

## 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>Sat Nov 14 23:47:20 EET 2015</b>
Serial	<b>1410037700</b>
Prod Date	<b>18.1.2013 13:38</b>
Firmware	<b>5.3</b>
Patchlevel	<b>4</b>

## 2. Chronological List of Events

✓	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	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.
⚠	0:00	Reset Reason: Watchdog	The Watchdog monitors the proper execution of the main software routine. Usually this error shall not happen, but in the situation of a manual coldstart with the userinterface this is a normal message. However in normal operation the occurrence of an watchdog reset can be caused by a massive electrostatic discharge event, or extreme magnetic fields.
✓	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.
▶	0:06	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
✓	0:16	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.
✓	0:26	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.
✓	0:36	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.
✓	0:46	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.
✓	0:56	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.
✓	1:06	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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✓	1:36	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.
✓	1:46	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.
⚠	1:50	The Cyclic Ring is active	If the agility of a Heli is set to the possibilities of the mechanic and aerodynamic limits, this did not happen. However in 3D Flying the agility cannot set high enough to fulfill the pilots needs. So this limiter is in action dependant on the flwon actions. If it is active very often, there is a potential problem with the mechanics. Using lighter blades will help increasing the natural agility preventing hitting the cyclic ring all the time.
⚠	1:51	The Cyclic Ring is active	If the agility of a Heli is set to the possibilities of the mechanic and aerodynamic limits, this did not happen. However in 3D Flying the agility cannot set high enough to fulfill the pilots needs. So this limiter is in action dependant on the flwon actions. If it is active very often, there is a potential problem with the mechanics. Using lighter blades will help increasing the natural agility preventing hitting the cyclic ring all the time.
⚠	1:52	The Cyclic Ring is active	If the agility of a Heli is set to the possibilities of the mechanic and aerodynamic limits, this did not happen. However in 3D Flying the agility cannot set high enough to fulfill the pilots needs. So this limiter is in action dependant on the flwon actions. If it is active very often, there is a potential problem with the mechanics. Using lighter blades will help increasing the natural agility preventing hitting the cyclic ring all the time.
⚠	1:54	The Cyclic Ring is active	If the agility of a Heli is set to the possibilities of the mechanic and aerodynamic limits, this did not happen. However in 3D Flying the agility cannot set high enough to fulfill the pilots needs. So this limiter is in action dependant on the flwon actions. If it is active very often, there is a potential problem with the mechanics. Using lighter blades will help increasing the natural agility preventing hitting the cyclic ring all the time.
⚠	1:55	The Cyclic Ring is active	If the agility of a Heli is set to the possibilities of the mechanic and aerodynamic limits, this did not happen. However in 3D Flying the agility cannot set high enough to fulfill the pilots needs. So this limiter is in action dependant on the flwon actions. If it is active very often, there is a potential problem with the mechanics. Using lighter blades will help increasing the natural agility preventing hitting the cyclic ring all the time.
⚠	1:56	The Cyclic Ring is active	If the agility of a Heli is set to the possibilities of the mechanic and aerodynamic limits, this did not happen. However in 3D Flying the agility cannot set high enough to fulfill the pilots needs. So this limiter is in action dependant on the flwon actions. If it is active very often, there is a potential problem with the mechanics. Using lighter blades will help increasing the natural agility preventing hitting the cyclic ring all the time.



✓	4:25	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.
✓	0:00	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.
▶	0:06	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
✓	0:16	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.
✓	0:26	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.
▶	0:27	Satellite Data out of synchronization	The connection to the Satellites has to be resynchronized after some packet losses
▶	0:28	Satellite Data out of synchronization	The connection to the Satellites has to be resynchronized after some packet losses
▶	0:29	Satellite Data out of synchronization	The connection to the Satellites has to be resynchronized after some packet losses
▶	0:30	Satellite Data out of synchronization	The connection to the Satellites has to be resynchronized after some packet losses
▶	0:31	Satellite Data out of synchronization	The connection to the Satellites has to be resynchronized after some packet losses
✓	0:41	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.
✓	0:51	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.
▶	0:53	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.
▶	0:53	Satellite Data out of synchronization	The connection to the satellites has to be resynchronized after some packet losses
✗	0:53	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/satellite. In case of satellite 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
✗	0:53	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/satellite. In case of satellite 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
✗	0:53	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/satellite. In case of satellite 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
✗	0:53	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/satellite. In case of satellite 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
✗	0:53	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/satellite. In case of satellite 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
▶	0:53	Satellite Data out of synchronization	The connection to the Satellites has to be resynchronized after some packet losses
✓	1:03	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.
✓	1:13	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.
✓	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.

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✔	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
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