SØ quick start guide

highlights

instant vario, baro altimeter
all GPS functions
IGC logger
wind speed & direction
thermal assistant
BLE telemetry
automatic behavior
60h battery life

spec

4.2" LCD, 400 x 300 px
bullet proof anti-glare LCD
115 x 77 x 16 mm, 150 g
3000 mAh battery
USB-C, SD card 32 Gb
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

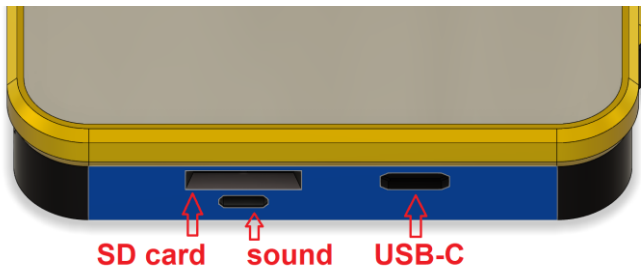**reset** - press & hold PB + UB for ~5s (PB PRESS-5 & UB PRESS-5)

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 the same method like withdrawal. The SD card contains a couple 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.

Except SD card slot opening, there are two more ports on the bottom of vario

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

firmware & configuration update

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

https://drive.google.com/drive/folders/1t_bgT86E-3NDzt0m7vW_5MtrlIgvNbPe?usp=sharing

Download firmware ELF file named by the highest number and also its configuration upddate in ZIP file.

firmware flash via computer

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

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

- Watch video here how to update your vario

https://youtu.be/UMh098ibdug

firmware flash via Android device

Download, install and use **StmDfuUsb** app from Google Play.
https://play.google.com/store/apps/details?id=com.yatrim.stmdfuusb

You can find more and the most actuall info on our product page here
https://skybean.eu/so-vario

other information

The more detailed user manual is here
https://vps.skybean.eu/manuals/

email: info@skybean.eu   **skybean.eu**

instagram.com/skybean_vario

youtube.com/c/SkyBeanVarios

rev. 2509