



**User Manual**  
**MultiOne Mobile**  
**v1.6**

September 2024

# MultiOne Mobile

The MultiOne Mobile app enables configuring your Philips or Advance drivers in your warehouse or in-field.

This version of the app is meant for Android 9 or higher smartphones, with internal NFC antenna, or with an external NFC scanner connected via Bluetooth (BLE).

Philips and Advance SimpleSet drivers can be configured with NFC (Near Field Communication)

Drivers with SimpleSet(NFC) have this symbol



Supported features of the app:

- Adjustable Output Current (AOC) (read only)
- Adjustable Light Output (ALO)
- DynaDimmer (If enabled by the OEM)
- DALI Power Supply
- Cloning (copy all the features to another driver)
- Diagnostics
- E-mail the driver's specification and diagnostics
- Connect to an external NFC scanner (dongle)



## Good to know (1)

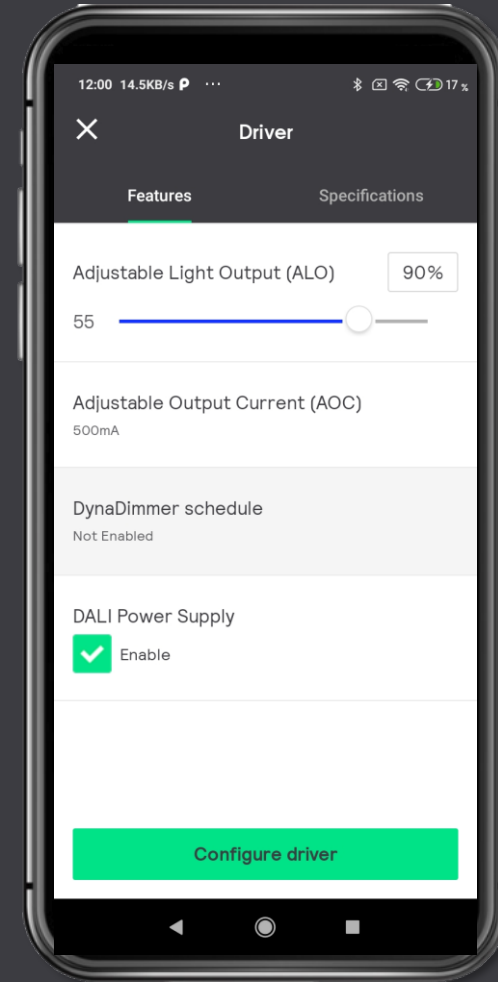
We recommend to use the latest Android version on your phone.

The protection key of the Luminaire Supplier could have locked the features with a so-called Supplier Protection Key (OEM Write Protection(OWP)). Please contact the Luminaire Supplier to unlock the features.

During reading or configuring, remove the smartphone or the NFC scanner only after the process is finished. You can see the result on the screen. In case the configuration/cloning is interrupted, there is a possible chance that the driver is not correctly configured/cloned.

In case the driver is not correctly configure/cloned, the driver needs to be repaired/reset through MultiOne Engineering.

Due to luminaire warranty concerns, Adjustable Output Current configuration capability is disabled.



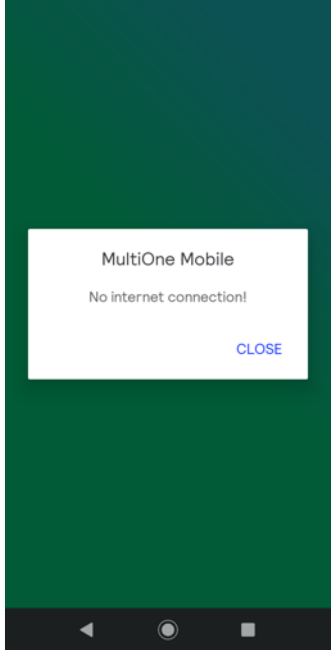
## Good to know (2)

For security reasons the App can only be used in combination with a secured NFC scanner. These scanners can be found in the Signify OEM sample web-shop.

