

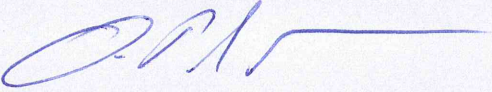
Title: Software Upgrade digital ASI and ALTI		
AG-SB-2018-01-B-EN		Compliance Category:
Applicability		A – MANDATORY B – RECOMMENDED C – OPTIONAL
Aircraft type & model: Any AutoGyro type, fitted with digital ASI (Software Version 2.16 and older) and ALTI (Software Version 2.12 and older)	Betroffene Werknummern: Any AutoGyro type, fitted with digital ASI (Software Version 2.16 and older) and ALTI (Software Version 2.12 and older)	
The maintenance manual to be referenced is this stated or subsequent issue.		As per AutoGyro website
This form is the response from AutoGyro GmbH either against a problem found in the product in service requiring a containment or rectification action, or as service information for aircraft modification incorporation. For help, contact AutoGyro on 49(0)5121 88056-00, or email airworthiness@auto-gyro.com .		

Documentation (Service Bulletin Completion action)

The accomplishment of this Service Bulletin, or the decision of its rejection, must be properly documented, if such procedure is required by the relevant authority

Category Codes

- | | |
|-----------------|---|
| A – Mandatory | – failure to comply result in a significant reduction of flight safety, injury or death |
| B – Recommended | – failure to comply may result in reduced safety margin, injury and/or equipment damage |
| C – Optional | – improves operating behavior, reliability and/or maintainability |

Chief Certification Officer  G. Speich Mar 14 2018 2:13 PM This document has been issued according to an approved computer generated signature procedure. 	Chief Technical Officer  15.03.2018
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Contact & Info:
airworthiness@auto-gyro.com
www.auto-gyro.com

AutoGyro GmbH
 Dornierstr. 14
 31137 Hildesheim

Reason and overview of the Service Bulletin (cause of problem if known)

Necessary software update after design change:

Establishment of 3 upgrade hubs (AG USA for America, AG China for China, AG GmbH for all other markets). This minimizes postage costs and allows faster return delivery to partners / customers after the upgrade.

The Owner is responsible for packing the units suitable for the journey.

Manpower estimates

The task may only be performed by the mentioned upgrade hubs.

Estimated man-hours to complete the task as a stand-alone item are:

pictures: ca. 30 minutes

Software ca. 5 minutes

Tooling required

Hardware

USA:

http://www.newark.com/olimex/arm-jtag-20-10/plug-in-adapter-arm-based-processor/dp/27W3725?ost=2144328&ddkey=http%3Aen-US%2FElement14_US%2Fsearch

http://www.newark.com/microchip/at91sam-ice/jtag-emulator-for-sam3-sam7-sam9/dp/68T5115?ost=1095464&isrnfonsku=true&ddkey=http%3Aen-US%2FElement14_US%2Fsearch

China:

http://cn.element14.com/olimex/arm-jtag-20-10/adptr-jtag-0-1-20pin-10pin-0-05/dp/2144328?ost=2144328&ddkey=http%3Azh-CN%2FElement14_China%2Fsearch

http://cn.element14.com/microchip/at91sam-ice/jtag-emulator-for-sam3-sam7-sam9/dp/1095464?ost=1095464&ddkey=http%3Azh-CN%2FElement14_China%2Fsearch

Weight and Balance Effects

No effect

Manuals affected

POH AutoGyro and MMM AutoGyro are not affected.

Previous Modifications that affect the SB

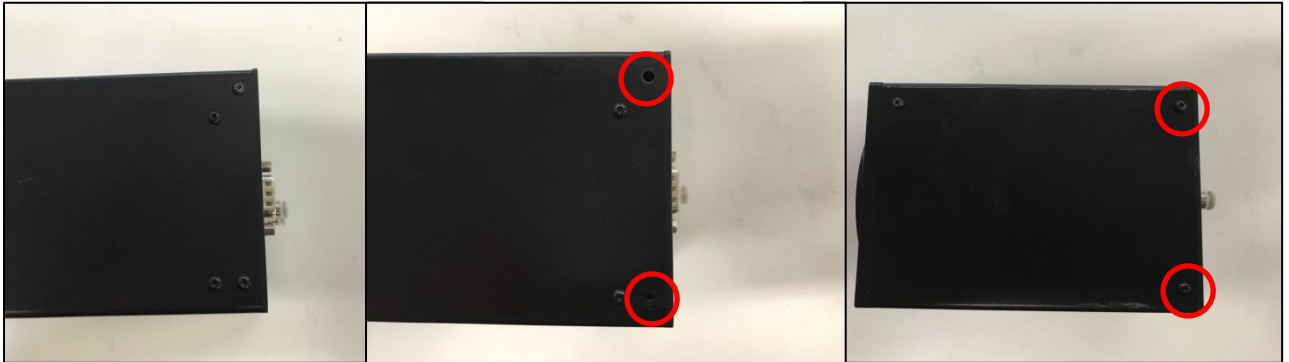
None

Accomplishment instructions (Action required to implement this bulletin):

