

## 1. General Description

This Document contains the log data of a read out logfile. It shows what happened with the specified vbar unit during the latest time

Version of PC Software	<b>5.3.2b 31.12.2012</b>
Date	<b>Mon Jan 30 19:58:11 EET 2017</b>
Serial	<b>1520100273</b>
Prod Date	<b>27.8.2012 12:31</b>
Firmware	<b>5.3</b>
Patchlevel	<b>4</b>

## 2. Chronological List of Events

⚠	0:00	High Vibration Level	The control loop suffers from a high vibration level, that starts to render the sensors blind. Save flying is possible, but the stability will be degraded. Additionally slow drifts that happen may be caused by vibrations.
✖	0:09	Extreme Vibration Level	Vibrations are extreme. That means, that the measurement signal is much lower than the signal level of the vibrations. No usable flying is possible with this level. Everything has to be checked and extended tests are needed to isolate and eliminate the source of vibrations
⚠	0:19	High Vibration Level	The control loop suffers from a high vibration level, that starts to render the sensors blind. Save flying is possible, but the stability will be degraded. Additionally slow drifts that happen may be caused by vibrations.
✔	0:00	Coldstart	A Coldstart is done on the beginning of each switch on time. A Coldstart can happen only, if the VBar Units is disconnected from power for more than 5 Seconds.
✔	0:00	Reset Reason: Power On	This happens if power is applied to the VBar unit. Usually this is ok, but it shall never happen in operational mode. So if a reset happens during flight, this points to a power problem. During flight the power on reset results in a warmstart. If a coldstart happens during flight, the power loss was more than 5 Seconds
▶	0:00	Bank 0 Loaded	Bank 0 was loaded from the non volatile memory. This can be triggered my manual backswitch from the userinterface as well as in flight if bank switch is programmed to the aux channel. On Startup the Bank 0 is loaded by default.
▶	0:05	Calibration Finished	At each Coldstart, the sensor and RC Values are calibrated to the actual seen values. If the calibration is finished, this message confirms the storage of data into the internal non volatile calibration memory
✔	0:15	Good Health Message (10sec)	This Message describes the good health state. That means, that the VBar unit does not see any error or Info Message in the last 10 Seconds.
✔	0:25	Good Health Message (10sec)	This Message describes the good health state. That means, that the VBar unit does not see any error or Info Message in the last 10 Seconds.
✔	0:35	Good Health Message (10sec)	This Message describes the good health state. That means, that the VBar unit does not see any error or Info Message in the last 10 Seconds.
✔	0:45	Good Health Message (10sec)	This Message describes the good health state. That means, that the VBar unit does not see any error or Info Message in the last 10 Seconds.
✔	0:55	Good Health Message (10sec)	This Message describes the good health state. That means, that the VBar unit does not see any error or Info Message in the last 10 Seconds.
✔	1:05	Good Health Message (10sec)	This Message describes the good health state. That means, that the VBar unit does not see any error or Info Message in the last 10 Seconds.
✔	1:15	Good Health Message (10sec)	This Message describes the good health state. That means, that the VBar unit does not see any error or Info Message in the last 10 Seconds.
✔	1:25	Good Health Message (10sec)	This Message describes the good health state. That means, that the VBar unit does not see any error or Info Message in the last 10 Seconds.
✔	1:35	Good Health Message (10sec)	This Message describes the good health state. That means, that the VBar unit does not see any error or Info Message in the last 10 Seconds.
✔	1:45	Good Health Message (10sec)	This Message describes the good health state. That means, that the VBar unit does not see any error or Info Message in the last 10 Seconds.
✔	1:55	Good Health Message (10sec)	This Message describes the good health state. That means, that the VBar unit does not see any error or Info Message in the last 10 Seconds.
✔	2:05	Good Health Message (10sec)	This Message describes the good health state. That means, that the VBar unit does not see any error or Info Message in the last 10 Seconds.
✔	2:15	Good Health Message (10sec)	This Message describes the good health state. That means, that the VBar unit does not see any error or Info Message in the last 10 Seconds.
✔	2:25	Good Health Message (10sec)	This Message describes the good health state. That means, that the VBar unit does not see any error or Info Message in the last 10 Seconds.
✔	2:35	Good Health Message (10sec)	This Message describes the good health state. That means, that the VBar unit does not see any error or Info Message in the last 10 Seconds.
▶	2:43	Testmode Started	The testmode ist entered intentionally by the user with the command on a Controlpanel or any other control terminal. The Entering command is checksum tested, so it cannot happen accidentally. In Testmode the normal control loop algorithm is not running, so its important to leave the Testmode prior flight. Its only can happen to fly in testmode with bluetooth.
▶	2:47	Testmode Started	The testmode ist entered intentionally by the user with the command on a Controlpanel or any other control terminal. The Entering command is checksum tested, so it cannot happen accidentally. In Testmode the normal control loop algorithm is not running, so its important to leave the Testmode prior flight. Its only can happen to fly in testmode with bluetooth.
▶	2:50	Testmode Started	The testmode ist entered intentionally by the user with the command on a Controlpanel or any other control terminal. The Entering command is checksum tested, so it cannot happen accidentally. In Testmode the normal control loop algorithm is not running, so its important to leave the Testmode prior flight. Its only can happen to fly in testmode with bluetooth.

