



StyleLight 2

User Guide

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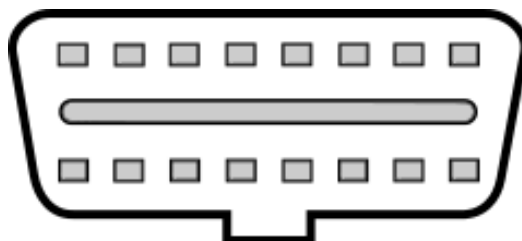
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Getting Started

Activate vehicle demo mode

Start by locating the OBDII connector (J1962) inside the cabin.

The connector is often located on the driver side under lower left side of dashboard.



Insert the StyleLight device into the OBDII connector. Make sure the orientation of the StyleLight aligns with the OBD II connector.

The StyleLight will now power up and start running its activation sequence. Activation status is indicated by the status indicator.

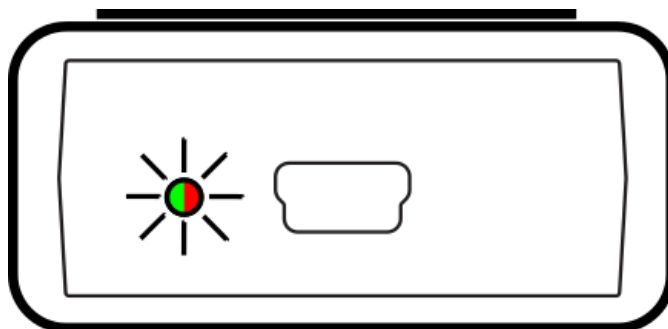
The vehicle demo mode is activated when the status indicator rapidly flashes green or when it makes two red flashes, see color description.

The vehicle key shall NOT under any circumstances be located inside the vehicle or within one meter from the vehicle when the demo mode is activated.

Status indicator

The StyleLight has two main systems, the vehicle communication and the internal web server. The Status indicator reports the status of each of these systems.

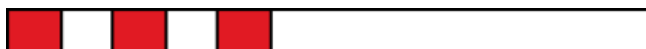
The LED indicator could either be green or red. It is located on the back of the StyleLight on the left side of the USB mini connector.



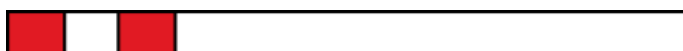
Color description



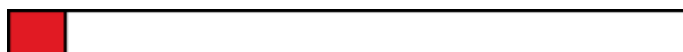
Booting, the device is initializing and loading internal configurations.



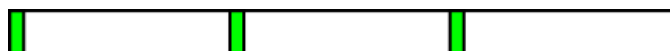
The internal web server and vehicle is starting up.



Vehicle demo mode is now activated.
The internal web server is NOT up and running.



Internal web server is up and running. The StyleLight is now broadcasting its SSID (StyleLight2_XXXXXX) and user can login to the web configuration page over Wi-Fi.
The vehicle demo mode is NOT activated.



Both the internal web server and vehicle demo mode is activated and up and running.



Installation of device firmware in progress.



Internal system check. Takes about 60 seconds to complete.

Deactivate vehicle demo mode

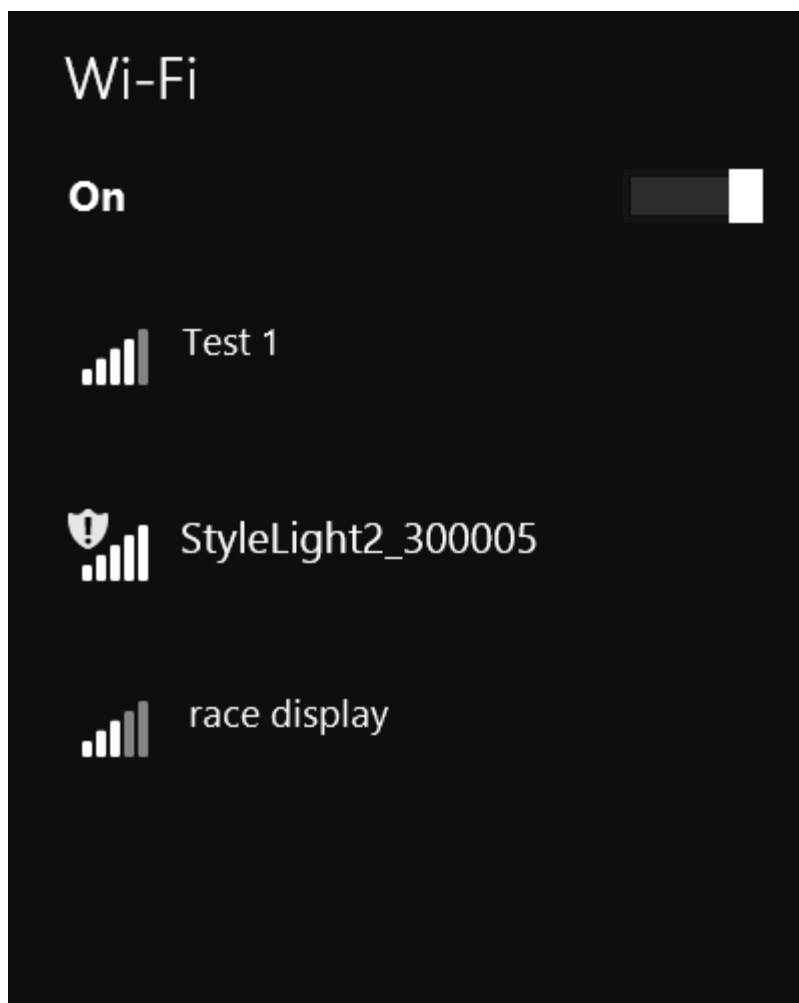
To deactivate the vehicle demo mode, disconnect the StyleLight device by pulling it out of the OBDII connector and wait for about 10 seconds. The vehicle will now return to its default "key off" state.