Effective date of this SB is 2nd March 2018

Instructions**Picture update:**

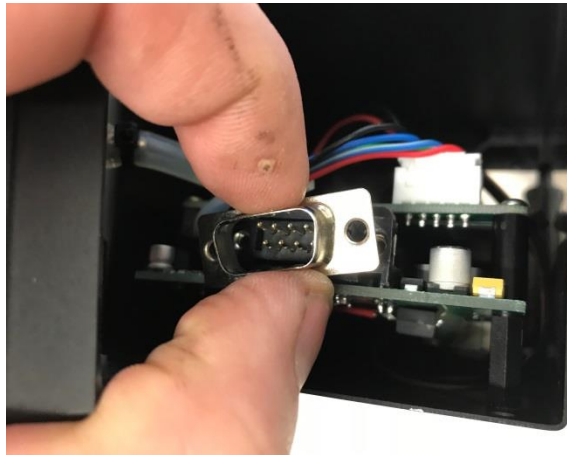
1. Removing the rear housing:
Loosen 4 screws



and 2 screws on the d-sub (5 outside hexagon)



2. Remove the Sub-d coverplate

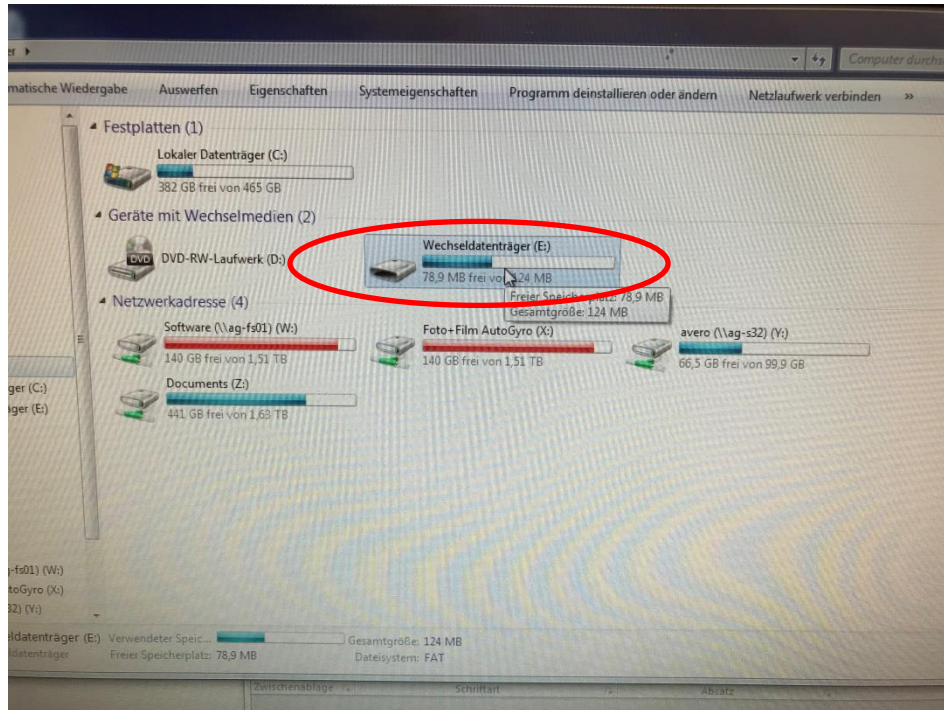


3. Disconnect the 5-pin plug

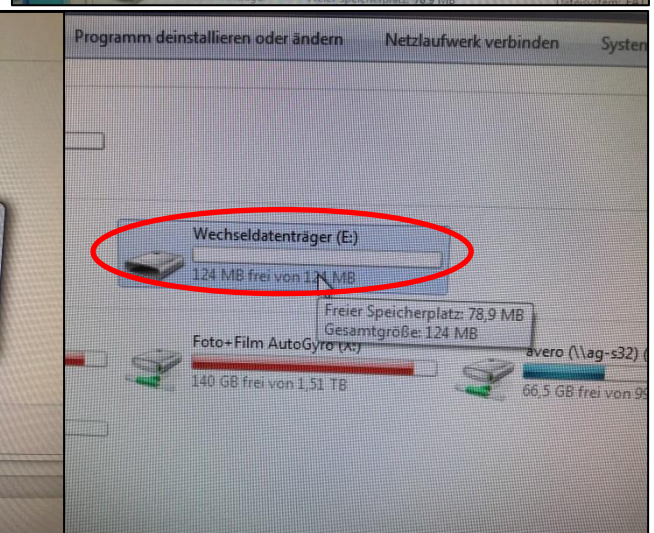
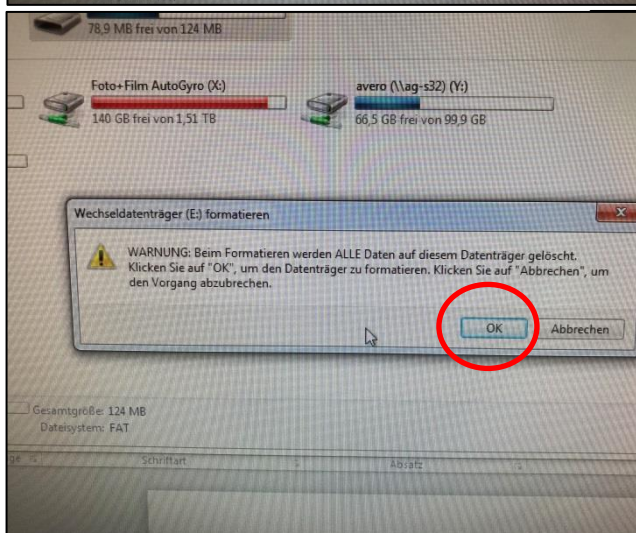
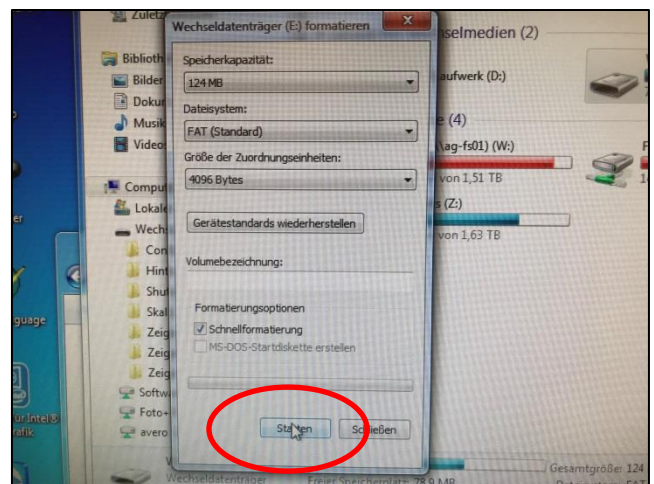
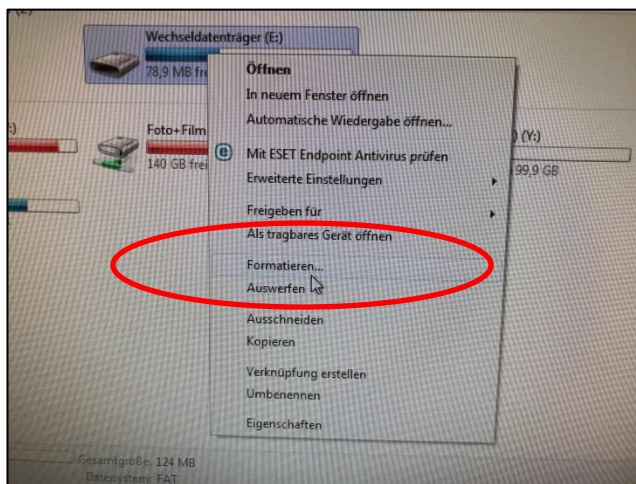


