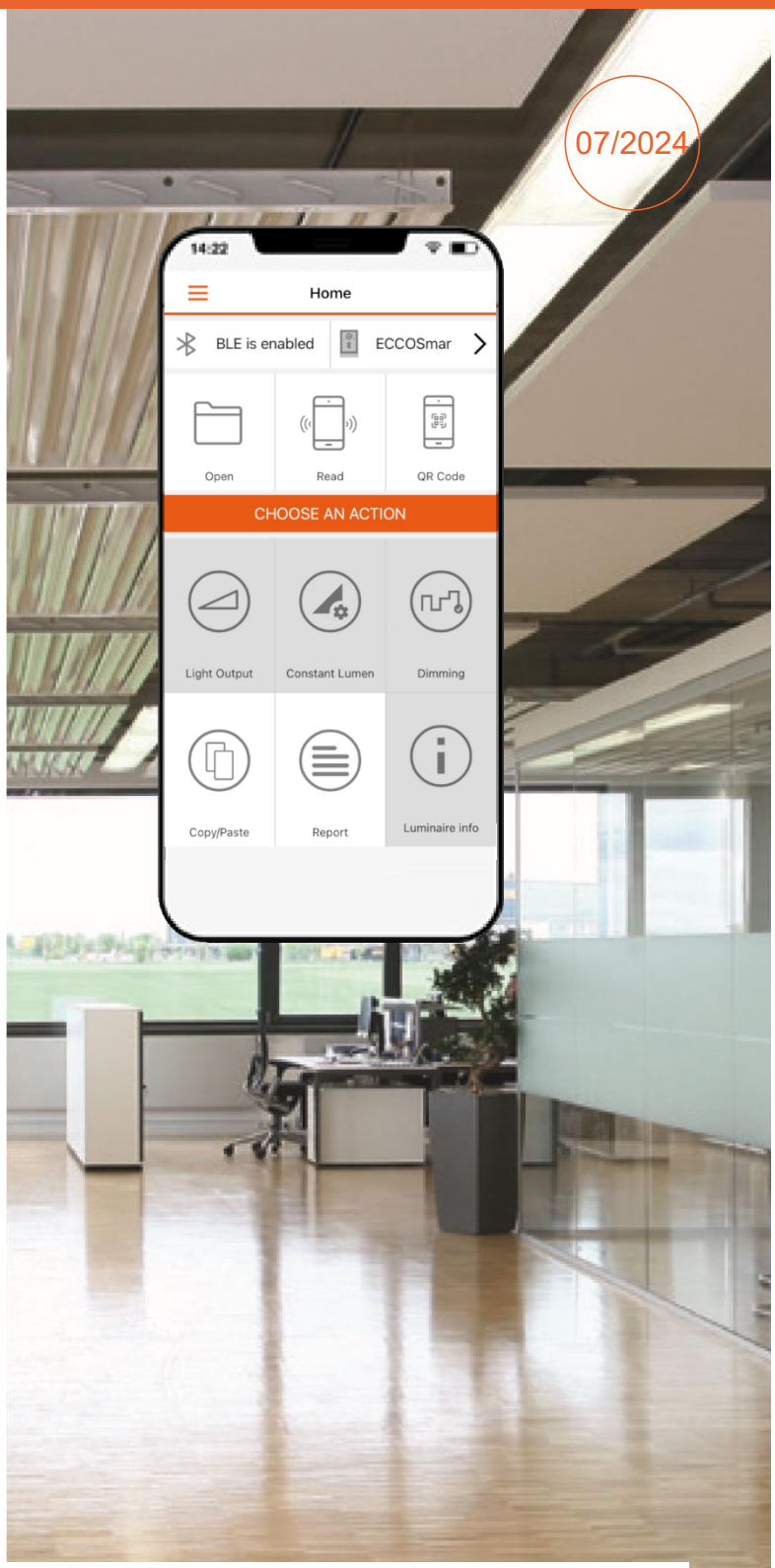

07/2024

User Manual

Tuner4TRONIC® Field App

Content

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Warning
Incorrect or unauthorized adjustments of a luminaire's crucial parameters might lead to damage or unsafe operation of the luminaire or have an impact on the luminaire certification! The Tuner4TRONIC® Field app cannot verify the correctness of your configuration for the intended luminaire. You need to be aware of the risk that certain configurations might not be suitable for certain luminaires connected to the OSRAM LED driver and might lead to a permanent damage or change in performance of the overall system. Consequently, before adapting the configuration of OSRAM LED drivers in any way, always read the driver's technical documentation and application guide as well as the technical documentation of the luminaire or lighting fixture intended to be used with the OSRAM LED driver. **In any case, do not use the Tuner4TRONIC® Field app to adapt the configuration of a system comprising an OSRAM LED driver unless you have ensured you are completely aware of the consequences of such an adaptation.**