Note: Always do a vehicle system check after StyleLight device have been used to make sure that there are no DTC's and other malfunctions.

Wireless connection

When the StyleLight webserver is running its SSID is broadcasted and it should be visible in the available wireless network list. The StyleLight SSID is composed by "StyleLight2_XXXXXX" where XXXXXX is the serial number of the device.

Note: To connect to the StyleLight make sure that the status indicator is indicating that the web server is up and running (see Status indicator).



If password is required to make connection, then enter "SLXXXXXX" where XXXXXX is the serial number of device. Ex. StyleLight2_300005 have password SL300005.

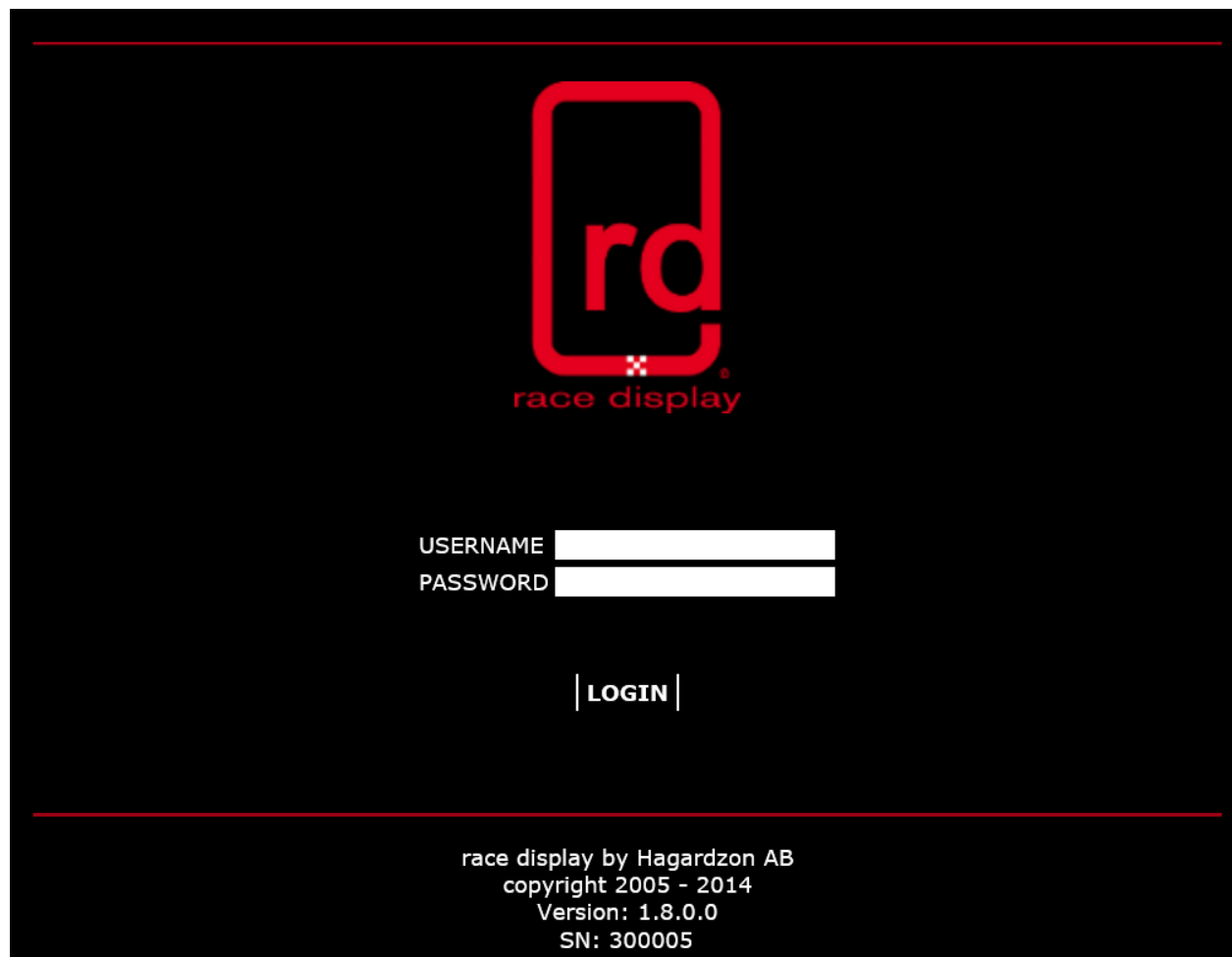
When connection is made to the StyleLight device there may be a message about "limited access". This is normal due that the StyleLight doesn't have any internet connection.

Login

Start by making a wireless connection to the StyleLight device and launch your client web browser application. Enter the IP address of the StyleLight (default is "192.168.2.2") in the browser's address field and press enter.

