

Hawk Setup

5.7 Setup Mode

5.7.3 Vario Parameters

5.7.3.14 **HAWK** enable/disable

Using this checkbox, pilot can switch on/off HAWK system.

5.7.3.15 **HAWK** wind variance

Wind variance smooths the horizontal and vertical wind (netto vario) readings. **The larger the value of wind variance is, the more nervous the readings. Recommended value for wind .07 to .11.**

5.7.3.16 **HAWK** Horizontal wind average 30

Horizontal wind average defines period, which is used for average horizontal wind calculation, which is displayed as grey arrow on wind page.

5.7.3.17 **HAWK** Vertical wind average 10

Vertical wind average defines period, which is used for average relative and average netto calculation. Both values can be shown as navbox on numeric or graphic page

5.7.8 Graphics

5.7.8.1 Indicator Setup

5.7.8.1.1 Needles

When **HAWK** option is installed, user can define, if he wants to see only **HAWK** (blue) needle, TEK vario (red) needle or **both needles**.

5.7.8.1.2 Vario Needle

Vario needle means, when your vario is in vario mode. A needle can be set to Vario, Netto, Relative or G-meter. **When using **HAWK** option it is recommended to set Vario needle to Vario.**

5.7.8.1.3 SC needle

SC needle means, when your vario is in SC mode. A needle can be set to Vario, Netto Relative or G-meter. **When using **HAWK** option it is recommended to set SC needle to Netto or Relative.**

5.7.9 Sounds

The sounds option has a sub menu for Equalizer, Vario and FLARM

5.7.9.2.4 SC Audio Mode

SC audio mode has five modes:

- SC positive: the sound is interrupted with silence every few milliseconds when the needle

is positive; on negative side sound is linear (not interrupted).

- SC negative: inverse function to SC positive.
- SC: the sound is linear and non-interrupted in full scale range.
- SC Mixed: for positive relative values the sound represents relative; for negative relative values the sound represents SC (for that setting it is recommended to set SC needle to relative).
- Relative: the variometer will produce the same sound as defined in Vario audio, except it will follow relative speed values.

5.7.9.2.5 Vario Audio source

Vario audio source is shown when **HAWK** option is activated. **You can choose between **HAWK** or TE vario audio source for variometer sound.**

5.7.9.2.6 SC Audio source

SC audio source is shown when **HAWK** option is activated. **You can choose between **HAWK** or TE vario SC audio source for speed to fly sound.**

7.7.4 Levelling AHRS

It is absolutely necessary that the plane is aligned with the longitudinal axis defined in the manual of the glider. Any misalignment leads to systematic errors in the **HAWK** algorithm. **HAWK** algorithm can compensate $\pm 10^\circ$ of the pitch offset. If the unit is installed in the glider with more offset, **HAWK** algorithm might not work properly. If installed device is not perfectly aligned with glider longitudinal axis it is essential to do a pitch alignment, which can be done in **Setup>Hardware>AHRS menu**. Put glider into zero degrees pitch position, usually this is a weighting position and press Level button in this menu. Device will perform auto-levelling procedure and system pitch offset will be calculated.