1 Introduction

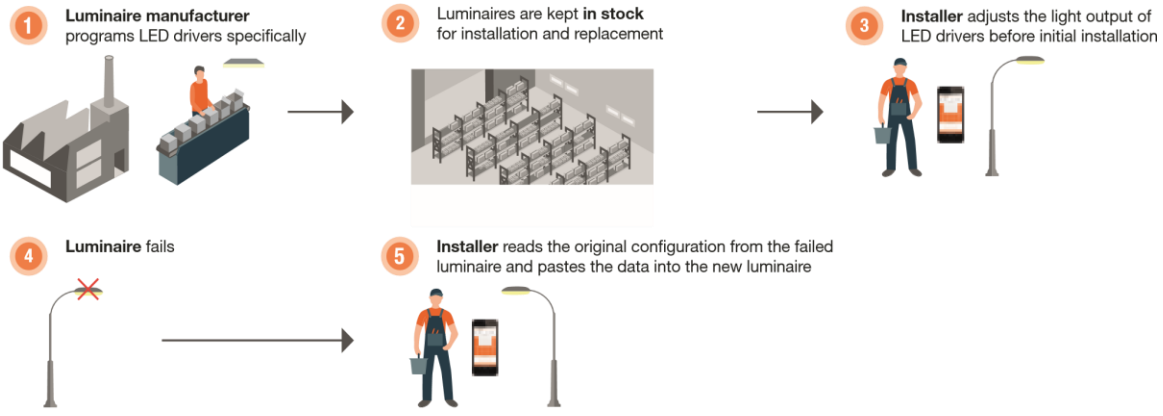
The installation and maintenance of indoor and outdoor luminaires with our NFC technology is as easy as it gets – thanks to the Tuner4TRONIC® Field app, which works on NFC-ready Android smartphones and iPhones. In combination with the corresponding standard luminaires and compatible OSRAM NFC LED drivers, the Tuner4TRONIC® Field app can be used for programming via NFC.

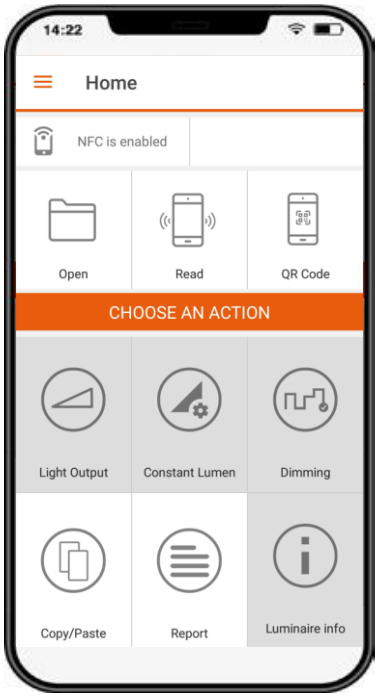
NFC, which is short for Near-Field Communication, allows the programming of the drivers in the field – wirelessly and without mains voltage. In most cases, it is possible to readout the driver's configuration even after the device's failure.

With the Tuner4TRONIC® Field app, certain luminaire settings can be easily adjusted according to the specific needs and within a predefined range
.

set by the luminaire manufacturer. For indoor and outdoor applications, a typical example is the adjustment of the light output depending on the required application. Using outdoor drivers, the dimming levels can be changed to optimize energy savings and you can also disable the dimming functionality for special applications such as roundabouts or pedestrian crossings.

With the Tuner4TRONIC® Field app, replacing a luminaire becomes more efficient than ever before. Using the copy and-paste function of the app, the settings of the original luminaire (indoor and outdoor) can be easily transferred to the new one in a matter of seconds. There is no need to check how the old luminaire was configured, the whole process is completely offline and you are not forced to store your data in a cloud





Download on the App Store

GET IT ON Google Play

2 System Requirements

2.1 Smartphone

The minimum system requirements for the Tuner4TRONIC® Field app are:

— Android smartphone with integrated NFC antenna (Android OS 6.0)
— Apple (iOS 9) with NFC scanner

Please note that the quality of NFC antennas built into Android smartphones can vary from phone to phone. Some antennas perform perfectly and some are completely unusable. We have tested the NFC antennas of the following devices and recommend them for use with the Tuner4TRONIC® Field app:

— CAT S60
— HTC One M8
— Samsung S7 and S8

2.2 NFC scanner

In case your smartphone has a low-quality NFC antenna, does not have an NFC antenna at all or does not allow the full use of the internal NFC antenna, such as the iPhone, you can use an optional NFC scanner. This device can be easily connected to the smartphone via Bluetooth using the Tuner4TRONIC® Field app and provides a reliable and stable NFC connection. It also offers a more comfortable way of programming LED drivers assembled in a luminaire. See chapter 4.7 for more information.

