

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 fafa462524e1

**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.
- 1.01.01 was Built on top of the 1.00.06.
- It has a more complex canbus functionalities so it must be tested thoroughly.

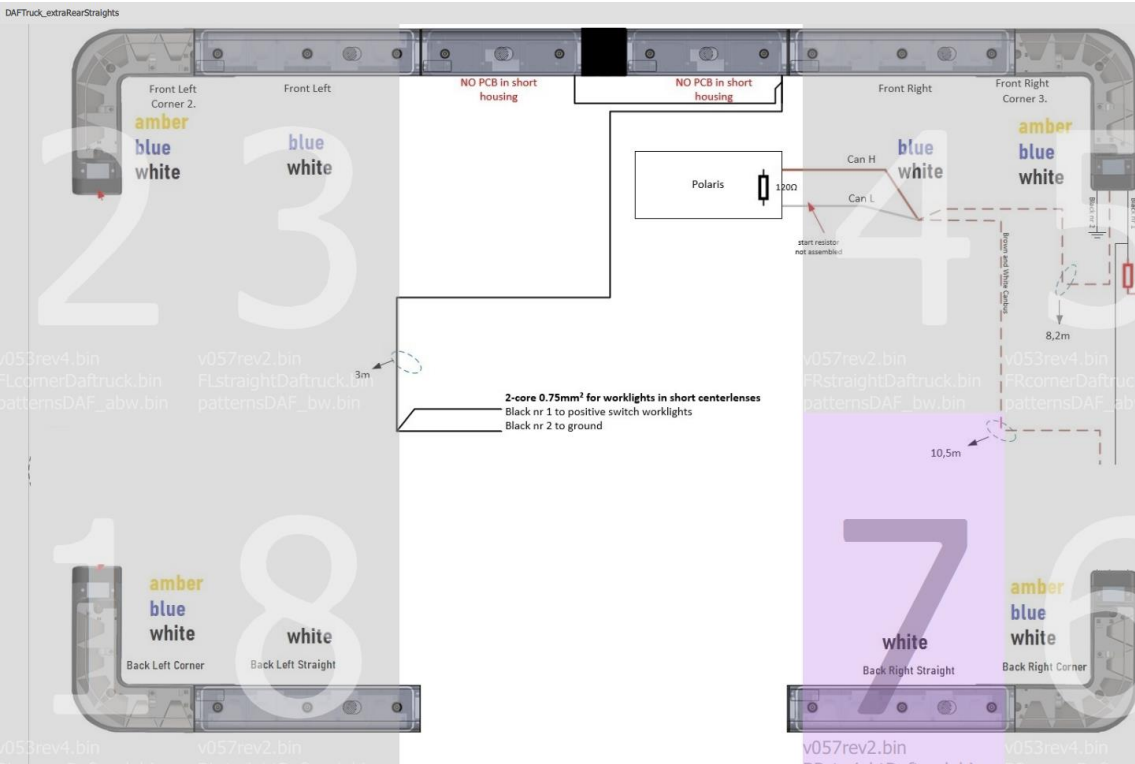
Donlight firmware:

- Ping functionalities were added.

Date	PC APP software:	BOB Firmware:	Donlight Firmware:	Github hash
31/08/2022	1.3.3 + DAFTruck_extraRearStraights	1.01.01(ping)	2.0.2(ping)	7511c39f002398c8dcc40d9d53556dbd8c38a32d

Pc APP:

After Wesley’s request:  
Added DAFTruck\_extraRearStraights setup, based on DAFTruck\_amberbluewhite setup with two extra white straights on the rear.



Date	PC APP software:	BOB Firmware:	Donlight Firmware:	Github hash
01/09/2022	1.3.3 + Config from straight modules on Sprinter6 setups changed	1.01.01(ping)	2.0.2(ping)	e2217c454e3b66 7f0351ef5eecf 91c31908791e

Pc APP:

After Wesley's noticed the IN02 enable/disable of the emergency lights was not working, I checked and somehow I missed a '\*' character in the straight configs, updated and tested by wesley.