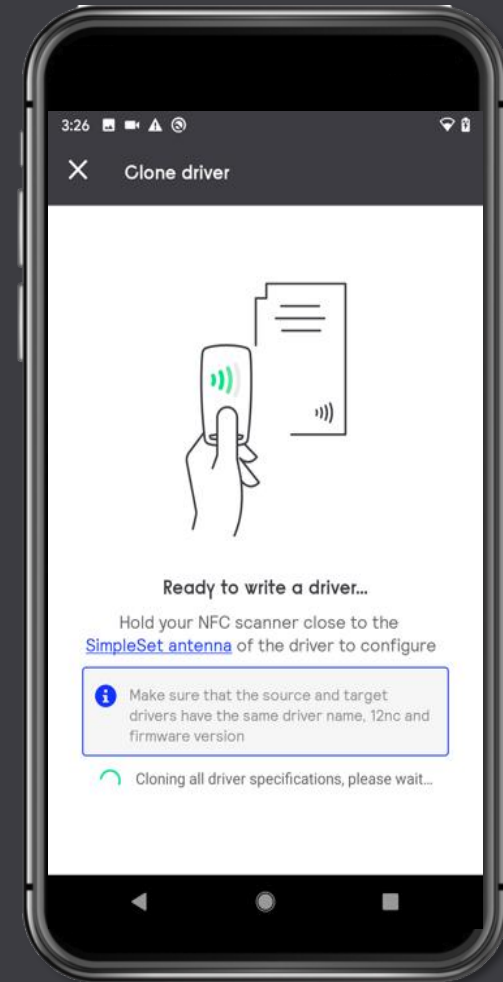
[Home page](#) | [Signify OEM Sample Shop EMEA](#)

Please check your spam-box if the “Email Specifications” do not appear in your Inbox.

If you have problems with reading of a driver, we suggest to start using an external NFC scanner.



The app needs to have an internet connection to check for new updates. Without internet connection you can still use the app for 7 days. On the 8<sup>th</sup> day you will get this notification. To fix this, connect the phone to an internet connection/hotspot.

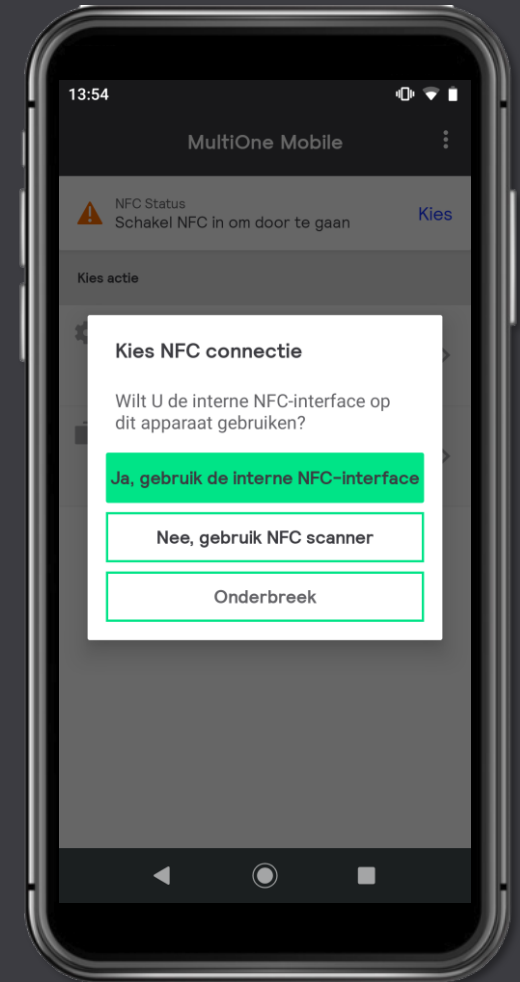
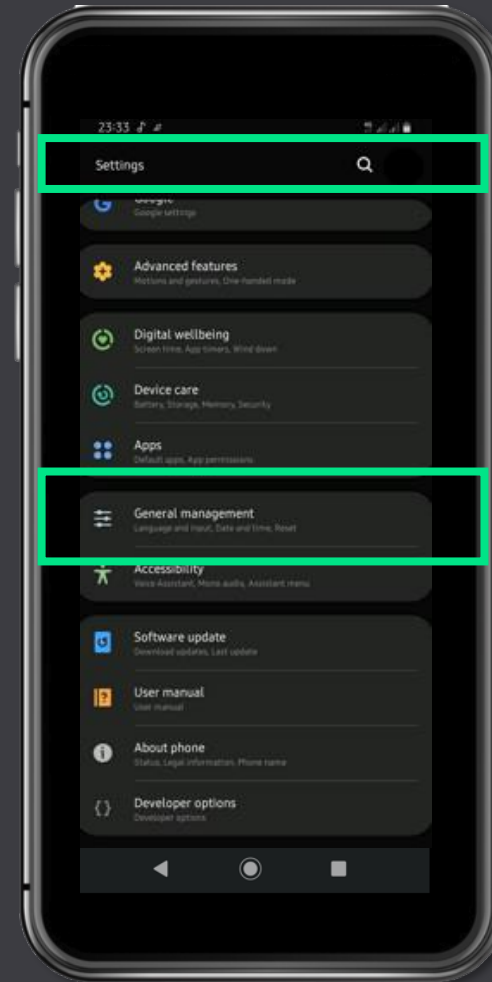


