Introduction

This document keeps track of firmware revisions for the MGL Avionics Stratomaster Velocity instrument range.

The revision number is displayed on the instrument's startup screen as follows.

Firmware
Revision

Note:

Please load default settings after a firmware upgrade. This is necessary in case the updated firmware contains new menu items / Unit settings etc. Please write down your current unit settings before loading the default settings. To load default settings, power up the instrument while pressing both the F1 and F2 keys simultaneously. The following message will be displayed.

ALT-3

Revision	Description
1.00	Initial release
1.01	Enhancement: Changed barometric pressure correction to use the range 940-1080mB
2.00	New display driver for new PCB & screen (Old screen went obsolete)

ALT-4

Revision	Description
1.00	Initial release
1.01	Enhancement: Changed barometric pressure correction to use the range 940-1080mB
2.00	New display driver for new PCB & screen (Old screen went obsolete)

ASI-3

Revision	Description
1.00	Initial release
1.01	Enhancement: The flight timer now increments in 1/99th of a hour with out any jump in minutes when "DEC" is selected Enhancement: Improved key press hold to increment 1,10,100 Enhancement: Removed the flight stop automatically stopping even if manual is selected. The flight log set to manual is now fully manual.
2.00	New display driver for new PCB & screen (Old screen went obsolete)

ASX-2

Revision	Description
1.00	Initial release
1.01	Enhancement: Changed barometric pressure correction to use the range 940-1080mB
1.02	Enhancement: The flight timer now increments in 1/99th of a hour with out any jump in minutes when "DEC" is selected Enhancement: Improved key press hold to increment 1,10,100 Enhancement: Removed the flight stop automatically stopping even if manual is selected. The flight log set to manual is now fully manual.
2.00	New display driver for new PCB & screen (Old screen went obsolete)

AV-2

Revision	Description
1.00	Initial release
1.01	Enhancement: Added in a numeric pitch/bank angle readout option (attitude indicator) Enhancement: The compass box now has a clear background to make reading the compass easier (attitude indicator) Enhancement: Removed the warm up warning message
1.02	Enhancement: Added a menu option to select between a large/small aircraft icon
1.03	Enhancement: Extended the range exceeded message to 15 seconds Enhancement: Added comms packet overflow protection
2.00	New display driver for new PCB & screen (Old screen went obsolete)

E-1

Revision	Description
1.00	Initial release
1.01	Bug: Fixed Max volts/TC channel 1 overwriting bug
1.02	Bug: Changed "VDO" text for 4-20mA sender to read "ROTAX"
1.03	Enhancement: Added Westach temperature sender Enhancement: Added display timers for egt/cht, pressure and temp Enhancement: The flight timer now increments in 1/99th of a hour with out any jump in minutes when "DEC" is selected Enhancement: Improved key press hold to increment 1,10,100 Enhancement: Removed the flight stop automatically stopping even if manual is selected. The flight log set to manual is now fully manual Enhancement: Removed the pressure max ohms menu item Enhancement: Removed the pressure max pressure menu item Enhancement: Added pressure support for the VDO 2 bar, VDO 5 bar pressure sender Enhancement: Added seperate volts low/high alarm
1.04	Enhancement: Dropped the lower pressure value for 10 psi to 1 psi
2.00	New display driver for new PCB & screen (Old screen went obsolete)

FF-3

Revision	Description
1.00	Initial release
1.01	Enhancement: Added in 1 calculated tank, 1 sender tank and single fuel flow (Diff&sum incl.) Enhancement: Changed flow "sender" to read "turbine"
1.02	Enhancement: Added warning message for calculated tanks at startup
1.03	Bug: Fixed differential/summation dual flow,dual level (1 calc,1 physical tank) fuel level
1.04	Bug: Fuel tanks now truncates to max reading if adc readings are greater/less then last point (Only affects tanks with large resistances)
2.00	New display driver for new PCB & screen (Old screen went obsolete)