2.3 Important programming information

When programming an LED driver, make sure that the NFC antenna of your smartphone (or of the NFC scanner) is aligned with the NFC antenna of the LED driver (NFC) after (not before!) pressing the programming button in the Tuner4TRONIC® Field app to ensure successful data transfer. Do not move the LED driver during the programming to avoid errors in the NFC data transfer. If the programming fails and the driver is no longer responsive, please power on the driver to reset it. For safety reasons, please make sure to program LED drivers only when they are not powered by mains. The position of the NFC antenna in the driver varies between products. As a general rule, the smartphone needs to be touching the NFC logo on the LED driver (NFC).

2.4 Supported Tuner4TRONIC® files

The Tuner4TRONIC® Field app can only load configuration files with the file ending .osrtup.

2.5 LED driver password protection

For safety reasons, the luminaire manufacturer can protect the safety-relevant settings of the LED driver with a master key and allow editing of non-critical settings such as dimming and light output within predefined limits. This is to ensure that no unauthorized person is able to modify the settings in a way that could cause safety problems. If an LED driver has a master key set and the Tuner4TRONIC® Field app is not able to modify the LED driver's settings, please contact the luminaire manufacturer.

For additional protection, the luminaire manufacturer can set a service key on the LED driver. In case your LED drivers are protected with a service key, please contact the luminaire manufacturer to get the corresponding service key to be able to program the protected drivers.

2.6 Supported LED drivers

A link to a list of all compatible LED drivers is provided in chapter 6.

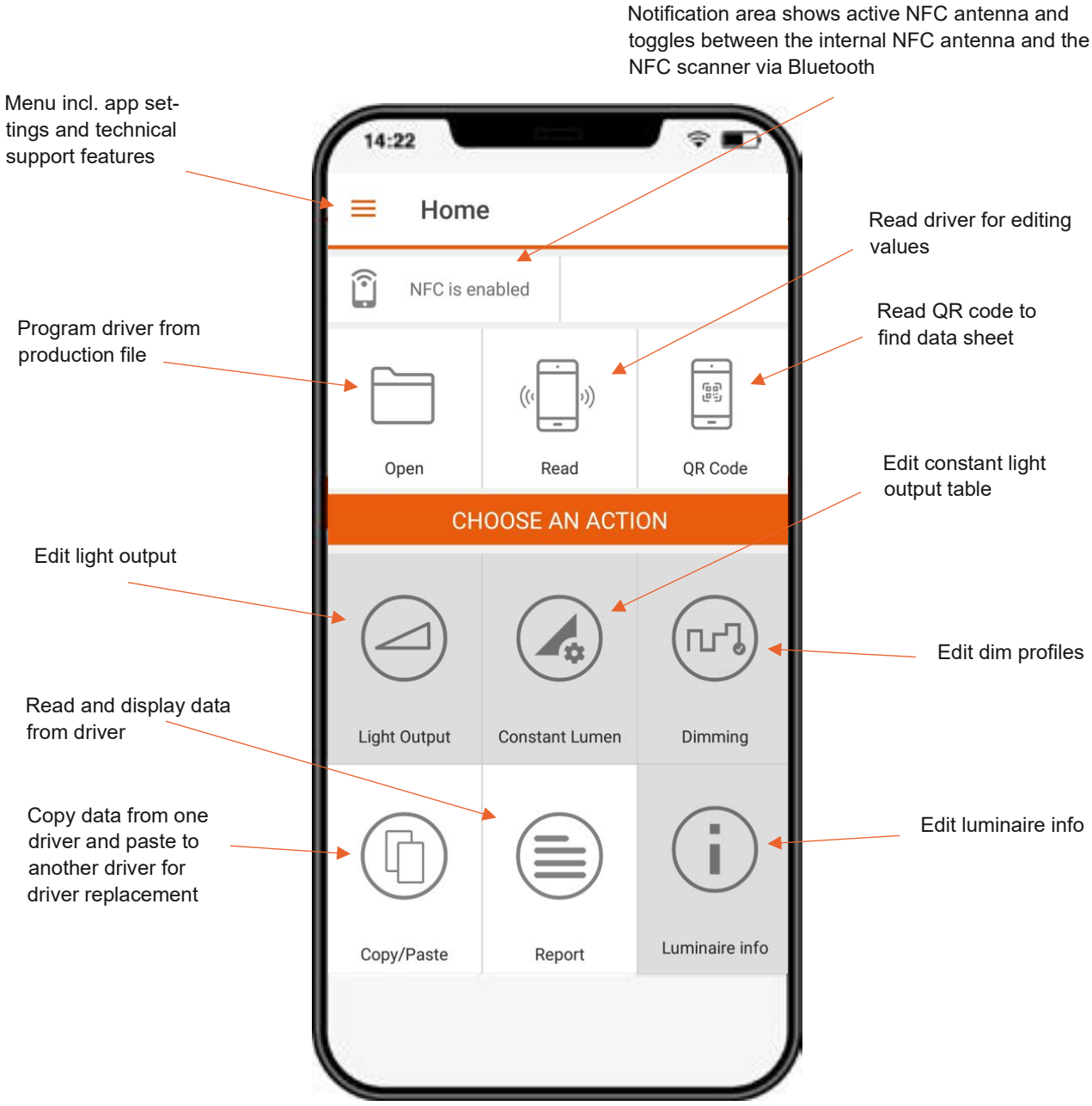
3 Quick start

3.1 App download

The Tuner4TRONIC® Field app can be downloaded from AppStore and GooglePlay. For more info please check www.inventronics-light.com/tuner4tronic