## Good to know (3)

Apart from the default language, English, Version 1.3 App supports multiple languages.

It is now available in Spanish, French, German, Italian and Dutch.

The mentioned languages can be selected/changed by the main settings of the phone. Refer the image to the right.



## Good to know (4)

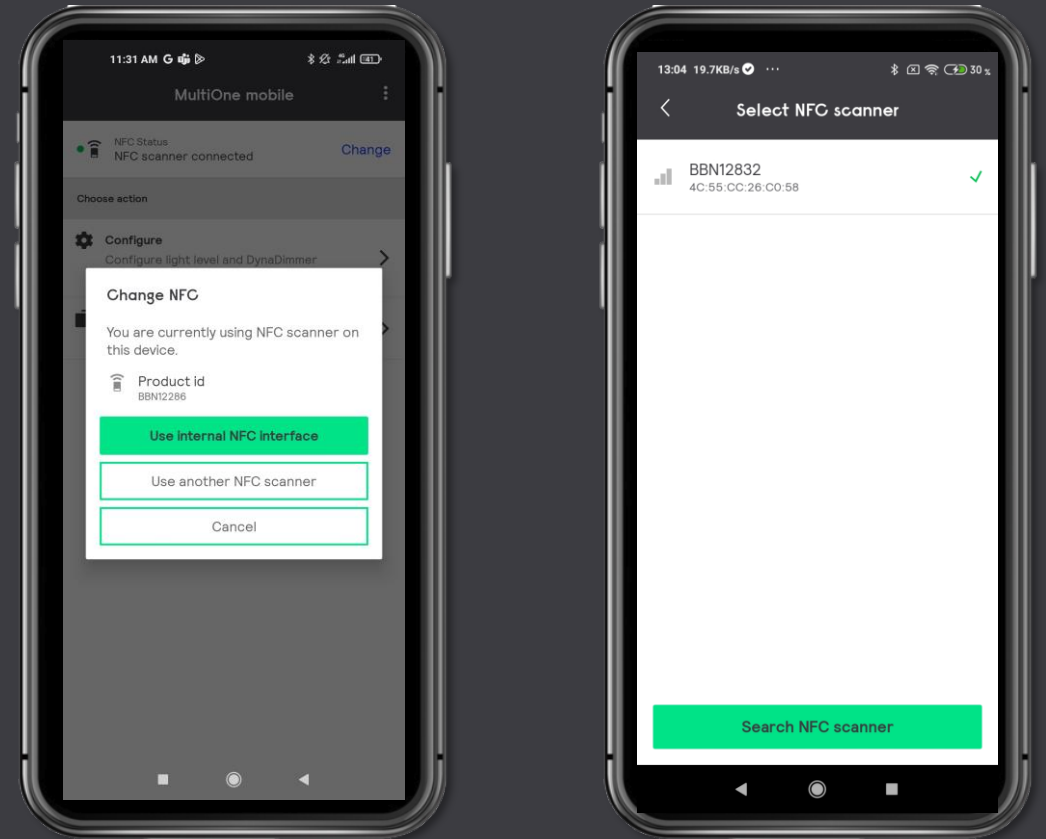


Connecting from one NFC scanner to the other

When you want to change from one NFC scanner that was currently in use to a second NFC scanner while using the MultiOne App. Sometimes, the following can occur:

- (1) The pairing of the second NFC scanner fails.
- (2) The NFC scanner will display that it is connected and shortly after the first try of Configure/Clone, you receive a message that it is disconnected.

Solution – Close MultiOne Mobile App and restart it again.



