

SØ quick start guide

highlights

- instant vario, baro altimeter
- all GPS functions
- IGC logger
- wind speed & direction
- thermal assistant
- Bluetooth to app connection
- automatic screen switching
- 60h battery life
- USB cable IGC download
- custom layouts and widgets

spec

- 4.2" durable anti-glare LCD
- 115 x 77 x 16 mm, 150 g
- USB-C, SD card
- 3D printed enclosure



PB

UB

DB

basics for operation

PB = power button

UB = up button

DB = down button

CLICK = button click

PRESS = button press for 1s

PRESS-N = button press & hold for **N seconds**

operation

power ON = PB PRESS-3, release, then PB CLICK

power OFF = PB PRESS, then PB CLICK (not possible in flight mode)

screen change = UB/DB CLICK

highlight and list adjustable/toggleable widgets on screen = PB CLICK

adjust highlighted widget on screen = UB/DB CLICK

toggle mode of highlighted widget on screen = PB PRESS

start/stop flight = PB PRESS when the flight time widget is highlighted

sound volume adjust = UB/DB CLICK when the sound icon is highlighted

enter to settings menu = PB PRESS, UB CLICK

enter to layout menu = PB PRESS, DB CLICK

menu item enter = PB CLICK

menu item exit = PB CLICK on „back“ item or PB PRESS anywhere

movement in menu = UB/DB CLICK

special button actions

reset - press & hold PB + UB for ~5s (PB PRESS-5 & UB PRESS-5)

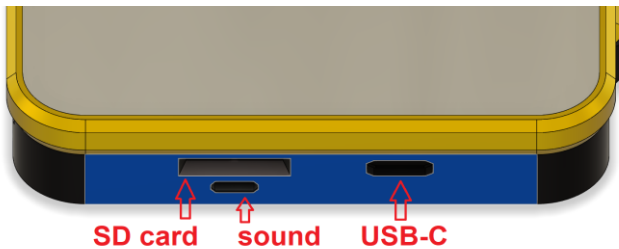
enter to DFU (programming) mode

Press & hold all buttons for ~5s, then release power button first (PB PRESS-5 & UB PRESS-6 & DB PRESS-6)

SD card

is accessible from the bottom panel of vario. Its holder is push-push type, so push it with a nail or pen to withdraw. Insert card into its slot, **metal contacts facing up** and push it in the same way as for withdrawal. The SD card contains a couple of folders and files.

- IGC files are stored in **igc** folder.
- Terrain data are in **agl** folder.
- Configuration is stored in **cfg** folder.
- Log files used for debug and development are in **log** folder.
- This document is also stored on the SD card inside the vario, so you can click the online links directly and don't have to type them manually from the printed sheet supplied with the vario.



Besides the SD card slot, there are two more ports on the bottom of the vario:

- USB-C port for charging and PC connection (not yet implemented).
- Sound channel opening

firmware & configuration update

Firmware flash can be performed when the vario is in DFU (Device Firmware Update) mode while connected via USB cable to a computer (Linux, Mac or Windows) or to an Android device (phone, tablet, etc.). Firmware files can be found in the repository linked below — the file with the highest number is the newest.

vps.skybean.eu/SO_repo/

Download the firmware ELF file with the highest number, along with the matching configuration update ZIP file.

firmware flash via computer

- Withdraw the SD card from the vario, delete the cfg folder and copy the new cfg folder from the downloaded ZIP file.
- Download and install the STM32CUBE Programmer app (Linux, Mac, Win32, Win64) from its product page here.

www.st.com/en/development-tools/stm32cubeprog.html

- Watch a video on how to update your vario:

youtu.be/UMh098ibdug

firmware flash via Android device

Download, install and use the **StmDfuUsb** app from Google Play.

play.google.com/store/apps/details?id=com.yatrim.stmdfuusb

You can find more detailed and up-to-date info on our product page here

vps.skybean.eu/SO_vario

other information

A more detailed user manual is available here:

vps.skybean.eu/manuals/

email: info@skybean.eu



[instagram.com/skybean_vario](https://www.instagram.com/skybean_vario)



youtube.com/c/SkyBeanVarios



skybean.eu

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