3.2 Quick overview

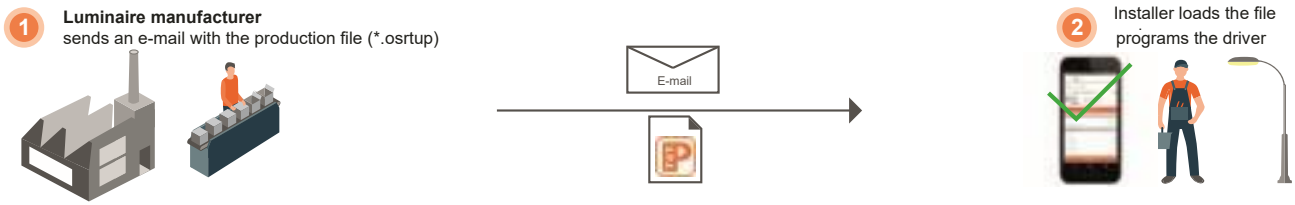
Here is a quick overview to get you started with the app.



4 Programming from production file

It is possible to load Tuner4TRONIC® production files (*.osrtup) directly from your e-mail. Inside your e-mail app, share the production file received with Tuner4TRONIC® Field app. The file will be saved in local memory of the Tuner4TRONIC® Field app. Inside the app, you can then go to the “Open file” screen, select a production file from the list and program that configuration into your LED driver. Press the Inspect button for viewing the data in the production file prior to programming. Tab on the picture of the driver to see the data sheet of the driver in the bowser. Press the Program button for programming.

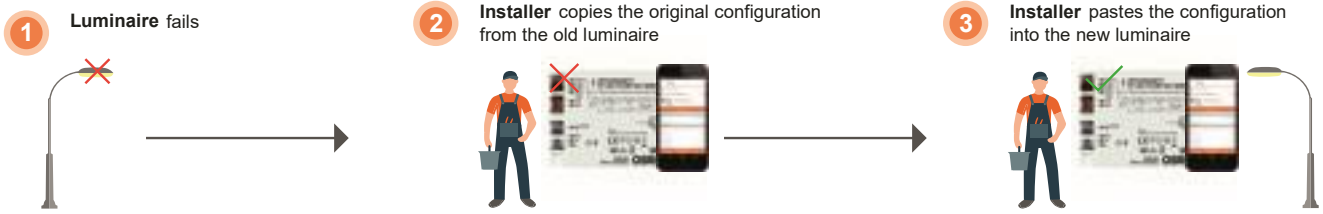
If the smartphone is connected to the Internet, data from the production file can also be used to program next-generation LED drivers (due to family programming cloud service).



5 Copy/paste

The Tuner4TRONIC® Field app features a copy/paste function to simplify the replacement of the LED driver in a luminaire.
Simply press the “Read” button and scan the old LED driver with your smartphone and press the “Write” button to paste the configuration into the new LED driver.
All driver parameters and settings are copied during the process, including the DALI short address. Unique serial number and monitoring data are not copied.
To allow copying of data to next-generation LED drivers, the T4T-Field app will access the family programming cloud service from the cloud (if the smartphone is connected to the Internet).

Tab on the picture of the driver to open the datasheet of the driver in your browser.



6 Edit data

6.1 Read driver data

In order to edit light output, CLO, DIM or additional luminaire info, you need to read data from the LED driver first by pressing the "Read" tile. All data will be downloaded, edited and finally uploaded to the driver when pressing the "Program" button. Due to this, only the driver that has been-read (identified by its serial number) can be programmed with edited data. To program a second driver, data from this second driver needs to be read accordingly.