A login page will be displayed.

Enter the login credentials that are printed on the "Quick Start Guide" card that is included in the StyleLight product box and click on "LOGIN".



rd
race display

USERNAME

PASSWORD

| LOGIN |

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Version: 1.8.0.0
SN: 300005

Options

Device configuration is made under options page.

PROFILE
VEHICLE
OPTIONS
LOGOUT

System time NOT synchronized!

SETTINGS

STANDALONE

STEALTH MODE

— INTERNET ACCESS —

SSID

PHRASE

NETWORKS

| SCAN |

TIMER

ENABLE

SYSTEM TIME: 0:52

— ACTIVATE —

8 : 0

— DEACTIVATE —

19 : 0

| SYNC |

OPERATION

CODE

| SUBMIT |

UPGRADE

| UPLOAD |

| SAVE | | SUPPORT |

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 copyright 2005 - 2014
 Version: 1.8.0.0
 SN: 300005

SETTINGS

STANDALONE, when this is checked the device will start it automatic profile detection and run vehicle demo mode with default configuration. To be able to make a custom profile and vehicle setup this option needs to be unchecked.

STEALTH MODE, when this is check the device will turn off its webserver and the wireless connection after 5 minutes from booting state. This could be used when wireless devices is not allowed.

The steal mode timeout is restarted each time a web page request is made.

Note: The device needs to be restarted to be able to make a wireless connection after stealth mode has been activated.

INTERNET ACCESS, Not implemented.

TIMER

With this option it is possible to activate and deactivate the vehicle demo mode by a built-in timer. This is useful for retail stores to have the vehicle active only when the store is open.

SYNC, synchronize the internal system time with the vehicle clock. This to make sure that the two systems are in sync.

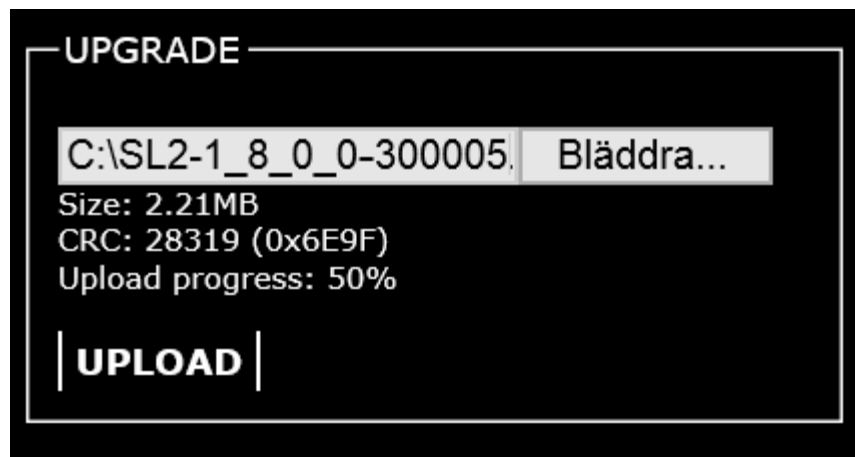
Note: The system time is always synced with the vehicle clock when activation of vehicle demo mode.

OPERATION

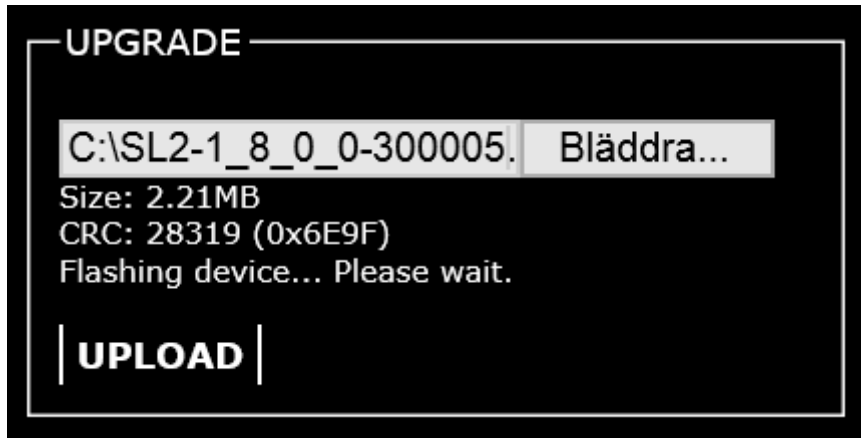
To control the device with manufacturer-generated codes.

UPGRADE

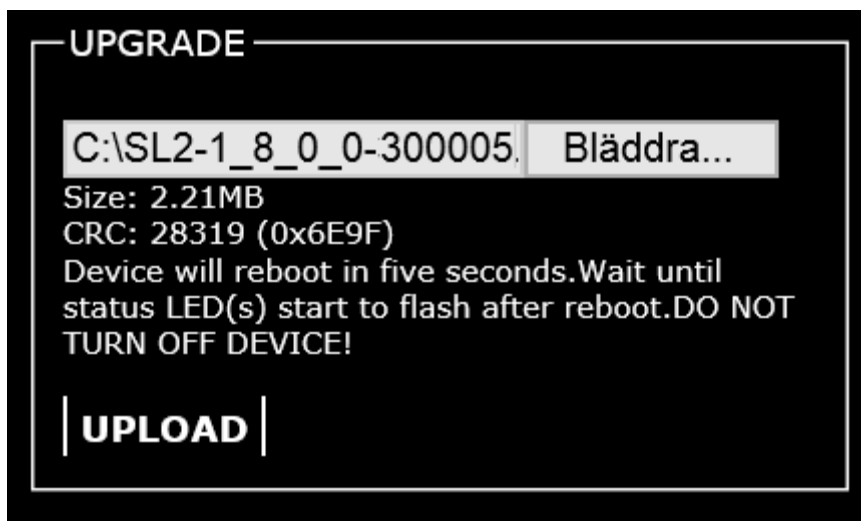
With this option the device firmware can be upgraded by selecting a firmware file provided by race display.



