

Date	PC APP software:	BOB Firmware:	Donlight Firmware:	Github hash
07/07/2022	1.3.2 +Gerderland detup	+1.00.06	2.0.0	9c5dd7e6e79d4a42567d73da661bcd3da96c2c06



After spending 3hours with Richard at Gerderland and connecting the turning signals from the vehicle to an oscilloscope, we noticed this vehicle had a delay between turning signals of 9ms. As the BOB was set to tolerate delays up to 5ms between received turning signals the lights were glitching when the hazard was on.

**13000003500\_rev01\_BOB\_V01\_00\_05\_hazarddelaytoleranceUpto11ms** is build on top of v01\_00\_04 with increased tolerance to delay in turning signals.

Also , **Setup for gerderland vehicles** was created.

Date	PC APP software:	BOB Firmware:	Donlight Firmware:	Github hash
13/07/2022	1.3.2	+1.00.04	2.0.1	0dc0fd53f8bab6064ef1e388c6d3fc15de7f900a



After two weeks at Marelko debugging Ambulances we made the following changes:

- Created BOB 1.00.04 firmware, improvements in the clock were made reverting the bug present in 1.00.03 firmware.
- Updated all Batch3,batch4,batch5 firmwares, they don't turn off when the sync canbus is not received, this way even if the BOB fails they will continue functioning (not synchronised and unable to switch off), they also reset its canbus if they feel something is wrong.

This setup was tested at Marelko and didn't show any error 13h uninterrupted.

Date	PC APP software:	BOB Firmware:	Donlight Firmware:	Github hash
22/07/2022	1.3.2	+1.00.06	2.0.1	9a11e192a83dd4 dce0a5137f51e1 d60a02ddf2fa



After a morning call with Richard, one ambulance's rear left corner was not switching on, this was caused by the BOB booting too fast.

This issue appeared with 1.00.04, as we improved the clock the booting process was finished faster.

I created the BOB firmware **v1\_00\_06** which is built on top of v1\_00\_05 with 300ms delay instead of 250, the issue was reported fixed after Richard tested it during 6 minutes with no problem.

Date	PC APP software:	BOB Firmware:	Donlight Firmware:	Github hash
27/07/2022	1.3.3	+1.01.01(ping) +Programming bob firmware(39rev0) +BlueProgrammer firmware(38rev0)	2.0.2(ping)	c98619c3501752 e58b02ad9e8051 fafe462524e1

**Both programmer firwares need to be updated to properly work with the pc app now.**

Intense rework of the PC APP:

- Fixed bugs involving Batch3 firmware updates, fixed also bugs with the firmware update involving more than one module.
- Added scroll bar to accommodate many more donlight modules at the same time in the pc app.
- Fixed bug of duplicated discovery of modules.
- Added the open folder button to easily access the luxae\_binaries folder from the pc app.
- USB file transfer between pc app and programmer now is chunked and more robust (blue programmer still has issues keeping up with large firmware transfers)
- Created and tested an autoupdate script to avoid having to download and unzip the pc app every time, just double click and the github windows CLI does the job (windows github cli needs to be installed in the pc)

BOB firmware:

- Bootloader now works with the pc app, also the BOB firmware was made compatible with the programmers and the pc app.
- 1.00.06 was Built on top of the 1.00.06.
- It has a more complex canbus functionalities so it must be tested thoroughly.

Donlight firmware:

- Ping functionalities were added.