## Good to know (5)

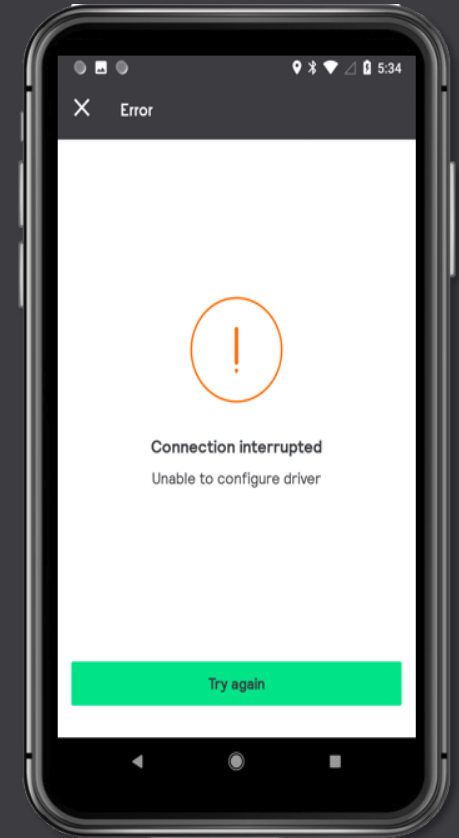
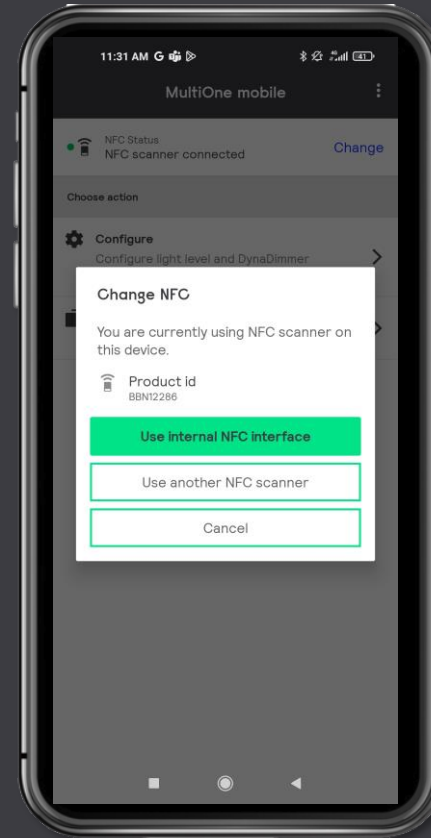


Connection interrupted

Sometimes, the connection to the NFC scanner is interrupted even though the scanner is placed in the correct position. The error message is shown in the picture to the right.

### Solution

- (1) If it still fails to connect after clicking 'Try again', remove the NFC scanner from its current position and place it back again.
- (2) Close MultiOne Mobile App and restart it again.



# Details on Cloning

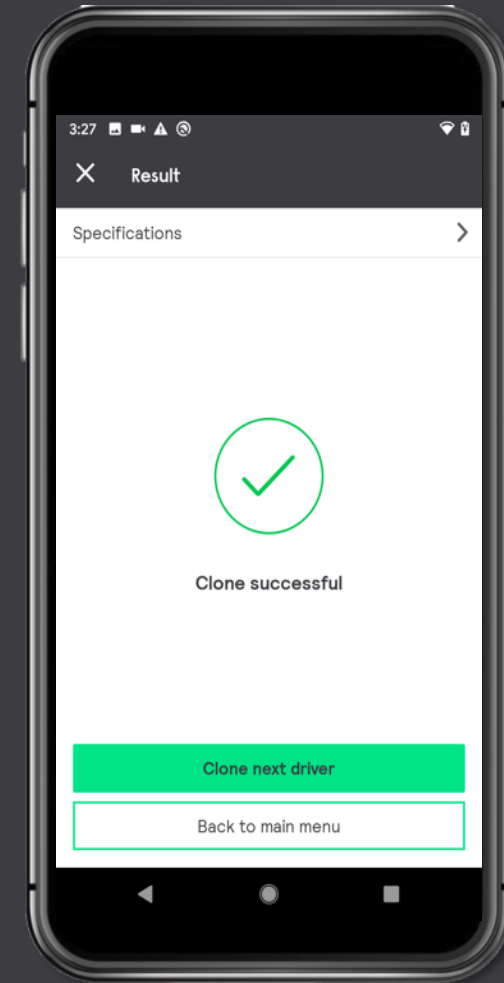
For cloning, the Defect (source) and Replacement (target) driver should be identical (including firmware version). This feature enables you to replace a driver in the field, by copying the complete configuration of a Defect driver into a Replacement driver. The behavior of the Luminaire will remain identical.