4. Connect the USB- cabel -> removable diskdrive appears

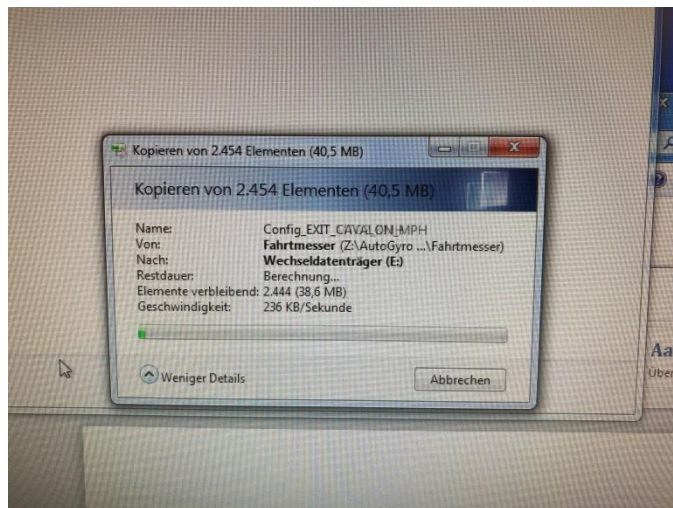
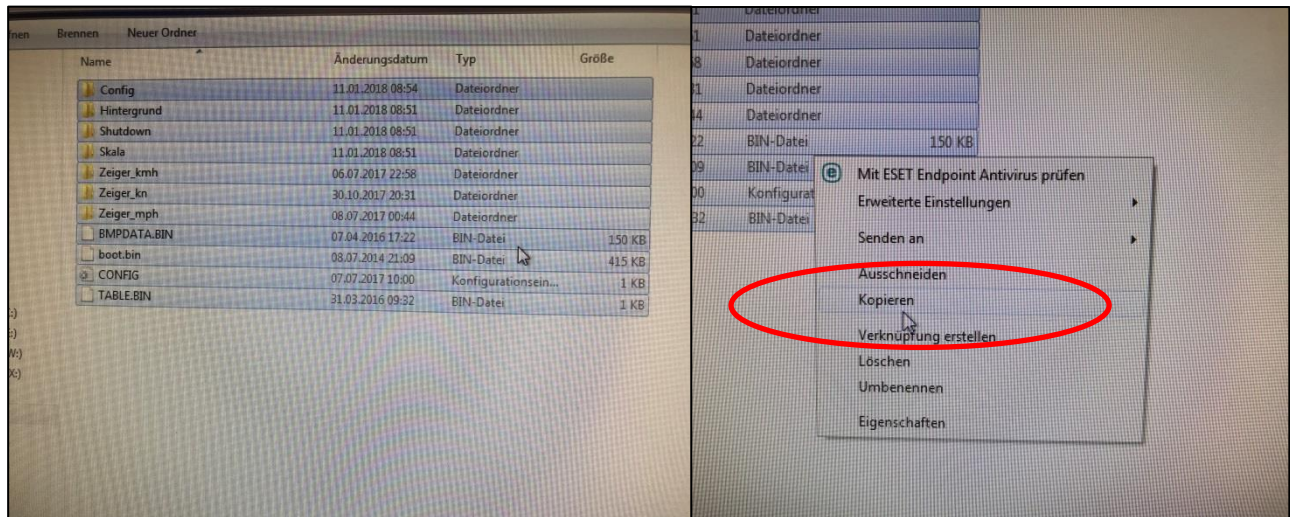