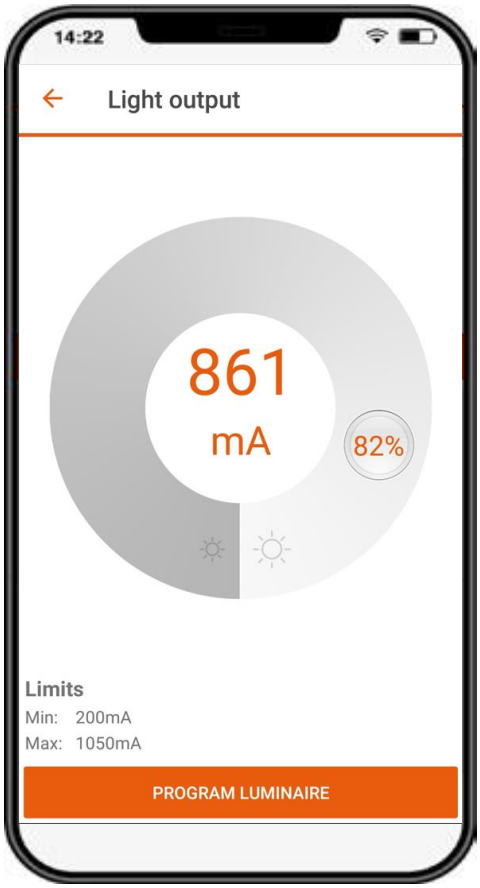
6.2 Edit light output

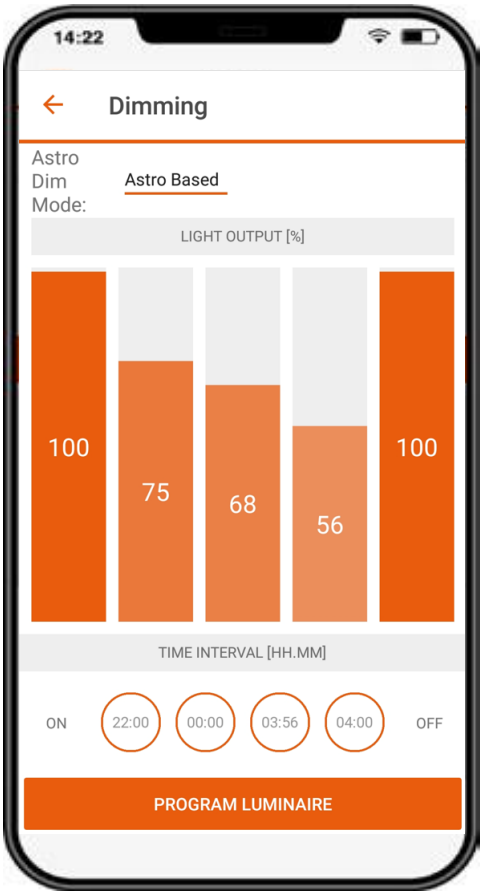
You can modify the light output of the LED drivers in lumens, percentage or milliamps. If the luminaire manufacturer enables the "Tuning Factor", the app will only edit tuning factor level. Rated current of the driver will not be changed. Due to this, the light output can only be modified within the min. and max. limits of the tuning factor settings. If “Tuning Factor” is disabled, the app will directly edit rated current settings within full range of output window provided by the driver.

Tapping on the light output value in the middle of the circle allows entering a numeric values.

6.3 Edit dimming profile (outdoor drivers only)

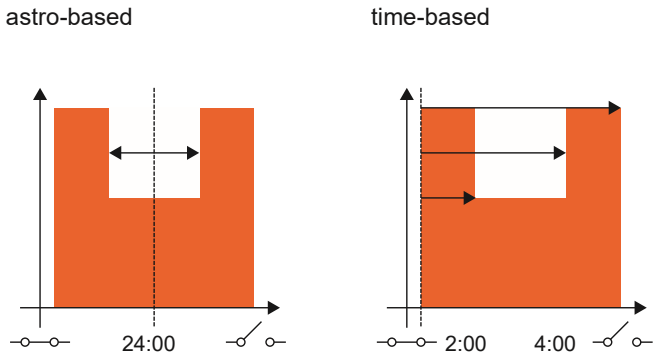
At the top of the dimming screen, you can choose diming mode (Astro-based or time-based). At the bottom, you will find the dimming levels and dimming times as well as the programming button. Driver needs to be programmed in an operating mode that features Astro-Dimming to allow the app to edit the dimming profile.





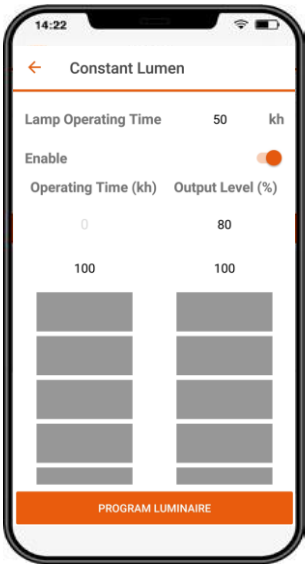
Astro-based: The dimming levels and times refer to the middle of the night, which is calculated based on the sunrise and sunset time.

Time-based:
The dimming levels and times refer to the switch-on time of the LED driver.



