Light is OSRAM

OSRAM

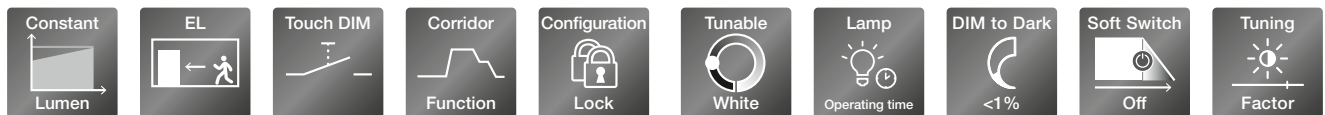# NFC technology
Saving time and money

NFC

Combined with the Tuner4TRONIC® software, wireless near-field communication (NFC) used in OSRAM LED drivers reduces time and costs in the manufacturing, installation and maintenance of luminaires.

A common practice during the luminaire manufacturing process was to set the output current of the LED drivers with resistors. This practice is outdated as resistors require dedicated manual labor and are more expensive, less accurate and less flexible than software programming.

OSRAM's programmable LED drivers support a variety of features that go beyond the simple adjustment of the output current and help you get the most out of the LED drivers. Depending on the application, the following features are available:
— Constant Lumen Output
— Emergency Light
— Touch DIM®
— Corridor Function
— Tunable White
— Configuration Lock etc.

Therefore, resistors do not fulfill the growing demand for customization that comes with modern LED luminaires.

| Constant Lumen | EL | Touch DIM | Corridor Function | Configuration Lock | Tunable White | Lamp Operating time | DIM to Dark <1% | Soft Switch Off | Tuning Factor |

OSRAM offers an industry-proven solution consisting of an intuitive software suite and standardized plug-and-play hardware interfaces to optimize and speed up the manufacturing, installation and maintenance of indoor and outdoor LED luminaires.

Hardware interfaces for manufacturing
The MD-SIG standardized NFC readers allow a quick, wireless and mains-free process. NFC, which is short for Near-Field Communication, makes programming as easy as it gets. Take the LED driver, place it on top of the NFC interface and it's done! No mains voltage is required. In most cases, it is possible to read out the driver's configuration even after the device's failure.

Hardware interfaces for non-stationary use
Android smartphones with NFC antenna can be used to program NFC LED drivers. If your smartphone has an NFC antenna that is too small or not accessible to the app, you can also use the optional NFC scanner. This device can be easily connected to the smartphone via Bluetooth and provides a reliable and stable NFC connection. It also offers a more comfortable way of programming LED drivers assembled in a luminaire. Please use the passive NFC repeater to further extend the connectivity range.

Scanner with passive NFC repeater

NFC scanner on LED driver

CPR30　　　PRH101　　　MR102　　　LR1002　　　ANT310/310

Software suite

Tuner4TRONIC® (T4T) from OSRAM is a software suite that allows luminaire manufacturers to program OSRAM LED drivers via DALI and/or NFC in a simple, fast, reliable and cost-effective way, speeding up the production process. This software suite consists of the following web-based, PC-based and mobile applications:

Tuner4TRONIC® Configurator is the perfect choice to configure LED drivers by setting individual parameters such as output current, dimming levels, constant lumen output and operating modes.

Use the OSRAM Tunable White LED module library or create your own TW data set for highly accurate TW applications. Thanks to its multi-level password system, Configuration Lock protects the LED drivers against unauthorized changes while service technicians can still be granted access rights for selected features. Once the configuration has been completed, the settings are exported as an encrypted read-only production file and transmitted to the production line.

Tuner4TRONIC® Configurator is a web-based tool that requires internet access – no installation on your computer, up to date at any time.

Tuner4TRONIC® Production provides an intuitive and multilingual user interface for the assembly line. Operators can conveniently load encrypted production files to start automatic programming for the fast mass production of LED drivers. Changes to the LED driver configuration are not possible during this stage. At the end of the workflow, the operator can also print out a label with the specific luminaire information and place it on the finished luminaire.

Tuner4TRONIC® Production also allows reading data from drivers. Data can be transmitted and processed with Tuner4TRONIC® Configurator.

Download and install Tuner4TRONIC® Production on your computer and connect USB programming interfaces such as NFC readers, DALI magic or OT Programmer to exchange data with OSRAM LED drivers.

The **Tuner4TRONIC® Simple Current** programming tool provides an easy way to switch from current setting via LEDset to current setting via NFC. This tool is the perfect choice when only current setting via NFC is required. Tuner4TRONIC® Simple Current is installed with Tuner4TRONIC® Production.

For any more sophisticated parameter settings, please check Tuner4TRONIC® Configurator and Tuner4TRONIC® Production.
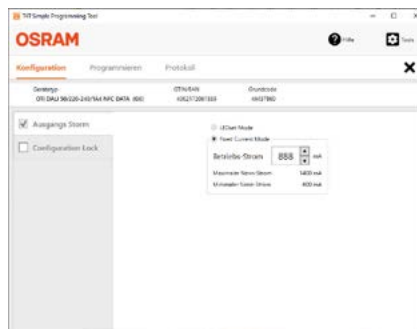
The **Tuner4TRONIC® Field app** makes the installation and maintenance of street light and industry luminaires as easy as it gets by allowing the wireless programming of OSRAM drivers without the need for mains voltage. A list of drivers supported by Tuner4TRONIC® Field can be found here.

Tuner4TRONIC® API is a REST API (https-based application interface) that allows automated production file creation directly from your ERP system using your customized database for parameter settings.

Tuner4TRONIC® Machine is a DLL and command line tool that allows the integration into your automated programming and testing stations in the luminaire factory line to optimize the production process. DLL and CMD line tools are installed with Tuner4TRONIC® Production.

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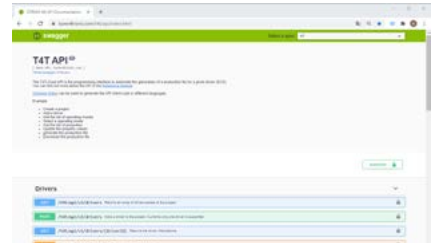
For more information on Tuner4TRONIC®, visit https://www.osram.de/ds/tools/tuner4tronic.jsp.

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