5. Format the appropriate drive



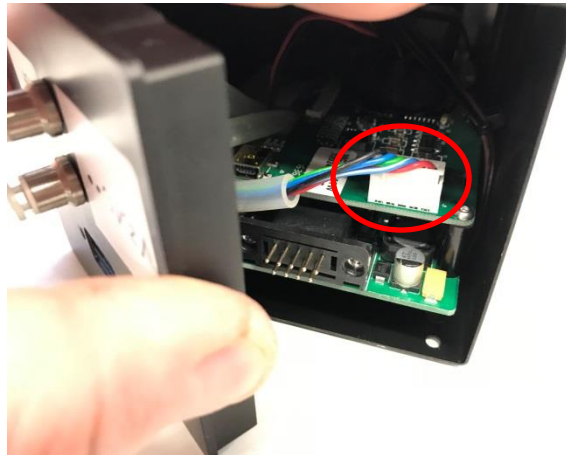
6. copy new data



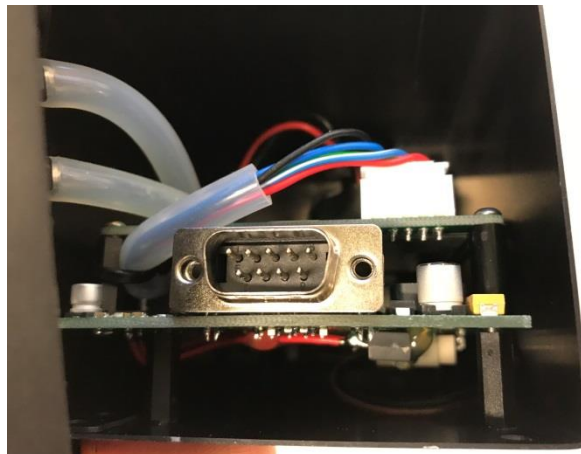
7. disconnect USB-cabel



8. Connect the 5-pin plug



9. fit the Sub-d coverplate

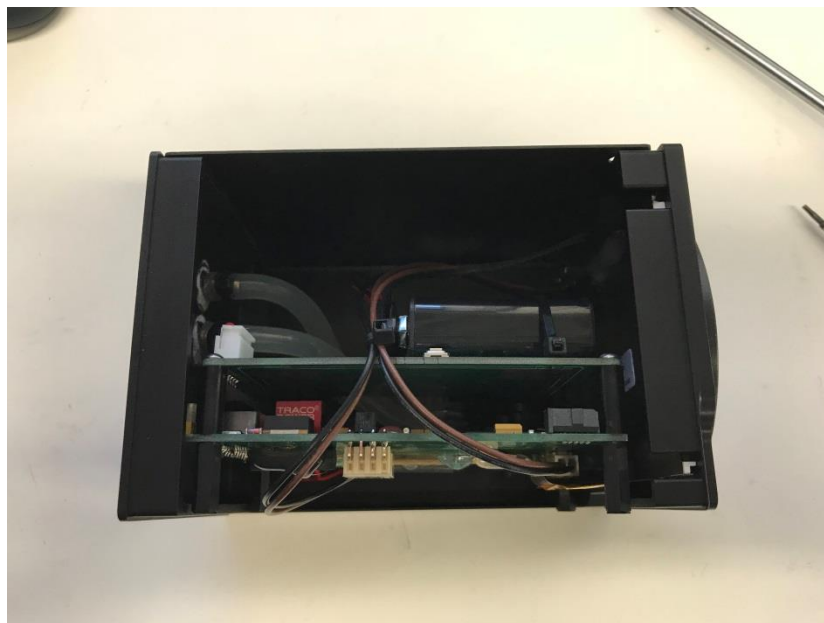


10. screw back the rear housing.



Firmware update:

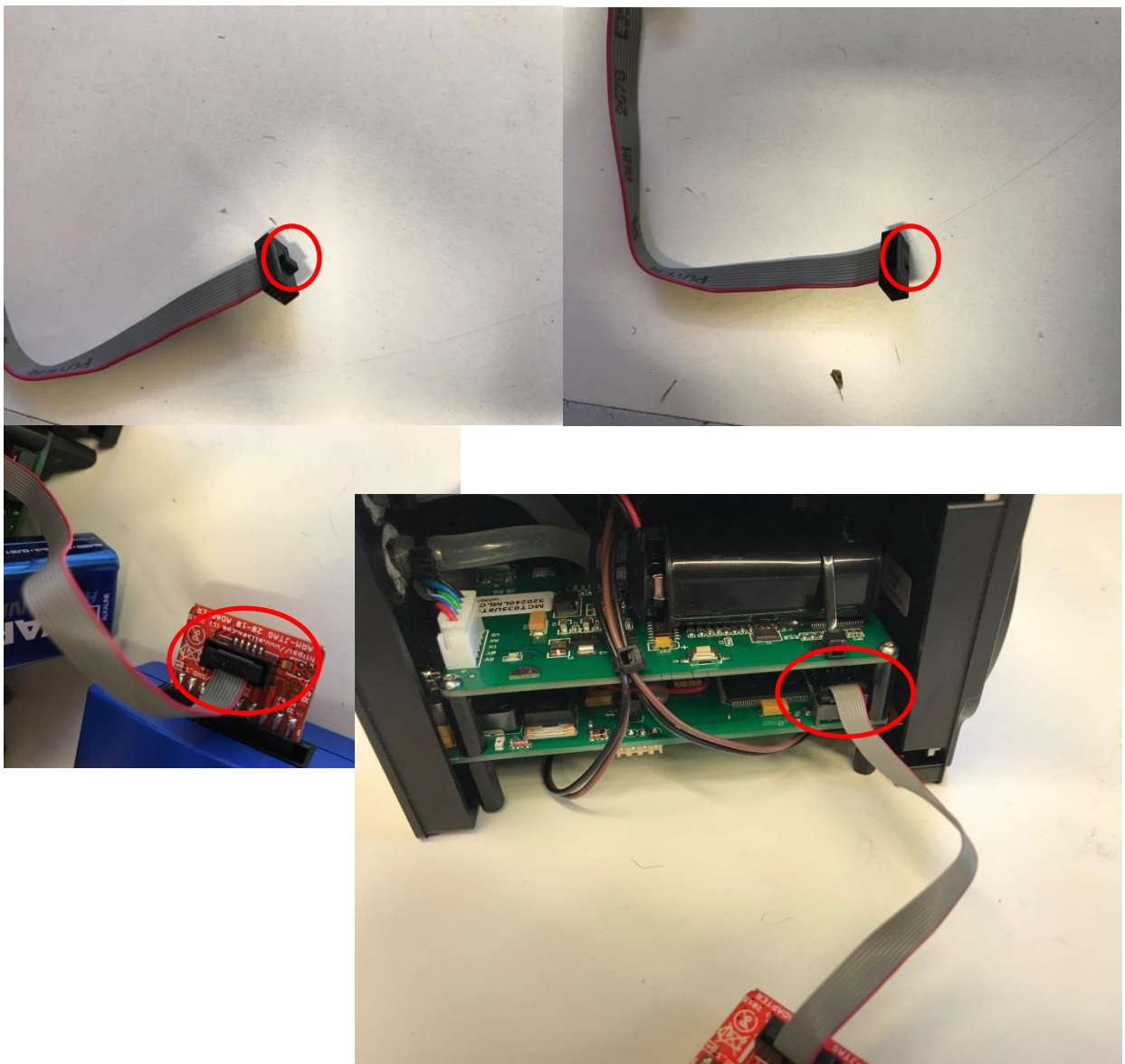
1. open the housing, except for one screw -> remove the side plate



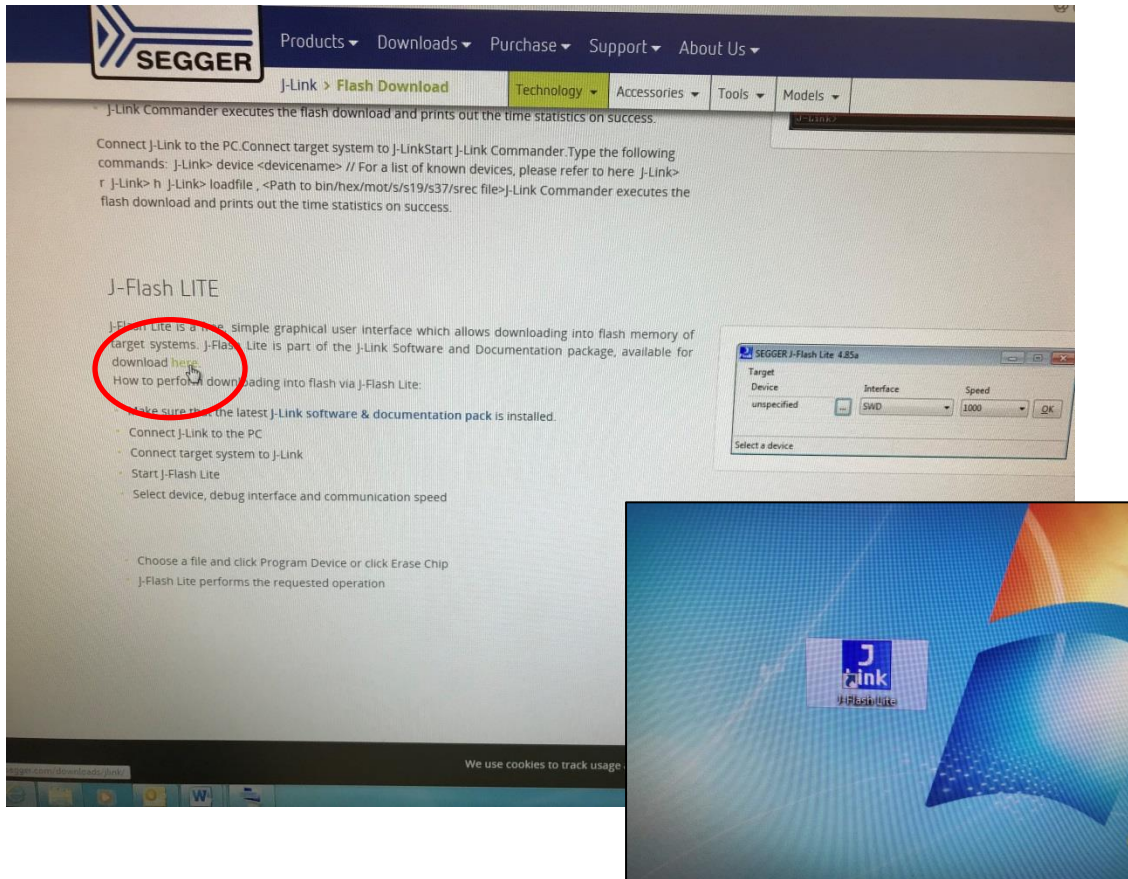
2. connect programmer to pc (driver installs automatically)