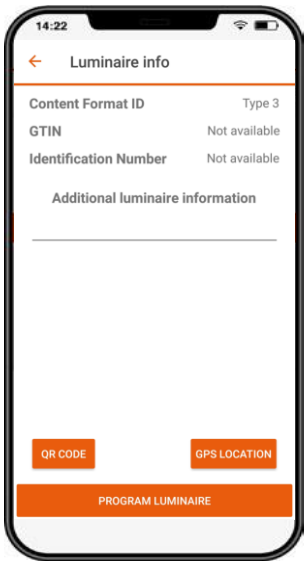
6.4 Edit constant lumen

You can enable/disable and edit constant lumen of LED drivers by entering value pairs for operating time [kh] and output level [%]. You can also edit actual operating time.



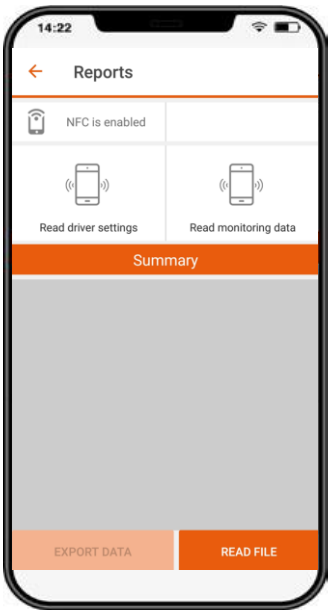
6.5 Edit additional luminaire info

This feature allows editing the field “additional luminaire info” (DALI MemBank 1) by either entering text, a string from QR code or GPS data from an actual location. If the string represents a valid URL (preceding blanks and characters after a blank in mid of string ignored), pressing the info button next to the picture of the LED driver will open the URL in the browser.



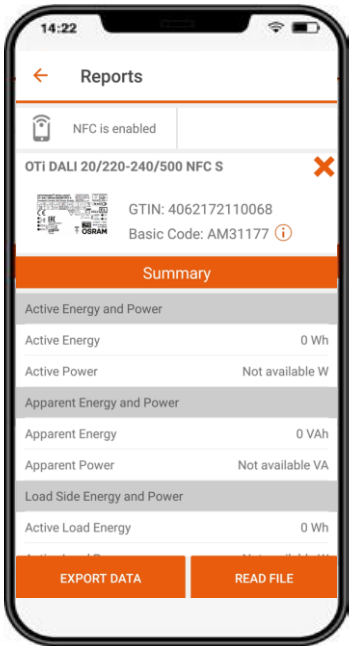
7 Report

Press "Report" on the homepage to read data and display the data settings of the LED driver.



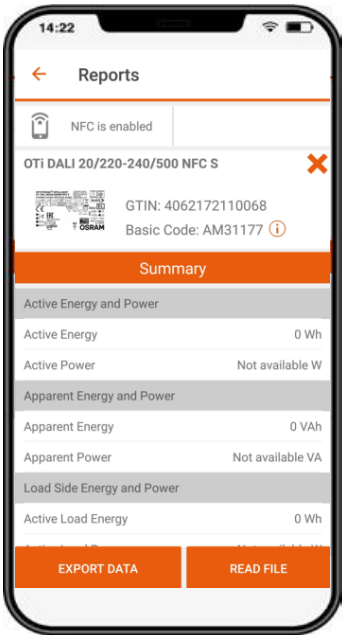
7.1 Driver Settings

The Tuner4TRONIC Field app can generate a report of all parameters and settings currently stored in the LED driver. After reading the LED driver, the app will reach out to a backend service in the cloud to format and display the data. The data (*.osrtur file) can be saved and sent via email for later processing in the T4T-Configurator. In case of no internet connection, please export the file to local memory, ready for later distribution. You can also read and display data from a saved *.osrtur file (backend service). Tapping on the picture will open the datasheet in the browser.



7.2 Monitoring data

The Tuner4TRONIC® Field app can read monitoring data from the LED driver. Monitoring data includes performance data collected by the LED driver during operation, e.g. working hours, failure counters etc. Press "Read monitoring data" on the reports page. The data can be saved as a CSV file and sent by e-mail.



8 NFC scanner

The optional NFC scanner is a Bluetooth-to-NFC adapter that comes in handy in the following situations:

— If the smartphone is too big to reach the LED driver mounted in the luminaire
— If the NFC antenna of the smartphone has a low-quality signal
— If the smartphone does not have an NFC antenna
— iOS smartphones or tablets

The following BT/NFC scanners have been released with the T4T Field app:

1. **Tertium**
   Order code: 4055462290281
2. **Feig ECCO Smart HF-BLE**
   Feig order code: 5738.000.00

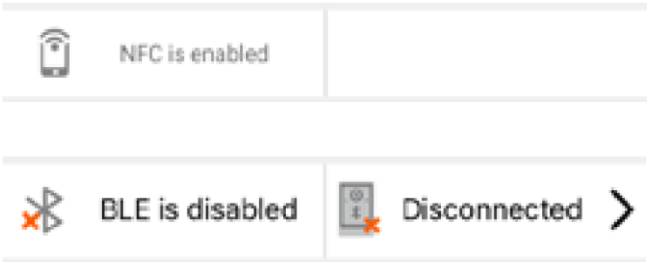
How to pair the NFC scanner with your smartphone
Using Android smartphones, the internal NFC antenna is selected by default in the Tuner4TRONIC® Field app. To select the NFC scanner as a programming interface (not available with iOS devices), please follow these instructions:

1. Make sure Bluetooth is enabled on your smartphone. To do this, open your smartphone settings and turn on Bluetooth.
2. Turn on the NFC scanner.