All features and parameters are copied into the new driver, except the items which are related to the driver such as:

- Diagnostic information (e.g., hour of operation,..)
- Energy metering

If the Defect(source) driver has a Supplier Protection Key, the content can be copied without Knowing/Entering the Supplier Protection Key.

The Replacement(target) driver should not be protected by a Supplier Protection Key!





## NFC scanner

In case you have problems reading a driver, we recommend to start using an external NFC scanner.

- When your smartphone has no or weak internal NFC-antenna
- When the driver cannot be reached with your smartphone
- We have noticed that some drivers cannot be read by some smartphones running on Android 9/10). This external NFC scanner will resolve this.

This driver communicates via secure BLE connection with your smartphone.

The NFC scanner is available in the sample web shop:  
[Home page | Philips OEM Sample Shop EMEA](#)

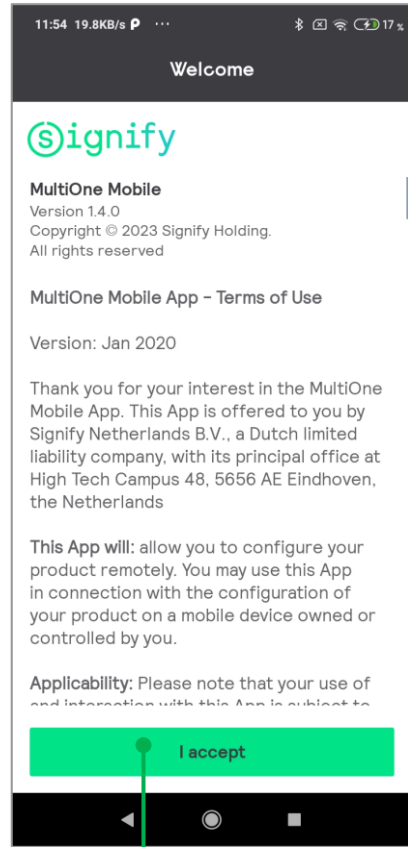
*BLE = Bluetooth Low Energy*

*NFC = Near Field Communication*

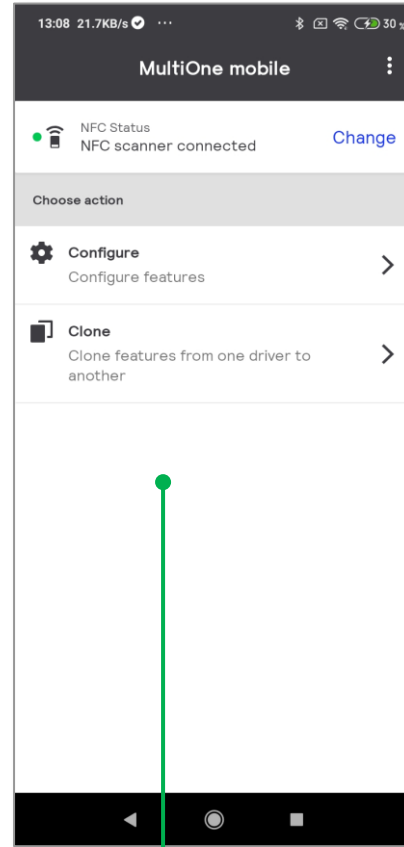
The NFC scanner enables  
you to read/write Philips  
drivers