1. Firmware is uploaded to device.



2. Flashing of firmware is under progress.



3. Final stage is to reboot device.

Note: The new type of upgrade is done over USB connection. See [Firmware upgrade](#)



To save current options, user have to click on the "SAVE" button.

If there is a problem to get a vehicle into demo mode and support is needed a support file can be generated. This file is generated by clicking on the "SUPPORT" button. This file need to be saved on the client and emailed to race display support email address.

Note: For race display to handle the incoming support file the device need to have a valid support license.

Vehicle configuration

Standalone mode

From factory the StyleLight is running in standalone mode.

In standalone mode the StyleLight automatically starts to communicate with the vehicle and detects its profile. The profile is based on model year, model and engine.

With a valid profile the demo mode is activated with the default vehicle setup.

Custom mode

In this mode the user can override the standalone mode with a custom vehicle setup.

This is done by making a wireless connection to the StyleLight device and login to the configuration web page.

Profile

The detected profile is displayed under the profile page.

The profile could be manual set if the automatically found profile doesn't match the connected vehicle or if no profile is found.

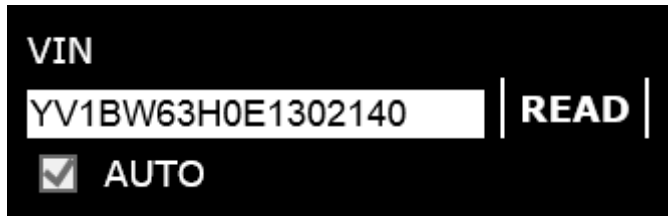
The screenshot shows a web interface with a dark background and white text. At the top, there is a navigation bar with the following items: PROFILE, VEHICLE, OPTIONS, and LOGOUT. Below this, the 'PROFILE' section is active. It displays the following information:

- VIN:** YV1BW63H0E1302140 (displayed in a text field) with a 'READ' button to its right.
- AUTO (checked checkbox)
- YEAR:** 2014 (selected in a dropdown menu)
- MODEL:** V70 (selected in a dropdown menu)
- ENGINE:** PETROL (selected in a dropdown menu)

At the bottom of the page, there is a footer with the following text:

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 Version: 1.8.0.0
 SN: 30005

The detected VIN (Vehicle Indication Number) that is read from the connected car is displayed in the VIN field. Clicking the "READ" button starts a new VIN readout and the new VIN is display in the VIN field.



When the "AUTO" tick box is selected the StyleLight resolves the profile based on the VIN that is entered in the VIN field.

Note: The "AUTO" tick box control is disabled in standalone mode.

The dropdown boxes "YEAR", "MODEL" and "ENGINE" can be used to manually set a profile for the VIN that is displayed in the VIN field.

Note: These dropdown boxes are disabled in standalone mode.