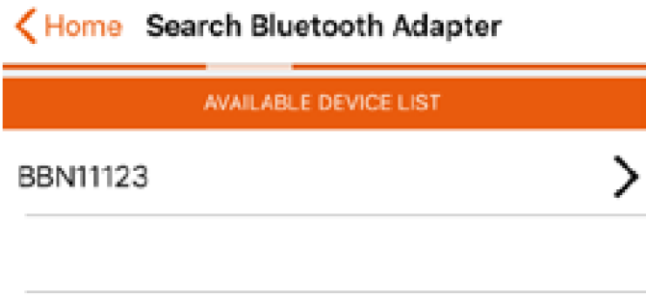
With the Tertium press and hold the button at the center of the device until you hear a beep. If the blue LED on the NFC scanner flashes once per second, you need to charge its battery.

With Feig ECCO Smart, press the button on the right. The blue LED flashes > 2Hz when the scanner is powered.

3. Go to the main screen of the Tuner4TRONIC® Field app and tap the NFC icon in the upper left corner to toggle from the internal NFC antenna to the Bluetooth mode. The screen should now show the notifications “BLE is disabled” and “Disconnected”.



4. Tap “Disconnected” to see the list of available NFC scanners.
5. The app will start scanning for available devices. Wait until the internal device name of your NFC scanner is shown on the screen and select the NFC scanner to start the connection.



6. A pop-up will confirm the connection and the screen will show the connected device.

7. You can now go back to the main screen and start reading and programming LED drivers with the NFC scanner.
8. When trying to read or program an LED driver, please ensure that the LED driver is touching the NFC scanner. Please align the arrow of the NFC logo ( ) on the LED driver with the edge between the white label and the black part on the back of the scanner.

Use an NFC passive antenna to improve NFC transmission

With Feig ECCO Smart, target the NFC antenna of the driver either from the front or the bottom of the scanner.

9 Read QR code

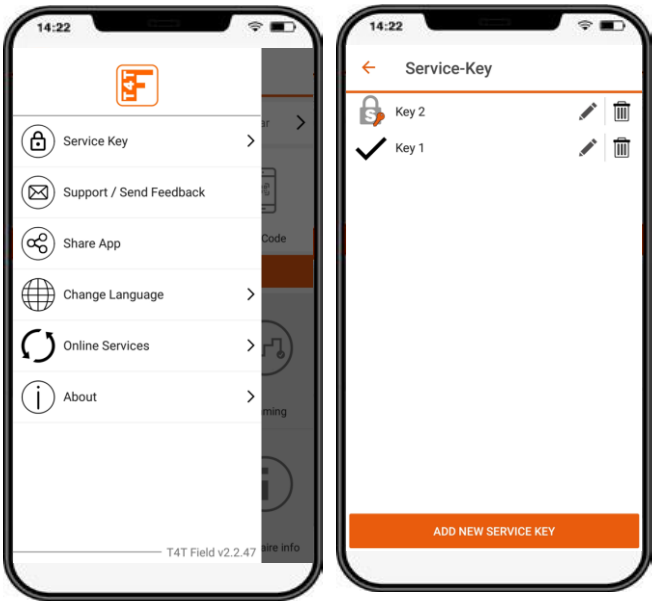
Press QR code button to open the datasheet of the driver on the Inventronics home page. Please make sure, that the QR code is centered and focused with upper ridge touching the red bar.

10 Settings

App settings can be found by sliding from left to right or pressing on the “hamburger menu”.

10.1 Service key password management

If the luminaire manufacturer has protected the driver with a service key to avoid unauthorized modifications, a service key needs to be entered in the Tuner4TRONIC® Field app. Only users with valid service key from can edit driver configuration. To make the handling of service keys easier, user can save multiple service keys in the Tuner4TRONIC® Field app and give them a name. The active key is indicated by a check mark. During programming, the Tuner4TRONIC® Field app uses the activated service key and authenticates it automatically. Provided the key is correct, the app proceeds to do the programming. If the key is wrong, the user gets an error message.