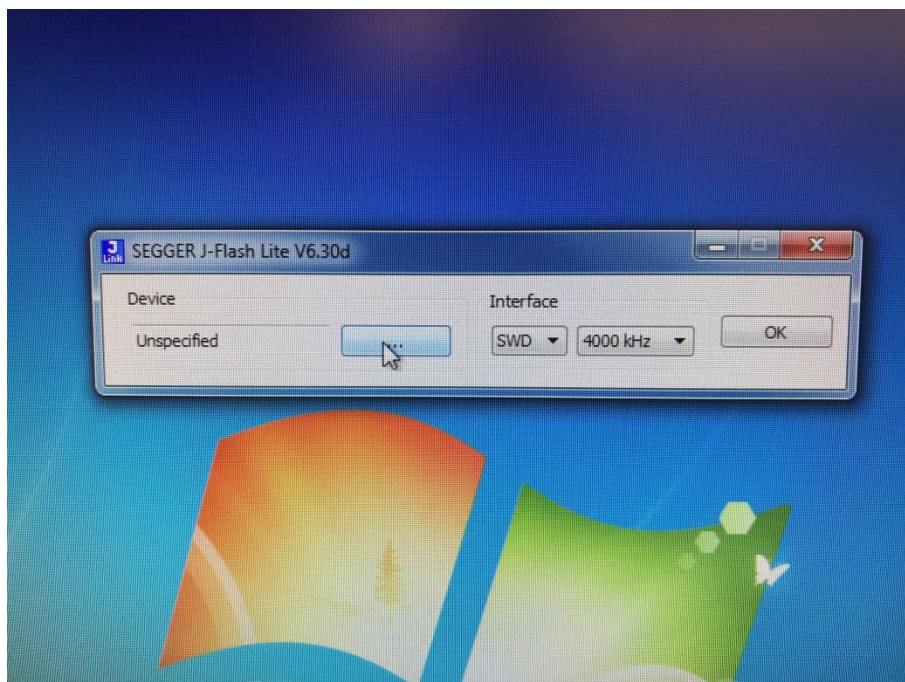
3. connect programmer to the instrument (the nose must be cut off the first time- see pic.)

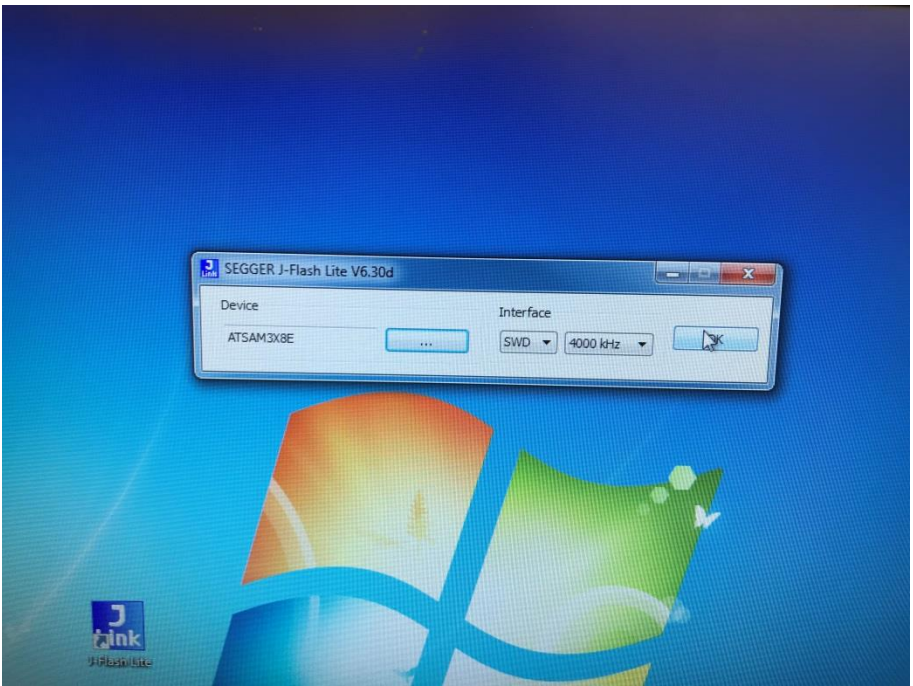
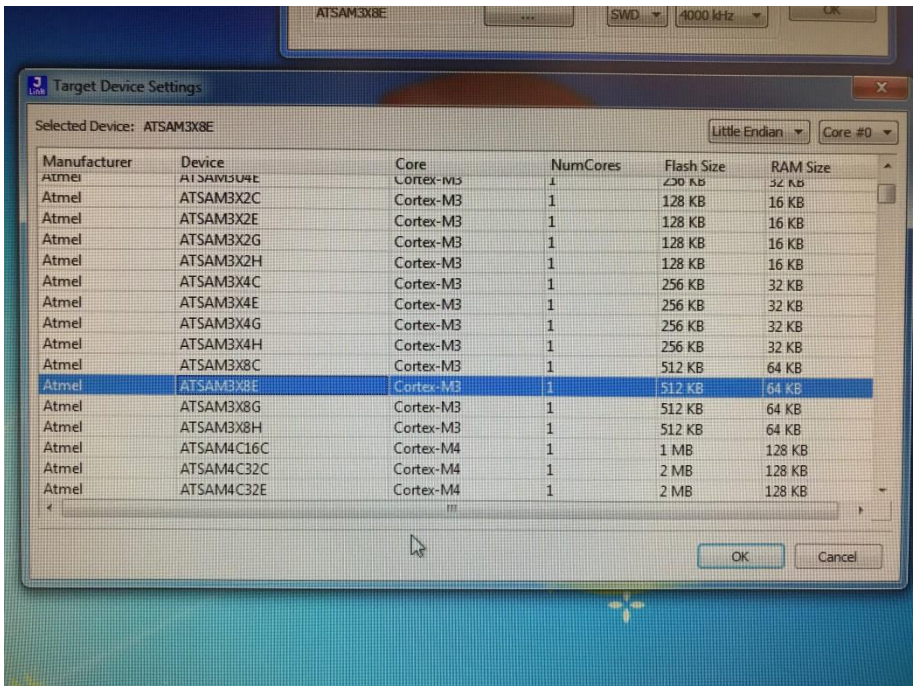