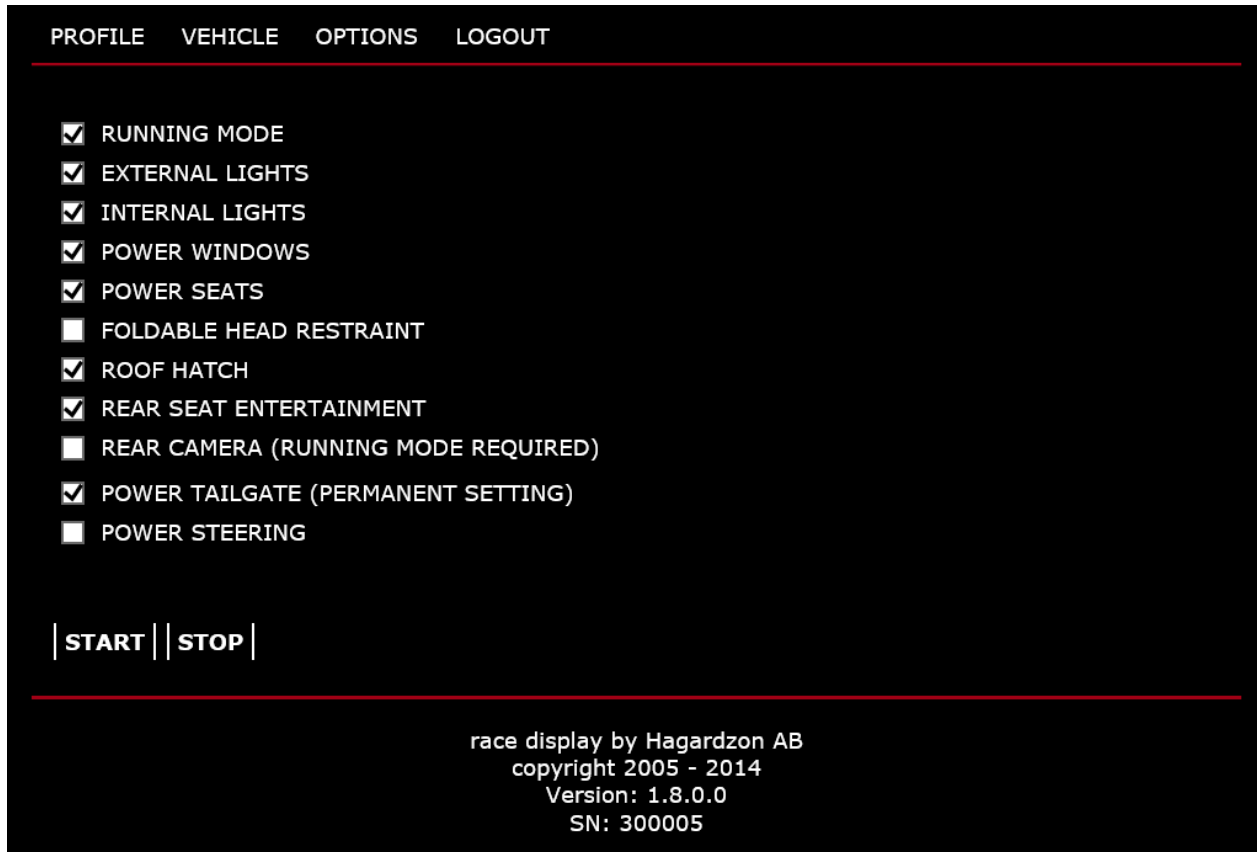
The items in each profile dropdown box are based on the available profiles for the current firmware. This means that some combinations of year, model and engine could not be set.

The current displayed profile is saved when user navigates to vehicle page.

Note: When the StyleLight is restarted and the detected profile doesn't match the stored profile the StyleLight is switching over to standalone mode.

Vehicle

In the vehicle page the current vehicle setup is displayed.

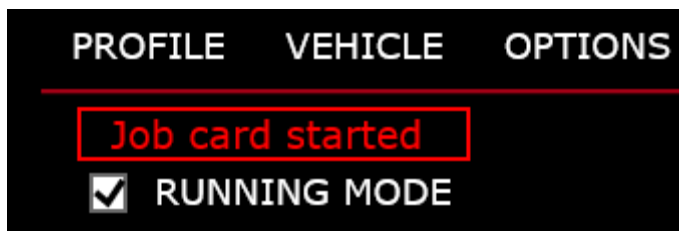


The number of vehicle settings depends on the vehicle profile.

See latest firmware release notes for information about supported setting for different profiles.

By selecting and deselecting these checkboxes a custom vehicle setup is created for that given profile.

To activate the selected setup user have to click on the "START" button and wait for result message to be displayed above setup list.



Technical data

Wireless communication	WLAN 802.11b/g, 2.4 GHz, access-point
Wireless security	OPEN/ WPA2-AES
External power	10 to 30V DC
Power consumption	J1962 (OBDII): max 200mA USB: max 300mA
Dimension	44 x 73 x 25 mm
Weight	63 g
Operating temperature	-25° C to 55° C
Storage temperature	-40° C to 70° C
Relative Humidity	0% to 85% (non-condensing)

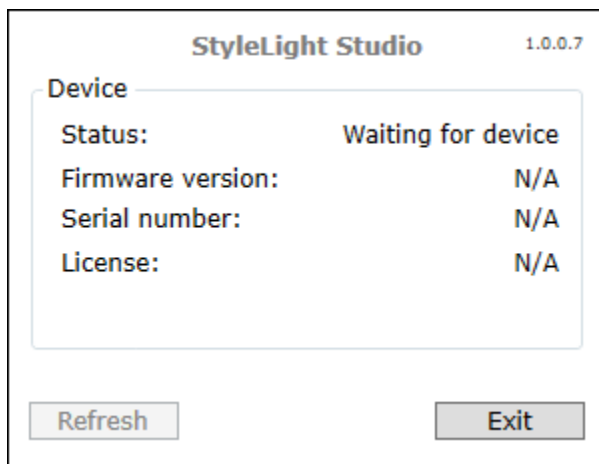
Firmware upgrade

The StyleLight 2 is upgraded thru USB connection.