▶	2:59	Testmode Started	The testmode ist entered intentionally by the user with the command on a Controlpanel or any other control terminal. The Entering command is checksum tested, so it cannot happen accidentally. In Testmode the normal control loop algorithm is not running, so its important to leave the Testmode prior flight. Its only can happen to fly in testmode with bluetooth.
▶	3:00	Testmode Started	The testmode ist entered intentionally by the user with the command on a Controlpanel or any other control terminal. The Entering command is checksum tested, so it cannot happen accidentally. In Testmode the normal control loop algorithm is not running, so its important to leave the Testmode prior flight. Its only can happen to fly in testmode with bluetooth.
▶	3:01	Testmode Started	The testmode ist entered intentionally by the user with the command on a Controlpanel or any other control terminal. The Entering command is checksum tested, so it cannot happen accidentally. In Testmode the normal control loop algorithm is not running, so its important to leave the Testmode prior flight. Its only can happen to fly in testmode with bluetooth.
▶	3:02	Testmode Started	The testmode ist entered intentionally by the user with the command on a Controlpanel or any other control terminal. The Entering command is checksum tested, so it cannot happen accidentally. In Testmode the normal control loop algorithm is not running, so its important to leave the Testmode prior flight. Its only can happen to fly in testmode with bluetooth.
✔	3:12	Good Health Message (10sec)	This Message describes the good health state. That means, that the VBar unit does not see any error or Info Message in the last 10 Seconds.
✔	3:22	Good Health Message (10sec)	This Message describes the good health state. That means, that the VBar unit does not see any error or Info Message in the last 10 Seconds.
✔	3:32	Good Health Message (10sec)	This Message describes the good health state. That means, that the VBar unit does not see any error or Info Message in the last 10 Seconds.
✔	3:42	Good Health Message (10sec)	This Message describes the good health state. That means, that the VBar unit does not see any error or Info Message in the last 10 Seconds.
✔	3:52	Good Health Message (10sec)	This Message describes the good health state. That means, that the VBar unit does not see any error or Info Message in the last 10 Seconds.
✔	4:02	Good Health Message (10sec)	This Message describes the good health state. That means, that the VBar unit does not see any error or Info Message in the last 10 Seconds.
✔	4:12	Good Health Message (10sec)	This Message describes the good health state. That means, that the VBar unit does not see any error or Info Message in the last 10 Seconds.
▶	4:19	Raised Vibration Level	There was detected a raised level of Vibration. Since the vibration detector has to decide which signal is vibration and chis is the intended measurement signal, this can happen sometimes on hard 3d moves. It shall not happen all the time. If this error is reported repeditly very often, check the heli for vibration sources.
✔	4:29	Good Health Message (10sec)	This Message describes the good health state. That means, that the VBar unit does not see any error or Info Message in the last 10 Seconds.
▶	4:38	Raised Vibration Level	There was detected a raised level of Vibration. Since the vibration detector has to decide which signal is vibration and chis is the intended measurement signal, this can happen sometimes on hard 3d moves. It shall not happen all the time. If this error is reported repeditly very often, check the heli for vibration sources.
▶	4:48	Raised Vibration Level	There was detected a raised level of Vibration. Since the vibration detector has to decide which signal is vibration and chis is the intended measurement signal, this can happen sometimes on hard 3d moves. It shall not happen all the time. If this error is reported repeditly very often, check the heli for vibration sources.
✔	4:58	Good Health Message (10sec)	This Message describes the good health state. That means, that the VBar unit does not see any error or Info Message in the last 10 Seconds.
✔	5:08	Good Health Message (10sec)	This Message describes the good health state. That means, that the VBar unit does not see any error or Info Message in the last 10 Seconds.
✔	5:18	Good Health Message (10sec)	This Message describes the good health state. That means, that the VBar unit does not see any error or Info Message in the last 10 Seconds.
✔	5:28	Good Health Message (10sec)	This Message describes the good health state. That means, that the VBar unit does not see any error or Info Message in the last 10 Seconds.
✔	5:38	Good Health Message (10sec)	This Message describes the good health state. That means, that the VBar unit does not see any error or Info Message in the last 10 Seconds.
✔	5:48	Good Health Message (10sec)	This Message describes the good health state. That means, that the VBar unit does not see any error or Info Message in the last 10 Seconds.
▶	5:51	Testmode Started	The testmode ist entered intentionally by the user with the command on a Controlpanel or any other control terminal. The Entering command is checksum tested, so it cannot happen accidentally. In Testmode the normal control loop algorithm is not running, so its important to leave the Testmode prior flight. Its only can happen to fly in testmode with bluetooth.
▶	5:52	Testmode Started	The testmode ist entered intentionally by the user with the command on a Controlpanel or any other control terminal. The Entering command is checksum tested, so it cannot happen accidentally. In Testmode the normal control loop algorithm is not running, so its important to leave the Testmode prior flight. Its only can happen to fly in testmode with bluetooth.
▶	5:53	Testmode Started	The testmode ist entered intentionally by the user with the command on a Controlpanel or any other control terminal. The Entering command is checksum tested, so it cannot happen accidentally. In Testmode the normal control loop algorithm is not running, so its important to leave the Testmode prior flight. Its only can happen to fly in testmode with bluetooth.
▶	5:53	Testmode Ended	Testmode has been switched off intentially. Normal control loop is in action now