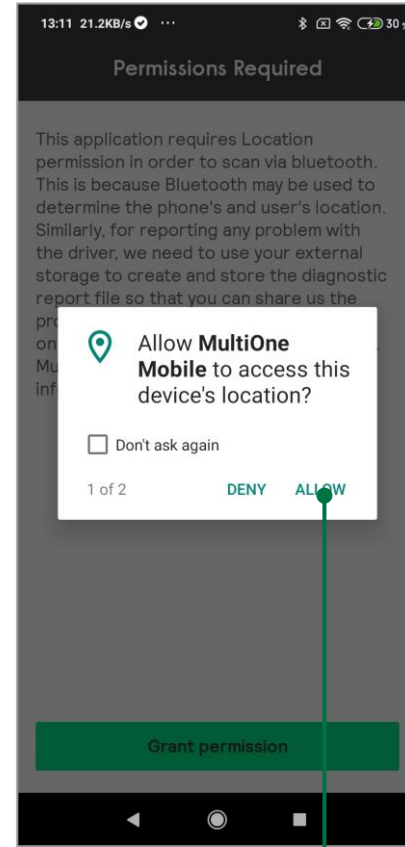
# Opening screens



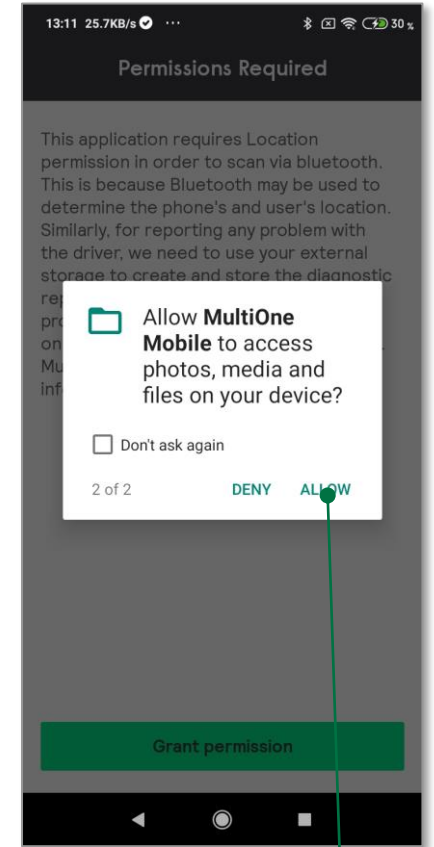
Agree with term of use to continue



Landing page  
Choose the action you would like to do

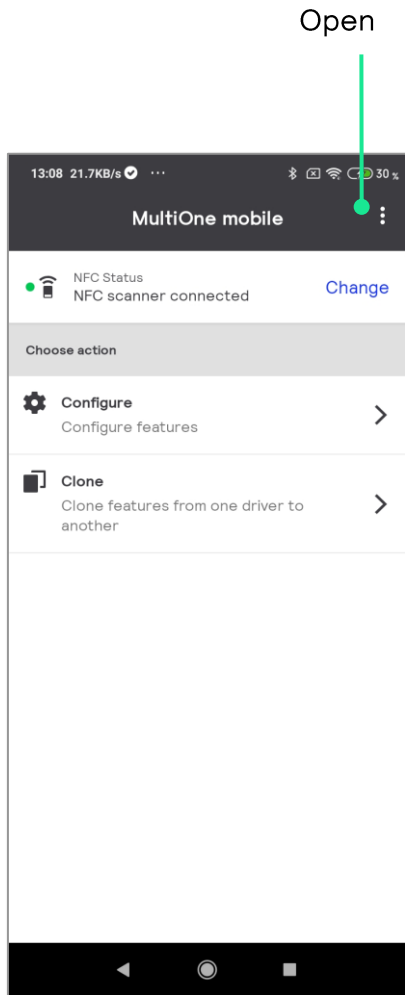


Provide allowance to access location to include in report

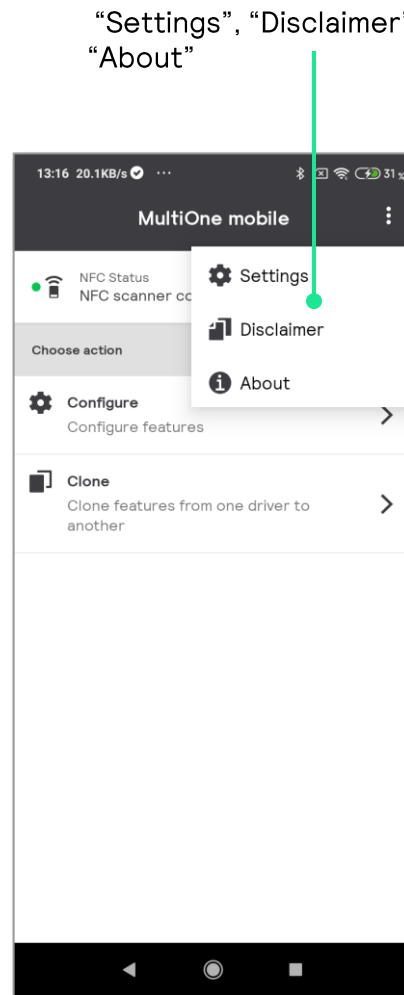