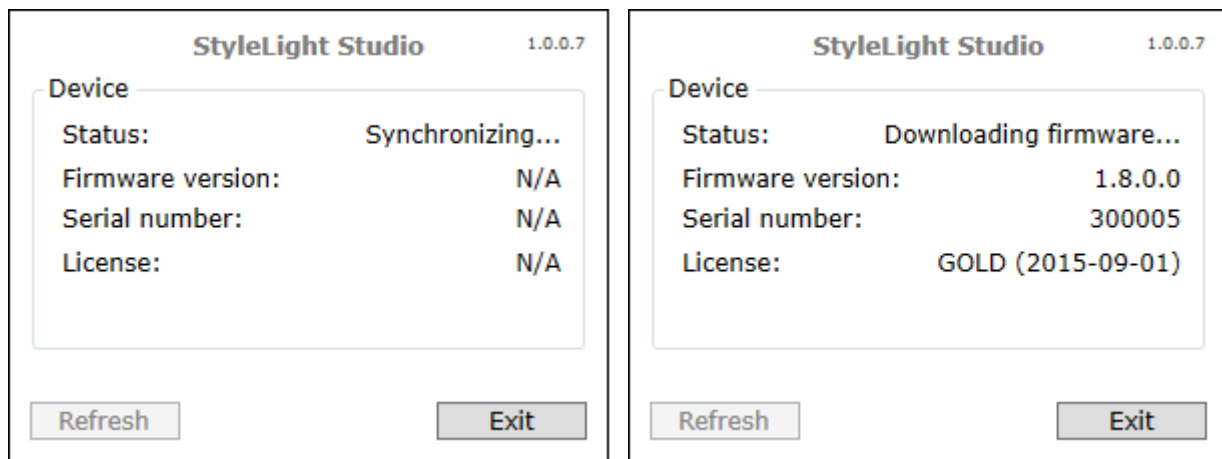
The application that handles the upgrade is called "StyleLight Studio".

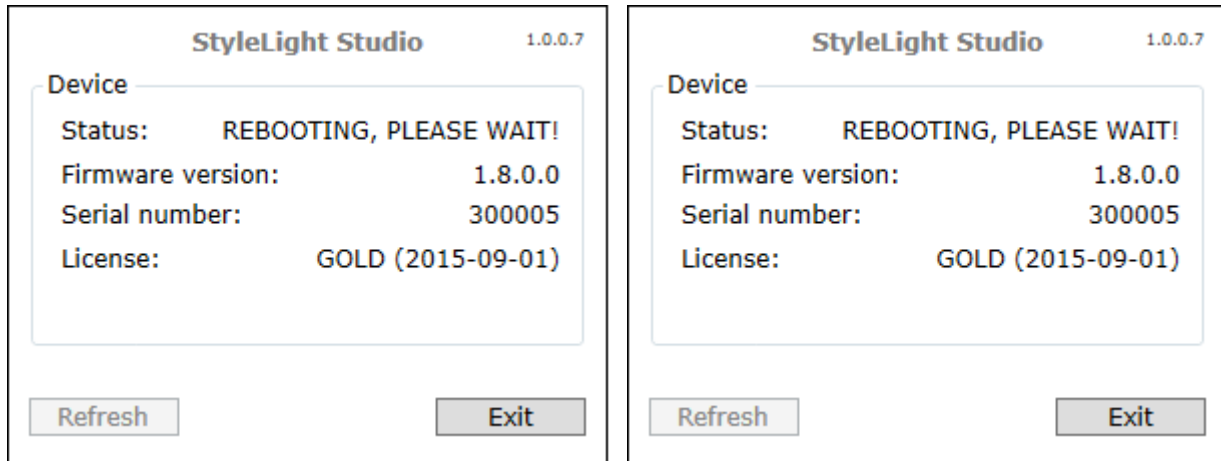
Note: When running the StyleLight Studio application for the first time, connect the StyleLight device after the application has started. Otherwise the application will not detect the device.

1. Launch the "StyleLight Studio" application from <http://racedisplay.se/products/stylelight/download.html>
2. Application will try to install the StyleLight device driver if this isn't installed. To be able to install the driver the application will need to be run as administrator. The user will be prompted to switch to administrator if this is necessary.
3. When the driver is installed correctly the application status will be "Waiting for device". Connect the StyleLight device to PC with USB (mini version) cable, included in product box.

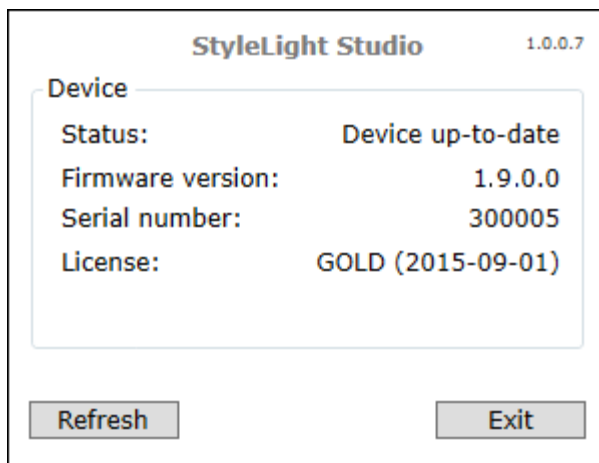


4. The application will start to synchronize the device with the central systems as soon as it's detected. If the device need to be upgraded the application will automatically start the upgrade process.





