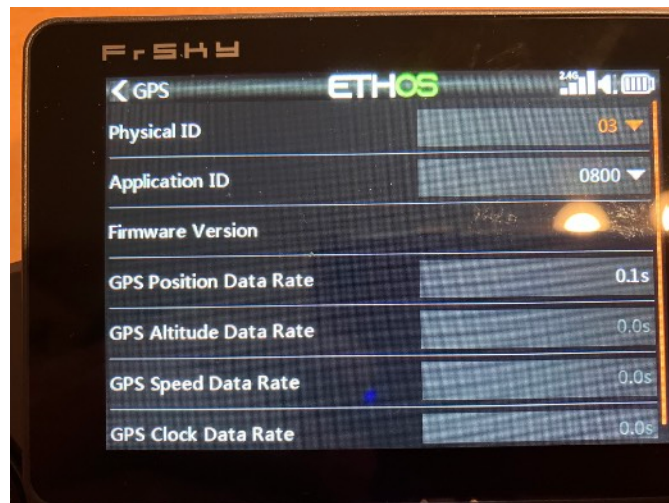
- Range setup: The length of track is calculated by two values. The left value is the distance from point of measure to „Base A“. If the GPS point exactly on „Base A“ then the value is „0“. If the track should be shorter a positive value may be chosen. Then „Base A“ will move in direction to „Base B“. In case of negative value the track is enlarged and „Base A“ is moved (i.e. F3F). The right value is the distance from point of measure to „Base B“. The length of track is defined only by these two values in widget configuration and is fixed.
- Select Direction Slider: The slider or knob is chosen as direction input of direct course from „Base A“ to „Base B“.
- Select Position Key: The calibration of track starts from main page of the widget. A knob is pressed. Then the GPS position is saved and with „Range“ information the track is calculated. The knob to start has to be selected. The selection should be in active pressed state (hold down the knob and confirm with return).

- Select Start Race Switch: To activate distance measurement a switch is in active position. In active position the main page of the widget is changed to the race page. The background color is changed in this state. The background color may be configured in the widget configuration also (may be depends of the filter of sunglasses). A switch to start the race in active position is registered here.

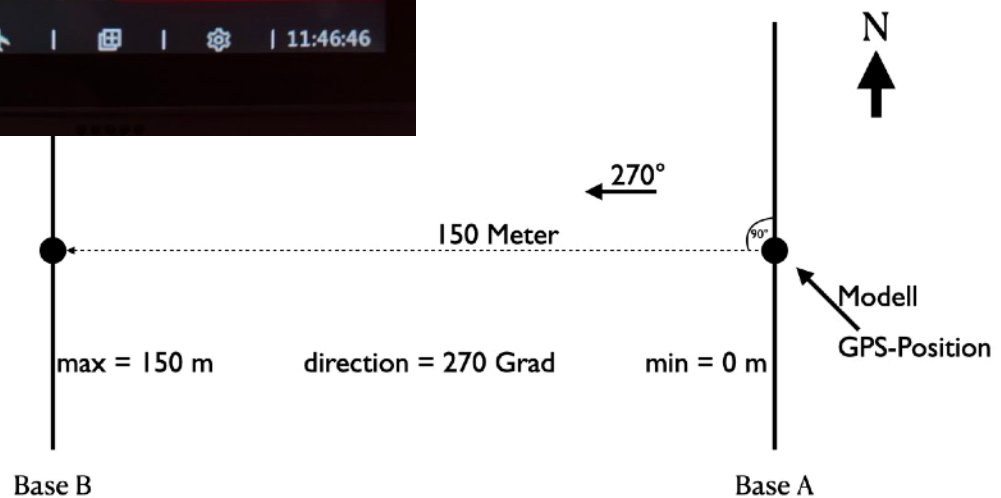
Additionally the speech for counting may be switched on. Also a timer may be chosen. Then on every finished lap the display shows the time.

Finally the GPS must be selected. A telemetry source „GPS“ for GPS position data is needed.

The GPS should have set a rate of 0,1 sec. (config device).



## Example F3B/G Track settings

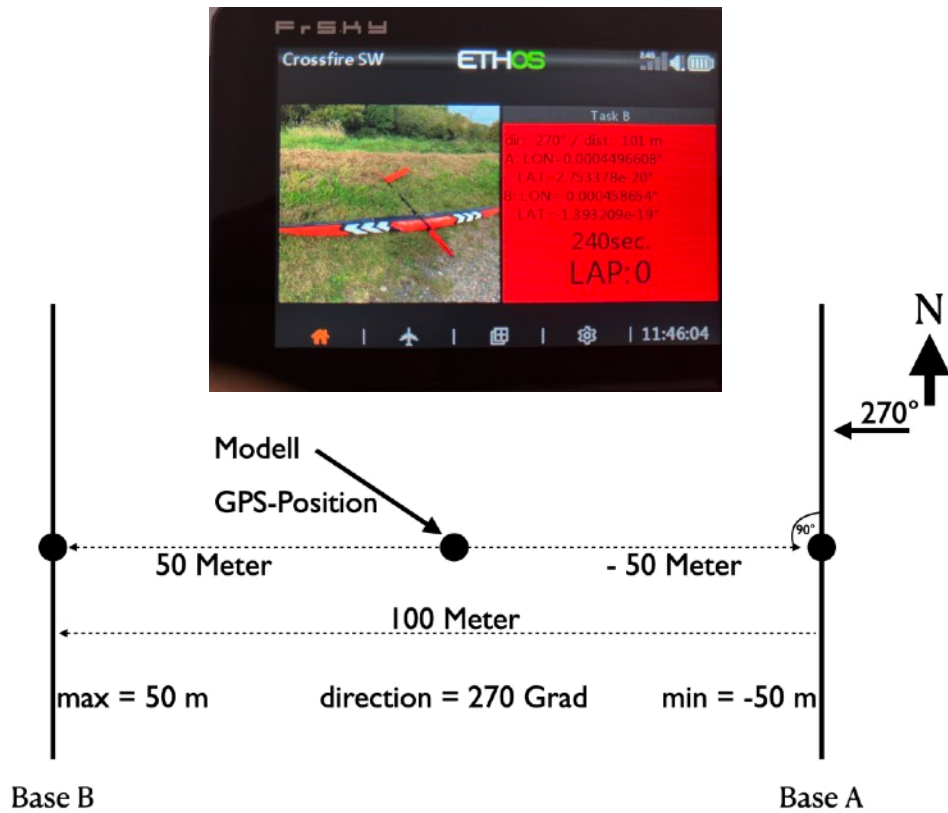


Einrichten einer F3B/G Task B Strecke





## Example F3F Track settings



### Einrichten einer F3F Strecke



F3 Distance Tool - TaskB