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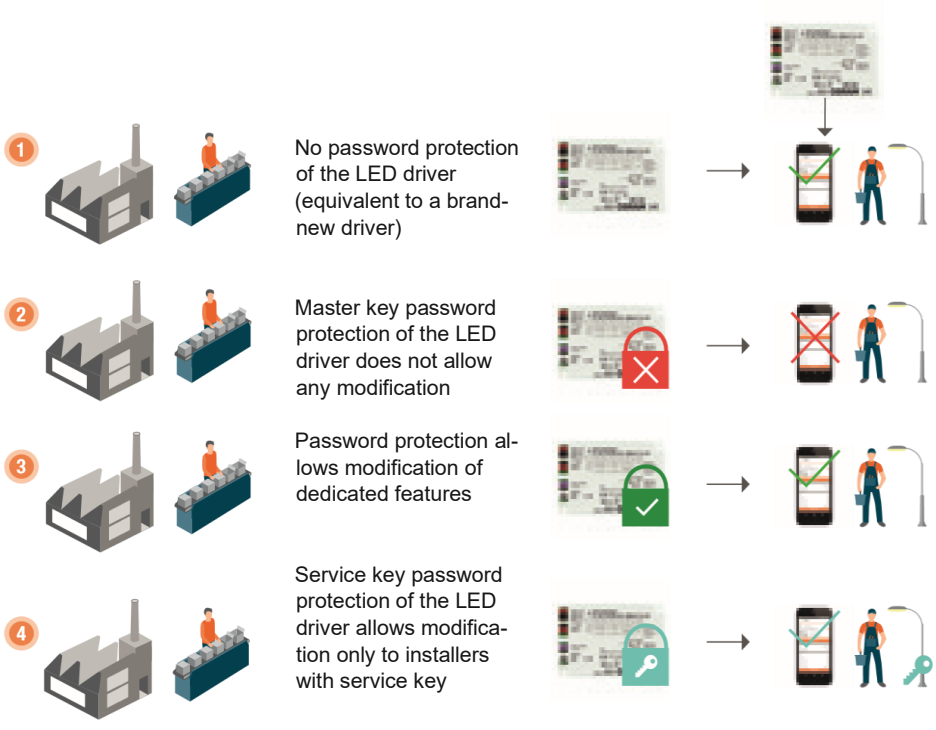


*) Note:
No restrictions for programming a driver from a production file that includes the (encrypted) master password.

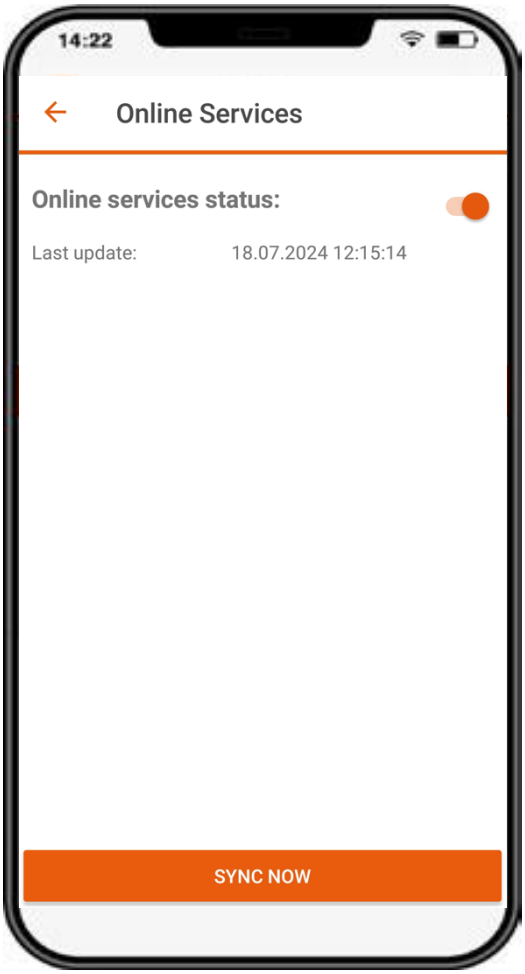
10.2 Support/send feedback
Inside the left side menu below the report, you can find the “Support/Send Feedback” function. After tapping this feature, the default e-mail app on the smartphone opens with a template to send a message to the Tuner4TRONIC® support team for help, feature requests or additional feedback.

10.3 Share app
The Tuner4TRONIC® Field app provides a simplified option to share the app with your co-workers. After clicking “Share App” in the left side menu, the default e-mail app on the smartphone opens with a direct link to download the app.

10.4 Change language
Select your language.

10.5 Online services
Activate "Online Services" and press "Sync Now" to update supported drivers. If online services are activated, the app will update supported drivers in the background with every new start of the app. To find out which drivers are supported, please check https://www.tuner4tronic.com/ddstore/#/field

10.6 About
Please find imprint, privacy policy, terms & conditions, SW licenses and the user manual in the "About" menu. Links to application guides and tutorials can also be found on the "Terms & Conditions" page.



11 Compatible products
Please check https://www.tuner4tronic.com/ddstore/#/field to find the list of drivers supported by the Tuner4TRONIC® Field app.

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