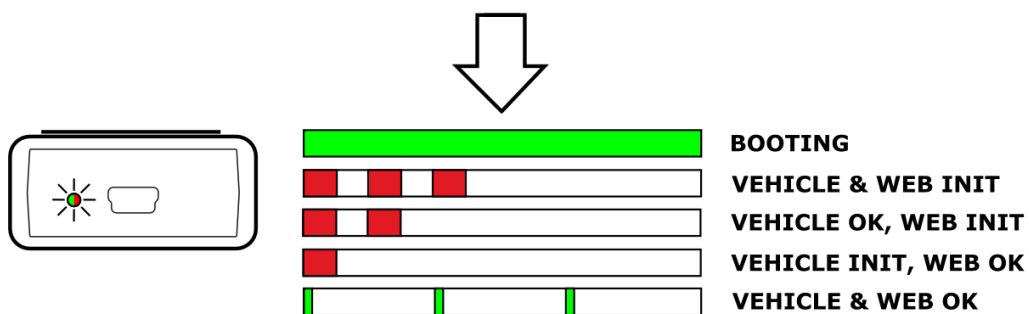
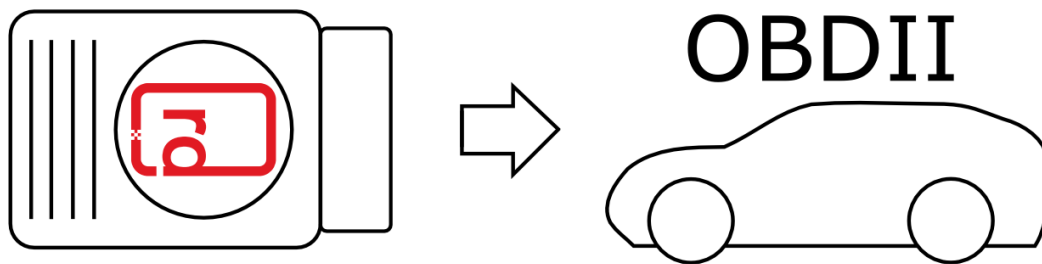
5. When synchronization is completed status will change to "Device up-to-date". Device can now be disconnected from USB connection and is ready to be used in vehicle.



Clicking on the "Refresh" button makes the application re-detect the connected device and do a new synchronization.

Appendix A. Quick Start Guide

StyleLight 2



REV.D

race display by Hagarzon AB

Appendix B. FAQ

Q. Some of the indication signs in DIM is activated and deactivated after StyleLight 2 has been used.

A. There is a bug on some of the DIM units that cause this problem. There are three workarounds to this problem.

1. Do a complete reset of the vehicle by pulling the battery power (+) for a couple of seconds and then connect the power again.
2. Do a complete reset of the vehicle by connecting the StyleLight 2 to the OBD2 outlet and wait until the interior light make a flash and then immediately disconnect the StyleLight device.
3. Lock the vehicle and wait until it goes to sleep, after about 20min.

Q. Some of the ECU's have stored new DTC's after use of the StyleLight 2.

A. This is normal. Always clear vehicle DTC's before using the vehicle.

Q. Is it possible to upgrade our StyleLight 2?

A. Yes, if the device has a valid GOLD or TITANIUM license.

Q. How do we upgrade the StyleLight 2?

A. Either over USB or by login to the StyleLight 2 unit over Wi-Fi connection.

Q. StyleLight Studio says "StyleLight port blocked"?

A. Disconnect StyleLight device, restart StyleLight Studio and connect device again.

Q. Can I see the StyleLight 2 on the Wi-Fi network?

A. Yes, when the status LED is flashing one red or one green indication each cycle it's broadcast itself by SSID = StyleLight2_XXXXXX where XXXXXX is the serial number of the device.

Q. How can I connect to my StyleLight 2 device over Wi-Fi?

A. Locate the StyleLight and make a connection to it over Wi-Fi. When device is connected, open an internet browser and enter the device IP (default is 192.168.2.2) in address field. Now you should see the login screen.

Q. When I connect the StyleLight 2 to the vehicle nothing happens, the red LED is flashing one time per cycle.

A. StyleLight couldn't detect the profile of the vehicle. This could either be that there is a bad connection between the device and vehicle or the vehicle profile is missing. It is possible to manually set a vehicle profile by login to the StyleLight over Wi-Fi. To set the profile manually the "standalone" mode must first be unchecked under OPTIONS page. Then a custom profile could be set under PROFILE page.

Q. What is the difference between the license options?

A. GOLD is for firmware upgrade, CARBON is for technical support and TITANIUM both GOLD and CARBON.

Legal acknowledgements

TERMS AND CONDITIONS

BINDING TERMS AND CONDITIONS OF SALE AND USE

The following are the terms and conditions ("Terms and Conditions") for sale and use of "StyleLight 2" device ("Device") by race display by Hagardzon AB ("race display") to race display's customers ("Customers").

"You" or "your" sets forth the terms and conditions under which race display agrees to provide to the Customers, and the Customers agree to acquire from race display maintenance and product support for the Device.

The Device shall NOT under any circumstances be used on a vehicle that is in motion.

The vehicle key shall NOT under any circumstances be located inside the vehicle or within one meter from the vehicle when the Device is connected to the vehicle.

Maintenance and Product Support

Optional annual maintenance or product support ("License") could be purchased for each Device owned by the Customers. The Device is the hardware key for the License.

Subsequent the License shall be renewed for successive one-year periods unless terminated by either party with written notice to the other at least thirty (30) days before the relevant anniversary of the effective date of annual renewal.

The maintenance and product support fee shall be non-refundable. If you have purchased and paid for maintenance or product support, race display will provide you with these terms for the corresponding purchased License level:

S.1 GOLD License Terms

- Online firmware repository access containing the latest firmware for a licensed Device.
- Online access to documentation, FAQs, and release notes.

S.2 CARBON License Terms

- Technical support by email, acknowledge (email response) within five business days.
- Online access to documentation, FAQs, and release notes.

