Service Bulletin No 9/2023

Kanardia d.o.o. Lopata 24A 3000 Celje Slovenia

Date: 23.02.2023 Product: Nesis III

Subject: Firmware Update Fail

Revision History

The following table shows the revision history of this document.

Rev.	Date	Description
A	23.02.2023	Initial release.

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1 Effectivity

Only when needed. The problem is characterized by an update process which is stuck. The process keeps updating one device and it never stops.

This problem affects Nesis III and Aetos models.

2 Purpose & Background

During the second phase of the update process, Nesis/Aetos tries to update firmware in all other devices connected to the CAN bus. This process is automatic. In rare cases, the update gets stuck and Nesis/Aetos tries to repeat this process over and over again.

It seems only that CAN devices with the same underlying type are affected and only if more than one such device are present on the CAN bus at the same time. For example: two SERUs, two JOYUs, two or more INDUs.

3 Compliance

Only when the problem appears.

4 Instructions

In most cases you can repair this yourself by following procedure given below. The procedure requires that you start Nesis/Aetos with only one *problematic* device connected at the same time. Let's assume there are two problematic devices. We will refer to them as A and B. (For example, A is SERU 1 and B is SERU 2.) The goal here is to:

- start the system without A and B connected.
- start the system with A connected and B disconnected.
- start the system with B connected and A disconnected.
- start the system with both A and B connected.

A more detailed procedure is also given below.

1. Turn Nesis/Aetos off.

- 2. Disconnect all *problematic* devices from the CAN bus. For SERU, disconnect both servo motors. (You can keep SERU power connected). For JOYU disconnect both Joyu sticks and for INDU disconnect all Indus and also DIGI (DIGI is a special version of Indu).
- 3. Make sure that the CAN bus is still properly terminated. At least one terminator must be present on the bus. Maybe you will have to move a terminator plug to another port. The terminators are: MAGU, DAQU and a special terminator plug insterted into one of the CAN bus ports. You can have any combination of these.
- 4. Turn Nesis/Aetos on. Wait for the instrument start. It may happen that some devices will start *programming* again. Wait for all to finish.
- 5. Turn Nesis/Aetos off and connect the device A to the CAN bus. The device B must not be connected. Start Nesis/Aetos. Wait for system to start. It should start normaly. Maybe it will update the device which got stuck. Depending on the circumstances, it may continue to update other devices. Wait until the process is complete.
- 6. Turn Nesis/Aetos off, disconnect the device A and connect the device B.
- 7. Turn Nesis/Aetos back on. Automatic update may start again. Wait for the process to finish. Now both devices were updated and the problem should be resolved.
- 8. Turn Nesis/Aetos off. Connect both A and B devices to the CAN bus.
- 9. Start Nesis/Aetos the system and should work normally.

4.1 Return Instructions

If the problem persists, then the problem could be somewhere else. Maybe there is electronics malfunction.

In this case, please contact alenka@kanardia.eu and she will give you instructions for the service return. We can organize a DHL courier pickup, when needed. Our address is:

Kanardia d.o.o. Lopata 24A 3000 Celje Slovenia

5 Additional Instructions

Weight and Balance: Not affected.

Manual: Not affected

Repetitive Inspections: Not required

Continuing Maintenance: Not required.