Date	PC APP software:	BOB Firmware:	Donlight Firmware:	Github hash
10/10/2022	1.3.3 + Multiple config files updated, containing typo in Polaris canbus addr.	1.01.01(ping)	2.0.2(ping)	f0844f333ca65135439bb0eb63152379dd5a80e3



After reviewing one by one this are the specific configs fixed that were deaf to polaris commands.

- Box-body MB Sprinter
  - BLcorner
- sprinter6
  - BLcorner
  - FL55blue
  - FR55blue
- sprinter6\_fixedcolours
  - BLcorner
  - FL55blue
  - FR55Blue
- sprinter6\_fixedcolours\_blue\_white\_fronts
  - BLcorner
  - FL55Blue
  - FR55Blue
- sprinter6RearWithArrow
  - BLcorner
- sprinter8\_fixedcolours
  - BLcorner
  - BLstraight
- sprinter9
  - FrontLeft
  - FrontRight

Date	PC APP software:	BOB Firmware:	Donlight Firmware:	Github hash
24/11/2022	2.0.0 +huge code refactor.	1.01.01(ping)	+2.1.0(49daysfix) +Programming tool firmware(38rev2)	187d2a35941fb8 e43b646577c7bf 346ba319771b

#### Pc APP:

Code refactored and cleanup, pc app setup set to work with data streams other than USB, (Bluetooth for example)

Added self-recovery after USB/Bluetooth NACK packages, slows down data stream when needed.

**PC app 2.0 is not compatible with previous Programmers(39rev0,38rev0)**

Canbus part remains the same.

#### Donlight Firmware:

Canbus bootloader for 53rev3 and 57rev1 (old donlights using the chip072) is updated to fit larger programs (expanded from 22KB to 32KB).

- This bootloader is included inside  
*production\_53rev3dummy(cornerBATCH3).bin*  
*production\_57rev1dummy(straightBATCH3).bin*

All firmware versions have been fixed and tested to overcome the 49 days rollover of the systick, systick gets initialiced 10 seconds to rollover, if they don't stop lighting after 10 seconds of working they wont stop after 49 days either.

- This Firmware fix is included in :  
*production\_53rev4dummy(cornerBATCH4)*  
*production\_53rev3dummy(cornerBATCH3)*  
*production\_53rev5dummy(cornerBATCH5)*  
*production\_55rev1dummy(modular board ALLBLUE)*  
*production\_57rev1dummy(straightBATCH3)*  
*production\_57rev2dummy(straightBATCH4)*  
and inside each setup folder folders as:  
53 rev4  
53 rev3  
53 rev5  
55 rev1  
57 rev1  
57 rev2

Added the firmware needed for the programming tool 38rev2



Date	PC APP software:	BOB Firmware:	Donlight Firmware:	Github hash
12/12/2022	2.0.0 +typo in Dakrip2.0's config files fixed	1.01.01(ping)	+2.1.0(49daysfix)	a2daad001873f4 7b49b72a27d6be 4d8fa8b4db8d

Pc APP:

Richard spotted an issue with working lights in DAKrip2.0 setup, due to a typo in the corners configuration.bin they were doing a arrow left when they should be doing white scene lights all, i also fixed the straights activating its worklights when front was activated instead of rear as they should.

## Donlight Changelog 16/03/2023

Date	PC APP software:	BOB Firmw are:	Donlight Firmware:	Github hash
16/13/2023	2.0.0 +typo fixed in config sprinter8_fixedcolours BRstraight.bin file	1.01.0 1(ping)	+2.1.0(49daysfix)	7c76bbf51cd52f 6fcb2884b32205 fa649c508b98

Richard spotted an issue with a straight module not responding to Polaris commands.

It turns out the issue i thought fixed 10/10/2022, was still present in the configuration BRstraight.bin from the setup sprinter8.

