

MGL Avionics EFIS G2



Guide to using Flap overspeed and ground proximity warning system

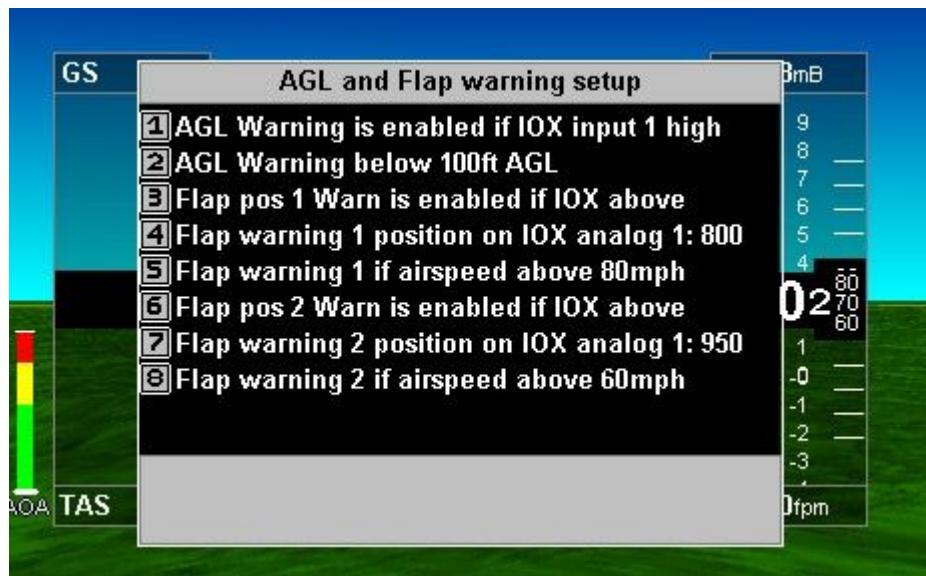
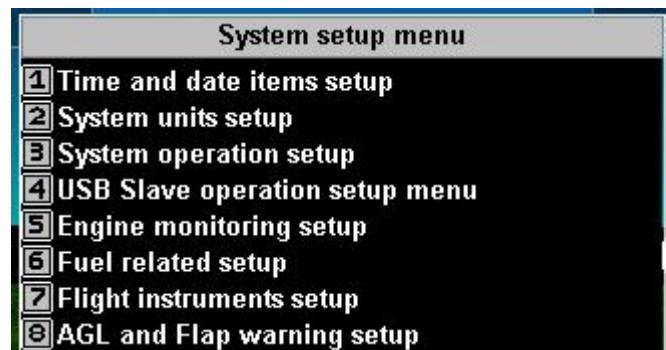
General

The G2 EFIS from version 1.0.2.4 onwards contains ground proximity warning as well as position based flap overspeed warning.

This guide explains how to setup and use these systems.

Configuration

The ground proximity (AGL warning) as well as flap overspeed warnings are configured in the setup menu under:



AGL Warning

AGL warning can be activated as verbal and on-screen warning message if altitude above ground level as determined from pressure altitude and terrain database is below a given setting. In the above example, 100ft. GPS position is required. This function will not work if there is no current GPS fix.

Once triggered, the warning mechanism is reset once altitude above ground exceeds the set

limit plus 50 ft.

The AGL warning may be disabled, permanently enabled or enabled if digital input 1 on a connected IO Extender module is either high or low. This allows the alarm to be suppressed if the gear is down for example by fitting a suitable gear switch.

The ground proximity warning is disabled after take off for a time set in the “terrain warning setup”. This prevents unnecessary ground proximity warnings. Please also view your settings for automatic take-off detection in this regard. In case manual detection is used, the time starts from the selection of “starting an active flight”.

Flap overspeed warning

Flap warnings result in a verbal warning “Flap speed – Flap speed” as well as an on-screen warning. Once triggered, the warning mechanism is reset once speed is below limits or if flaps are retracted.

One or two flap position points may be defined for overspeed warning. If two positions are defined, position 2 must be used for the lower airspeed threshold (typically full flaps).

For example, position 1 would be your first flap position at perhaps 80 mph and position 2 would be the second flap position at perhaps 60 mph.

Flap positions may be indicated by one of two methods: Either by using two switches connected to IO Extender digital inputs 2 and 3 or using a single analog input using IO Extender analog input 1.

Switches may be active in either the high or low state.

Positions refer to the actual analog reading on the IO Extender analog input. This is a value ranging from 0 (0 volts) to 1023 (12V).

The current reading can be obtained at any time using the “General diagnostics 2” function under the “System Diagnostics menu”. Note that you can use the same function to read the state of the digital inputs.

If you will be using the analog inputs, select a value for the flap settings that will ensure positive activation of the warning function.

For example: In your case you find readings of 300,500,700 for “No flaps”, “Flaps 1” and “Flaps 2”. You would select warning position 1 of 400 and “above” and position 2 as 600 and “above” .

Using the internal flap overspeed with a VPX system

The internal flap overspeed monitoring mechanism works completely independent of a connected VPX system, if used.

Should you make use of the VPX functions for flap position and position monitoring, the internal system may still be used but it is completely independent so you should assure that your setup ensures that both systems work with similar settings.