

MAltI

Altitude meter

MAltI is a system that measures atmospheric pressure and using the obtained data it calculates the altitude above sea level. The sensor also alerts you if any alarm setting is exceeded. The sensor data can also be transmitted via the Duplex system to the user.

The Duplex system takes advantage of the 2.4GHz band for communication. This system not only transmits control data to the model but also sends data from the model back to the transmitter. The telemetry data collected during operation is shown as actual, measured values in real time on either LCD screen of a connected JETIBOX or on the DC/DS JETI model transmitters.

Main features

- Measurement of altitude, pressure, and temperature.
- Possible sound alarm signaling using a JETI Tx module (EU only) or JETIBOX profi.
- The device is compatible with EX Bus protocol, i.e. it is possible to be configured comfortably via a special menu in DC/DS JETI model transmitters.
- Firmware updates.

Technical data	MAltI
Dimensions	30x16x7mm
Weight with the cables	5 g
Measuring accuracy of relative altitude	±3m
Resolution of measured height	0.1m
Measurement range	450÷1100hPa
Operating temperature	-10÷85°C
Supply voltage	3.5 ÷ 8.4V
Current consumption	15mA

Placement of MAltI sensor:

MAltI is a very sensitive pressure sensor. Any change in pressure causes a change in the indicated altitude, pressure, etc. The sensor should be mounted in the model in such a way that the sensor is not affected by air pressure flowing inside the model, but only by static atmospheric pressure. In other words, place the sensor in a model where it is only influenced by the static atmospheric pressure. For the most accurate altitude measurement, do not place the sensor near any components that generate heat during flight (e. g. near engines, motors or ESCs).

The menu of MAlti sensor:

MAlti MENU: ACTUAL VALUES – by pressing the D button (arrow down) select depicting of actual measured values

Rel/Abs Altitude – relative and absolute altitude. After switching on, the device creates a reference (zero) level of the relative altitude based on the absolute altitude. Relative altitude indicates the difference between the actual absolute altitude and the zero reference level.

Abs. pressure – depicts actual atmospheric pressure in hPa (hectopascal).

Temperature – shows actual temperature of the sensor.

MAlti MENU: MIN/MAX – by pressing the D button (arrow down) select depicting of the recorded extremes that occurred during the measurements

Altitude MAX – shows the maximum reached relative altitude.

Temp MIN/MAX – shows the minimum and maximum temperature of the sensor.

Reset MIN/MAX – allows you to clear the minimums and maximums then re-initializes the altimeter. Pushing R and L arrows (right and left) together deletes the extremes of all measured parameters.

MAlti MENU: SETTING – by pressing the D button (arrow down) you get to the basic setting of the MAlti sensor.

Round altitude – permits or denies rounding the altitude values sent via EX telemetry and displayed on the transmitter or the JETIBOX profi. Relative and absolute altitude round to full meters, so if the voice output is activated, the transmitter announces the actual altitude without the decimal part.

Sealevel Press – to calculate the absolute altitude, the atmospheric pressure at sea level is taken as a reference. To get the most accurate calculation of the altitude, set the current pressure in the area adjusted to sea level.

Smooth altitude – enables or disables altitude smoothing. If smoothing is permitted, the altitude measurement will not be affected by noise, but the response to sudden changes in altitude may take longer.

MAlti MENU: ALARMS - by pushing the button D (downward arrow) you will get to the setup of particular alerts and to the sound indication of the MAlti sensor. If an adjusted parameter is exceeded, the LCD screen of the JETIBOX then shows alternately the original data and the matching alert in the second line of the main screen and the buzzer of the transmitter module emits the alert signal. The first tone is the revelation tone and the second tone beeps out the Morse code of the character representing the corresponding alert. If the alert is in position OFF, the given alert is switched off.

Alti High Alarm - adjustment of the signal representing the relative altitude. If the value of the relative altitude exceeds the set value, the alert will be activated.

Beep Alti. Alarm – adjustment of one of the Morse code letters, which represents exceeding the set altitude alarm by the sound from the Duplex Tx transmitter module.

MALTI MENU: SERVICE

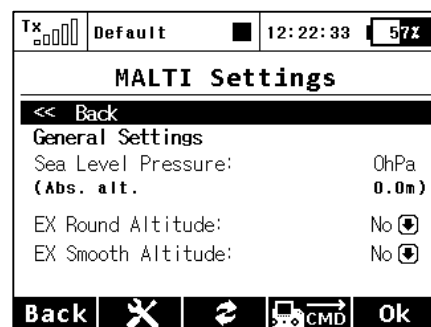
Factory Defaults - by simultaneous pressing of arrows R and L (right and left) the factory settings of the MAlti are loaded.

Setup via DC/DS line transmitters



Malti sensor can be easily configured via any transmitter of DC/DS line. If you switch the paired receiver to the EX Bus mode and you connect the Malti to its Ext. port, the device will be detected automatically and then might be configured in the menu *Model* → *Device Explorer*.

Notice: For proper function the transmitter version at least 2.20 (or newer) and the receiver version 3.20 (or newer) is necessary. Also, make sure that in the Devices folder of your SD card there is a configuration file MAlTI.bin.



On the main screen there is a general menu of available options.

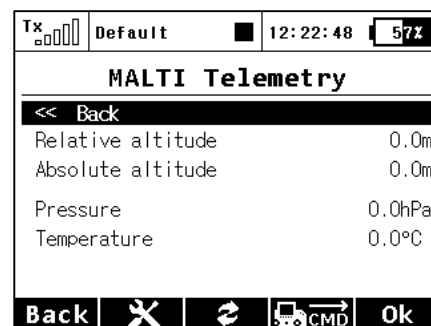
Main setup of the sensor

Sea Level Pressure – to calculate the absolute altitude the atmospheric pressure at the sea level is taken as a reference. To get the most accurate calculation of the altitude, set the current pressure in the area adjusted to the sea level. The current altitude will also be displayed.



EX Round Altitude – permits or denies rounding the altitude values sent via EX telemetry and displayed on the transmitter or the JETIBOX profi. Relative and absolute altitude round to full meters, so if the voice output is activated, the transmitter announces the actual altitude without the decimal part.

EX Smooth altitude – enables or disables altitude smoothing. If smoothing is permitted, the altitude measurement will not be affected by noise, but the response to sudden changes in altitude may take longer.



Telemetry

Here is a quick view of the possible measured values available to the sensor.



Measured minimums and maximums

In this menu you can display measured minimum and maximum values. These values can be easily reset using „Clear and reinitialize now“. After confirmation the sensor is reinitialized, the extremes are reset and the altitude relative to the current position is also reset.



Using the menu item “Clear MIN/MAX values“, you can assign any control or switch that will be used to clear minimums and maximums in the sensor.

After assigning the control, the command for clearing the minimums and maximums will be displayed in the Command Overview (button **F(4)** CMD). Now simply move the switch to the active position and confirm the execution of the command (Clear MIN/MAX values).

This product is guaranteed for 24 months from the date of purchase, provided that it has been operated in accordance with these instructions at the prescribed load and becomes mechanically damaged. Proof of purchase required for any warranty claim. For customer service, see your JETI dealer or the manufacturer.

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