4. start the Flash software (maybe to install:
https://www.segger.com/downloads/jlink/JLink_Windows.exe)

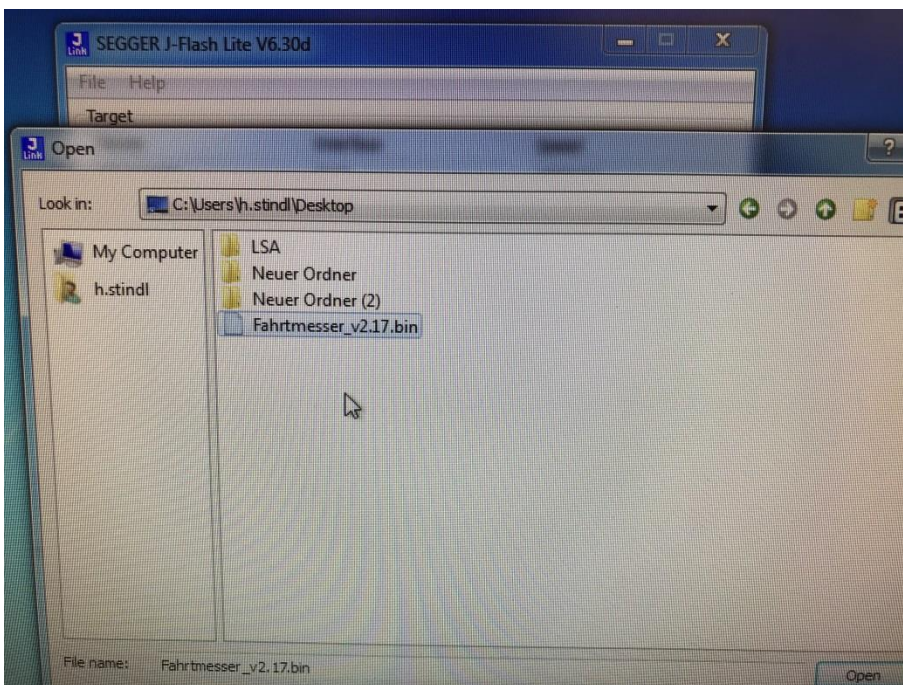
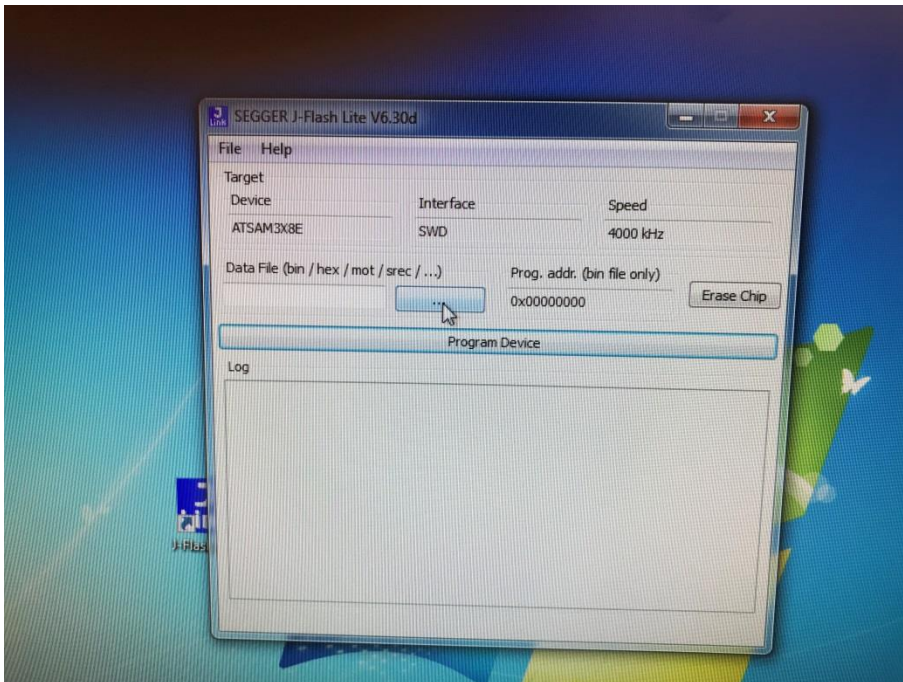


5. select processor (ATSAM3X8)