✔	6:03	Good Health Message (10sec)	This Message describes the good health state. That means, that the VBar unit does not see any error or Info Message in the last 10 Seconds.
✔	6:13	Good Health Message (10sec)	This Message describes the good health state. That means, that the VBar unit does not see any error or Info Message in the last 10 Seconds.
✔	6:23	Good Health Message (10sec)	This Message describes the good health state. That means, that the VBar unit does not see any error or Info Message in the last 10 Seconds.
✔	6:33	Good Health Message (10sec)	This Message describes the good health state. That means, that the VBar unit does not see any error or Info Message in the last 10 Seconds.
✔	6:43	Good Health Message (10sec)	This Message describes the good health state. That means, that the VBar unit does not see any error or Info Message in the last 10 Seconds.
✔	6:53	Good Health Message (10sec)	This Message describes the good health state. That means, that the VBar unit does not see any error or Info Message in the last 10 Seconds.
▶	6:59	Antenna Switched	The Signal from one of the satellites was missing. The Main reciver is switched over to the other connector. In Case of a single reciver connected, one frame was lost.
✘	6:59	Low Voltage of 3.3V Rail	The Controller is no longer able to perform reliable IO Operations. This is not necessary the reason for a complete reset, but this is a strong hint to take a close look at the power supply. This shall not happen in flight. If you see this error, the problem has to be fixed before the next flight.
✘	6:59	RC Input of Pitch Channel missed	The Pitch Input Signal ist updated with each Frame recived from the reciver. This Error is raised, if for 50ms no new signal arrives from the reciver. Depending on the hardware connection this can point to a problem with the connection to the reciver/sattelite. In case of sattelite recivers used, all channels will be accused at the same time. In case of single channels, this can happen seperately on each channel. Closely check your wiring for broken wires or connection problems
✘	6:59	RC Input of Aileron Channel missed	The Aileron Input Signal ist updated with each Frame recived from the reciver. This Error is raised, if for 50ms no new signal arrives from the reciver. Depending on the hardware connection this can point to a problem with the connection to the reciver/sattelite. In case of sattelite recivers used, all channels will be accused at the same time. In case of single channels, this can happen seperately on each channel. Closely check your wiring for broken wires or connection problems
✘	6:59	RC Input of Elevator Channel missed	The Elevator Input Signal ist updated with each Frame recived from the reciver. This Error is raised, if for 50ms no new signal arrives from the reciver. Depending on the hardware connection this can point to a problem with the connection to the reciver/sattelite. In case of sattelite recivers used, all channels will be accused at the same time. In case of single channels, this can happen seperately on each channel. Closely check your wiring for broken wires or connection problems
✘	6:59	RC Input of Tail Channel missed	The Tail Input Signal ist updated with each Frame recived from the reciver. This Error is raised, if for 50ms no new signal arrives from the reciver. Depending on the hardware connection this can point to a problem with the connection to the reciver/sattelite. In case of sattelite recivers used, all channels will be accused at the same time. In case of single channels, this can happen seperately on each channel. Closely check your wiring for broken wires or connection problems
✘	6:59	RC Input of AUX Channel missed	The AUX Input Signal ist updated with each Frame recived from the reciver. This Error is raised, if for 50ms no new signal arrives from the reciver. Depending on the hardware connection this can point to a problem with the connection to the reciver/sattelite. In case of sattelite recivers used, all channels will be accused at the same time. In case of single channels, this can happen seperately on each channel. Closely check your wiring for broken wires or connection problems. The aux channel is monitored only in case it is used by the bank selekt switch
▶	7:00	Antenna Switched	The Signal from one of the satellites was missing. The Main reciver is switched over to the other connector. In Case of a single reciver connected, one frame was lost.
