

LXNAV Compass

Installation manual Version 1.0



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1 Technical Data

- Power input 12VDC via RS485 bus
- Consumption at 12 V: 70mA
- 56 x 40 x 15 mm
- Weight Approx. 100g

2 Installation

2.1 Location requirement

- The location should be magnetically benign.
- As far as possible of metal parts, power cables
- In case of small magnetic interferences is available user calibration
- Very important is orientation of the magnetic compass (compass has marked TOP position and flight direction position)

2.2 Connecting

Compass module must be connected to RS485 bus through RS485 splitter. It must be installed to the place where is no strong magnetic fields (Irons or ferromagnetic materials), cables with AC current or not constant DC currents.



When installing magnetic compass use screws made of non ferromagnetic materials (plastic or brass)



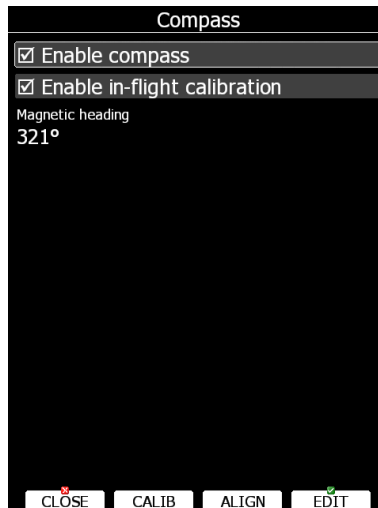
Orientation of compass module marked on housing as on picture above.

2.3 Calibration

When a compass is connected to the system use this menu to preform calibration of compass. Before calibration, please make sure that compass is installed properly. Refer to compass and installation manual for more info about installation.

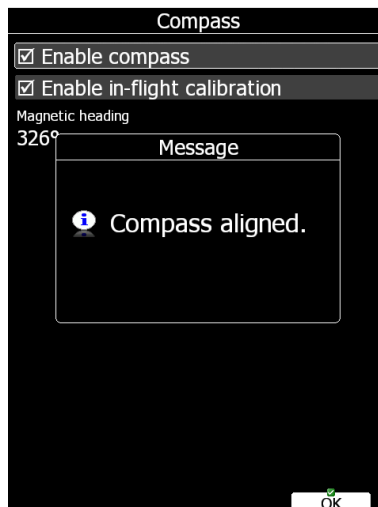


It is very important that compass is installed away from power cables, other compasses, speakers and all other magnetic components in the aircraft. Keep maximum possible distance to such components (at least 30cm).

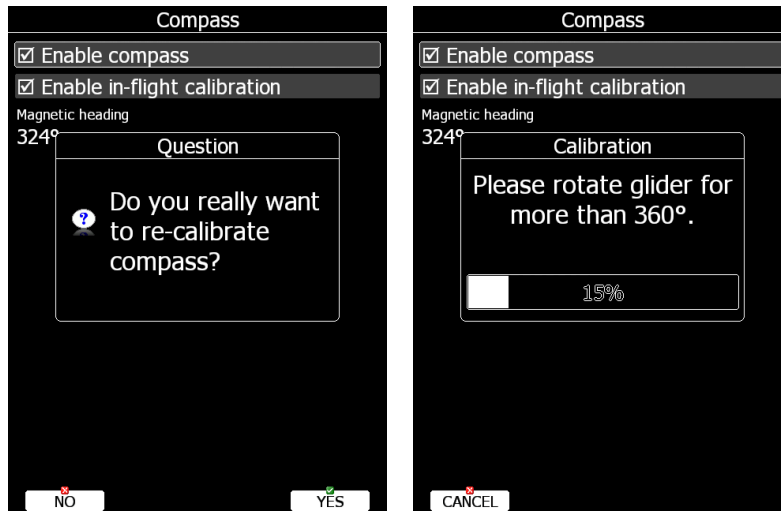


Compass will be enabled if check box **Enable compass** is ticked. If you would like to perform in-flight calibration, check **Enable in-flight calibration**. It is not recommended to do in-flight calibration in very turbulent conditions.

Press **ALIGN** button to align compass with AHRS, which is built-in V9 vario. When installing compass, please make sure to align it as much as possible with V9 variometer. Deviation of few degrees is tolerated. When aligning compass with AHRS it is important that cabin is closed and glider is not moving. Message will be displayed on screen, when aligned.



Press **CALIB** button to start calibration of compass on the ground. Calibration process is very straightforward. Make sure glider fuselage is levelled (use tail dolly), wings are levelled and canopy is closed with pilot inside. Switch on all the avionics, which is normally switched on while flying. Confirm calibration of compass to start calibration process. Assistant on the wing should slowly rotate glider with wings levelled.



Keep rotating glider until progress reaches 100%. Calibration will automatically exit and compass calibration is finished. Check compass directions afterwards, they should be within +/-2 degrees. Press PTT on radio to see if there is any deviation in magnetic heading.

If more error is observed install compass in different place and repeat calibration procedure.