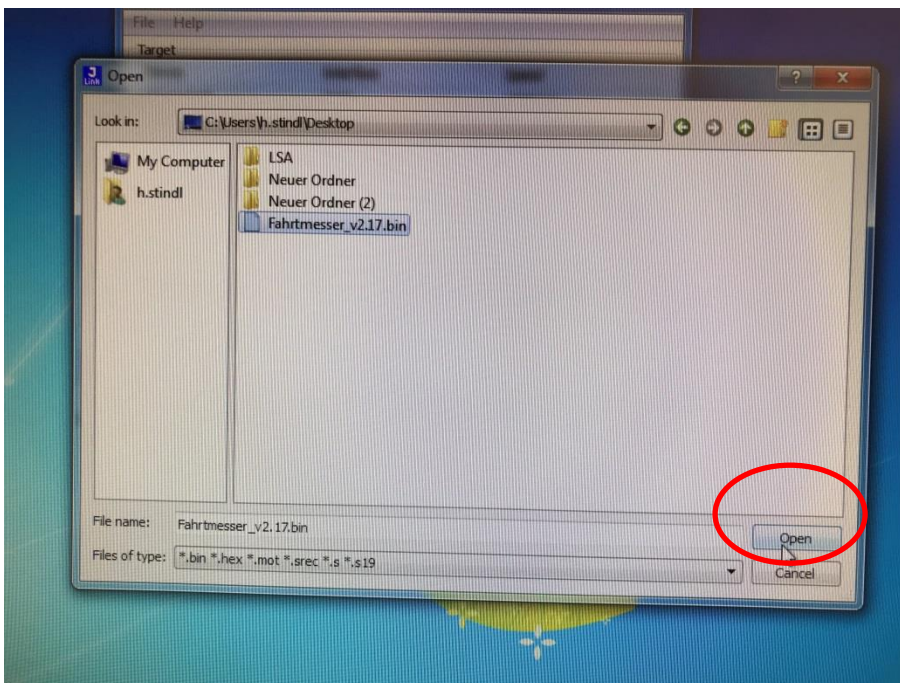
6. select the file to flash

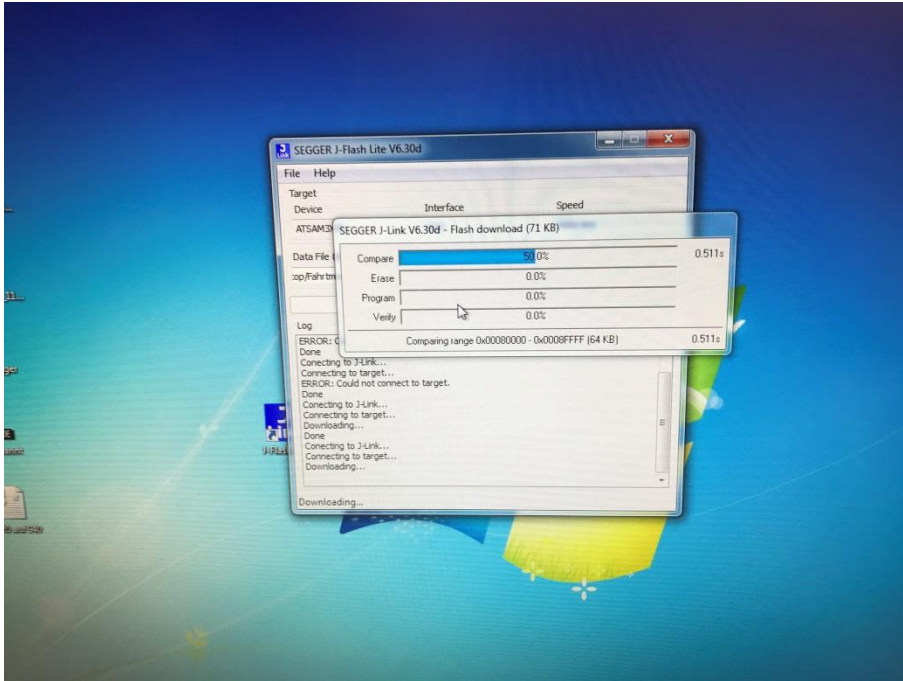


7. Permanently press the on button or rotary switch so that the instrument starts. Unhand only after flashing is done. If the battery is empty, then a temporary battery (9V block) must be attached.



8. Start flashing with the other hand.





- 9. After successful completion, remove the temporary battery if used, reconnect the standard battery and screw back the housing.**

Required action after assembly to make sure the device is working properly and safe to fly with:
Use appropriate equipment to test and/or calibrate the device to ensure the readings indicated from zero to full scale deflection (ASI) and from 0 to 10,000ft (ALT) are correctly indicated.

Identification of the updated device:

Overwrite the old software version on the sticker with a permanent marker with the new version.

It must be clear that the ALT is updated with ALT software, and the ASI with ASI software. No errors!

The software file description in the cloud will be Airspeed and Altimeter. Due to the different power on button design for ASI and ALTI there should be no confusion about which software for which instrument.

Should the operator install the incorrect software, post installation only the AG Logo will be visible when powering up, and nothing more.

The installation and configuration leaflets must be supplied by returning the items to the owner.

Material information (Parts required to be made to implement this service bulletin):

No AutoGyro parts made during embodiment

List of components (with purchasable part nos)

Consumables used:

If required:

Interchangeability

Not affected

Parts disposition

- a) Disposal requirements – Normal waste
- b) Environmental hazards of parts containing hazardous materials - None
- c) Scrap requirements (e.g. mutilate scrapped items beyond use) – Not applicable