FLIGHT-2

Revision	Description
1.00	Initial release
1.01	Bug: Fixed Fuel flow averaging Bug: Fuel tank now truncates to max reading if adc readings are greater/less then last point (Only affects tanks with large resistances)
1.02	Enhancement: Added a menu option to turn RPM on/off
2.00	New display driver for new PCB & screen (Old screen went obsolete)

GF-2

Revision	Description
1.00	Initial release
2.00	New display driver for new PCB & screen (Old screen went obsolete)

MAP-2

Revision	Description
1.00	Initial release
1.01	EEnhancement: Added a selection to display RPM in percent or RPM Enhancement: Added a mag check feature Enhancement: The flight timer now increments in 1/99th of a hour with out any jump in minutes when "DEC" is selected Enhancement: Improved key press hold to increment 1,10,100
2.00	New display driver for new PCB & screen (Old screen went obsolete)

ROTOR-1

Revision	Description
1.00	Initial release
1.01	Enhancement: The flight timer now increments in 1/99th of a hour with out any jump in minutes when "DEC" is selected Enhancement: Improved key press hold to increment 1,10,100 Enhancement: Removed the flight stop automatically stopping even if manual is selected. The flight log set to manual is now fully manual. Bug: Fixed the hobbs code which was not centered on the screen
1.02	Enhancement: Changed the Rotor 100% value,low and high alarm increment from 10 to 5
2.00	New display driver for new PCB & screen (Old screen went obsolete)

RTC-1

Revision	Description
1.00	Initial release
1.01	Enhancement: Added in an option for volts low/high alarm to be switched on/off individually
2.00	New display driver for new PCB & screen (Old screen went obsolete)

RV-3

Revision	Description
1.00	Initial release
1.01	Enhancement: Added a selection to display RPM in percent or RPM Enhancement: Added a mag check feature Enhancement: The flight timer now increments in 1/99th of a hour with out any jump in minutes when "DEC" is selected Enhancement: Improved key press hold to increment 1,10,100
2.00	New display driver for new PCB & screen (Old screen went obsolete)

TC-2

Revision	Description
1.00	Initial release
2.00	New display driver for new PCB & screen (Old screen went obsolete)

TC-3

Revision	Description
1.00	Initial release
2.00	New display driver for new PCB & screen (Old screen went obsolete)

TP-2

Revision	Description
1.00	Initial release
1.01	Bug: Changed "VDO" text for 4-20mA sender to read "ROTAX"
1.02	Enhancement: Added Westach temperature sender Enhancement: Improved key press hold to increment 1,10,100 Enhancement: Removed the pressure max ohms menu item Enhancement: Removed the pressure max pressure menu item Enhancement: Added pressure support for the VDO 2 bar, VDO 5 bar pressure sender
1.03	Enhancement: Dropped the lower pressure value from 10 psi to 1 psi
1.04	Bug: Fixed alarm flashing on channels if ch1=temperature and ch2=pressure
2.00	New display driver for new PCB & screen (Old screen went obsolete) Enhancement: Added "Hg pressure unit

Other instruments in the *Stratomaster Velocity* series

ALT-3	Encoding aviation altimeter and Vertical speed indicator (VSI)
ALT-4	Encoding aviation altimeter with Serial RS232 & Parallel Gillham code output
ASI-3	Airspeed indicator (ASI) with automatic flight log
ASX-2	Encoding aviation altimeter and Airspeed indicator (ASI)
AV-2	Artificial horizon and magnetic compass indicator
E-1	Universal engine monitor
FLIGHT-2	Primary Flight instrument
FF-3	Fuel Computer (single or dual fuel tanks)
GF-2	+-10G tilt compensated dual range G-force meter
MAP-2	Manifold pressure and RPM Indicator
ROTOR-1	Dual Rotor / Engine tachometer
RTC-1	Aviation real time clock (RTC), outside air temperature (OAT) and Voltage display
RV-3	Universal engine / Rotor RPM Indicator
TC-2	4-Channel thermocouple (EGT/CHT) indicator
TC-3	12-Channel thermocouple (EGT/CHT) indicator
TP-2	Universal temperature and pressure gauge