✘	7:00	RC Input of Pitch Channel missed	The Pitch Input Signal ist updated with each Frame recived from the reciver. This Error is raised, if for 50ms no new signal arrives from the reciver. Depending on the hardware connection this can point to a problem with the connection to the reciver/sattelite. In case of sattelite recivers used, all channels will be accused at the same time. In case of single channels, this can happen seperately on each channel. Closely check your wiring for broken wires or connection problems
✘	7:00	RC Input of Aileron Channel missed	The Aileron Input Signal ist updated with each Frame recived from the reciver. This Error is raised, if for 50ms no new signal arrives from the reciver. Depending on the hardware connection this can point to a problem with the connection to the reciver/sattelite. In case of sattelite recivers used, all channels will be accused at the same time. In case of single channels, this can happen seperately on each channel. Closely check your wiring for broken wires or connection problems
✘	7:00	RC Input of Elevator Channel missed	The Elevator Input Signal ist updated with each Frame recived from the reciver. This Error is raised, if for 50ms no new signal arrives from the reciver. Depending on the hardware connection this can point to a problem with the connection to the reciver/sattelite. In case of sattelite recivers used, all channels will be accused at the same time. In case of single channels, this can happen seperately on each channel. Closely check your wiring for broken wires or connection problems
✘	7:00	RC Input of Tail Channel missed	The Tail Input Signal ist updated with each Frame recived from the reciver. This Error is raised, if for 50ms no new signal arrives from the reciver. Depending on the hardware connection this can point to a problem with the connection to the reciver/sattelite. In case of sattelite recivers used, all channels will be accused at the same time. In case of single channels, this can happen seperately on each channel. Closely check your wiring for broken wires or connection problems
✘	7:00	RC Input of AUX Channel missed	The AUX Input Signal ist updated with each Frame recived from the reciver. This Error is raised, if for 50ms no new signal arrives from the reciver. Depending on the hardware connection this can point to a problem with the connection to the reciver/sattelite. In case of sattelite recivers used, all channels will be accused at the same time. In case of single channels, this can happen seperately on each channel. Closely check your wiring for broken wires or connection problems. The aux channel is monitored only in case it is used by the bank selekt switch
▶	7:04	Antenna Switched	The Signal from one of the satellites was missing. The Main reciver is switched over to the other connector. In Case of a single reciver connected, one frame was lost.
✔	7:14	Good Health Message (10sec)	This Message describes the good health state. That means, that the VBar unit does not see any error or Info Message in the last 10 Seconds.
✔	7:24	Good Health Message (10sec)	This Message describes the good health state. That means, that the VBar unit does not see any error or Info Message in the last 10 Seconds.

✔	7:34	Good Health Message (10sec)	This Message describes the good health state. That means, that the VBar unit does not see any error or Info Message in the last 10 Seconds.
✔	7:44	Good Health Message (10sec)	This Message describes the good health state. That means, that the VBar unit does not see any error or Info Message in the last 10 Seconds.
✔	7:54	Good Health Message (10sec)	This Message describes the good health state. That means, that the VBar unit does not see any error or Info Message in the last 10 Seconds.
✔	8:04	Good Health Message (10sec)	This Message describes the good health state. That means, that the VBar unit does not see any error or Info Message in the last 10 Seconds.
✔	8:14	Good Health Message (10sec)	This Message describes the good health state. That means, that the VBar unit does not see any error or Info Message in the last 10 Seconds.
✔	8:24	Good Health Message (10sec)	This Message describes the good health state. That means, that the VBar unit does not see any error or Info Message in the last 10 Seconds.
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