

V5- LXNAV Variometer system

Technical specification

- Outline dimensions: 61x61x92mm
- 2 ARM processors
- 2inch 320x240 color screen



Description

V5 vario system is a modern variometer system which is built of two main components; **sensor box** and **vario indicator**. In current version both two components are within single housing. On request we can provide them also in separate housings.

Sensor box is based on digital pressure sensors with 100Hz sampling rate. It features 12bit audio signal generator for more smooth sound. There are 7 digital inputs available. Two of them are pre-defined for use as speed to fly switch and vario priority switch.

Vario indicator is having mechanical needle and color screen with 320x240 pixels, on which user selectable data are displayed.

Each vario indicator is identified by a serial number, which is also displayed on main system. Therefore literally unlimited number of vario indicators can be connected to RS485 bus and each of them can be setup separately.

Description of data is shown on next picture.



Mechanical needle displays vario, netto, relative or speed to fly value. It can be setup separately for climb mode or cruising mode. Scale can be chosen in range -5 to 5 or -10 to 10.

Upper number can be configured as average vario, time, flight time, task remaining time, netto value or outside temperature. It can be setup separately for climb mode or cruising mode.

Lower number shows current altitude, distance to goal, arrival altitude, True airspeed, Last 60 minutes speed, altitude in feet or flight levels.

Speed to fly bar symbol is indicating which speed you have to fly according to current MacCready setting, sink rate and speed. One arrow means 10 units of speed faster or slower. Up red arrows mean fly slower and down blue arrows mean fly faster.

Red diamond symbol shows average vertical speed.

Blue arrow symbol shows current MacCready value.

Green T symbol represents last thermal average value.

White bar, which is not shown on picture above, displays arc between minimum and maximum vertical speed value in last 20 seconds.

Update of firmware

Most innovative feature of V5 vario system is an upgrade. Firmware for sensorbox and vario indicator can be easily upgraded by customer with SD card. An update file is copied to SD card, which is inserted to LX9000, LX8000, LX8080. Upgrade is initiated through password 89891.