S.3 TITANIUM License Terms

- Online firmware repository access containing the latest firmware for a licensed Device.

- Technical support by email, acknowledge (email response) within five business days.
- Online access to documentation, FAQs, and release notes.

“The License” does not include the following:

- Support for the design, development, and/or creation of any specific solutions and/or the creative use of the Device to solve specific issues.
- On-Site support
- Training
- Infrastructure related issues
- Third-party software or software not expressly mentioned in this Agreement.

Upon detection of any error in the Device, the Customers agrees to provide race display with a listing of output and any other relevant data, including for example VIN (vehicle identification number), model, model year and/or logs that race display reasonably may request in order to reproduce operating conditions similar to those present when the error was detected.

Invoices

race display shall invoice the Customers for the License fee prior to the relevant anniversary of the Effective Date every year thereafter. All payments shall be due prior to the anniversary, or thirty (30) days from the date of the invoice whichever is the earlier. The provision of the License to the Customers is subject to the settlement of invoiced amounts when due. Payments on amounts not received when due shall accrue interest at the lesser of one and one half (1.5) percent or the highest interest rate permitted by law, per month until paid. In addition, in the event that any payment due is not paid, race display reserve the right to withhold or suspend the supply of the License immediately.

Should the License not be renewed within thirty (30) days after the anniversary for any reason, then the License shall be deemed as terminated. Should the Customers wish to reinstate the License after this event, then race display reserve the right to apply a reinstatement fee.

Termination shall not relieve the Customers from its obligations to remit payment for all outstanding invoice payments including accrued interest, and collection costs, and including legal fees necessarily incurred by race display in the pursuit of the debt. All payments under this Agreement are exclusive of any central government or local government taxes that may be applicable at the time. All Sales taxes due shall be paid by the Customers.

Limited Warranties

The Device has a hardware warranty period of twelve (12) months from the date of shipment.

Firmware or Software for the Device has a warranty period of one (1) month from the date of shipment. Customers are responsible to pay for any transportation cost incurred for repair of the Device during or after the warranty period. race display warrants that the Device or License provided shall be performed in a professional and workmanlike manner and in accordance with the description set forth herein.

To the maximum extent permitted by applicable law, race display disclaims and excludes any and all other express, implied and statutory warranties and representations regarding any maintenance or product support provided, including, without limitation, warranties against infringement, and warranties of merchantability or fitness for purpose. race display does not warrant that any maintenance or product support provided will satisfy the Customers requirements or are without defect or error or that the operation of any of its enhancements provided will be uninterrupted.

race display does not assume any liability whatsoever with respect to any third party hardware, firmware, software or services.

Limitation of Liability

In no event will race display, nor any of its officers, directors, employees, shareholders, or other representatives, be liable for any special, incidental, direct, indirect or consequential damages whatsoever, including without limitation, cost of component wear, damages for loss of profits, revenue, data, use, goodwill, or other consequential losses suffered by the Customers or others, even if the possibility of such damages was disclosed or could have been reasonably foreseen.

The Device shall NOT under any circumstances be used on a vehicle that is in motion. When the Device is no longer connected to a vehicle, the Customers must make a complete system check on the vehicle to ensure all systems are fully operational before it can be used.

This limitation of liability applies regardless of whether liability is based on breach of contract, tort, strict liability, breach of warranties, infringement of intellectual property, or failure of essential purpose or otherwise.

Governing Law

Any claim, action, suit, proceeding or dispute arising out of the Agreement shall in all respects be governed by, and interpreted in accordance with the substantive laws of the Sweden, without regard to conflicts of laws provision. The venue for any actions arising shall vest exclusively in the Courts of the general jurisdiction of the Sweden.

DECLARATION OF CONFORMITY (DoC)

Manufacturer's Name and Address:

race display by Hagardzon AB
Smedmästaregatan 2
SE-44234 Kungälv
SWEDEN

Equipment description: Wireless automotive communication unit

Model/Type reference: StyleLight

Brand name: race display

Year in which the CE mark was first affixed: 2014

Serial number which the CE mark was first affixed: 400391

We, race display by Hagardzon AB, declare under our sole responsibility that the above mentioned wireless automotive communication unit conforms to the following Directives:

- Low Voltage Directive (LVD) 2006/95/EC
- Electromagnetic Compatibility (EMC) Directive 2004/108/EC
- Radio and Telecommunications Terminal Equipment (RTTE) Directive 1999/5/EC

All conformity testing has been done by an independent third party testing body and the equipment has been found to comply with the following harmonized standards:

Safety

- EN 60950-1:2006/A11:2009/A1:2010/A12:2011 / IEC 60950-1:2005/A1:2009
- EMC
- EN 61000-6-1:2007
- EN 61000-6-3:2007/A1:2011

Radio

- EN 301 489-1 V1.9.2
- EN 301 489-17 V2.2.1
- EN 300 328 V1.7.1

USA

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.

Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his/her own expense.

FCC Compliance

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This device contains FCC ID: T9J-RN171

When using the StyleLight 2 device, you will be exposed to some of the transmitted RF energy. This exposure is well below the prescribed limits in all national and international RF safety standards and regulations. For security reasons: This modular transmitter **MUST** have a separation distance of at least 20 cm between the antenna and the body of the user or nearby persons.