Provide allowance to share files to include in report

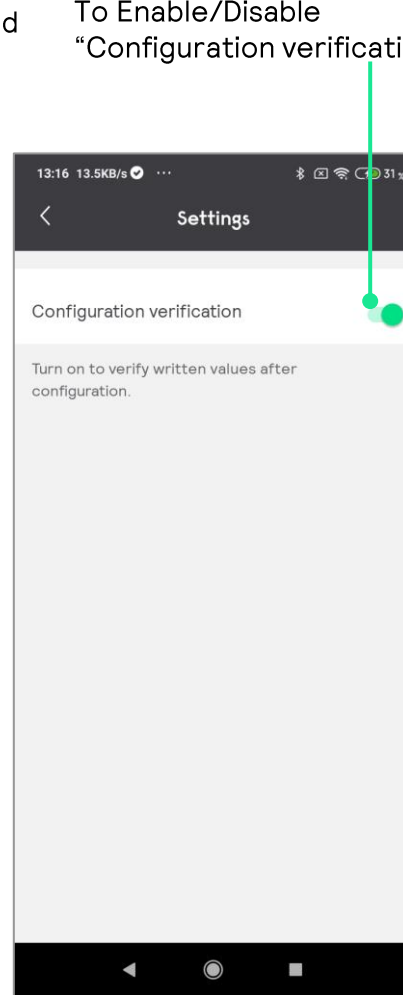
# General screens



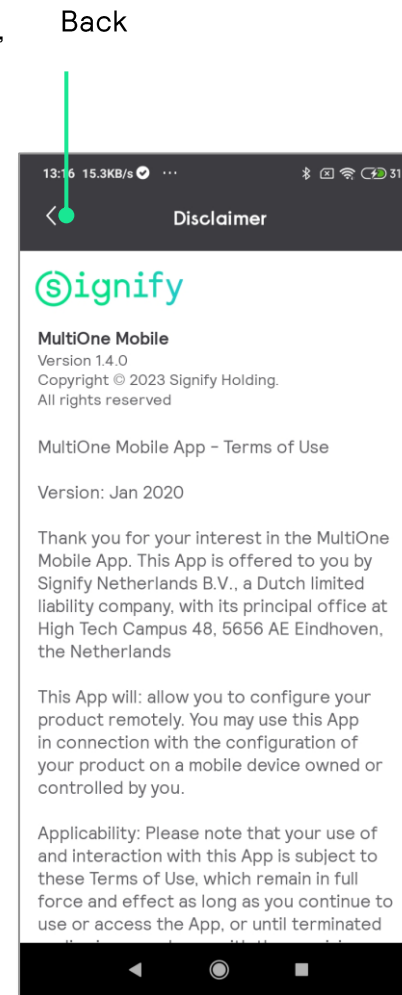
Open



“Settings”, “Disclaimer” and  
“About”



To Enable/Disable  
“Configuration verification”



Back



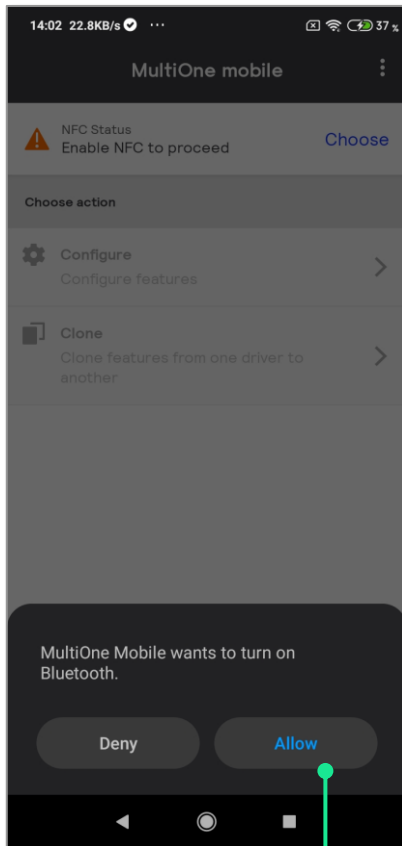
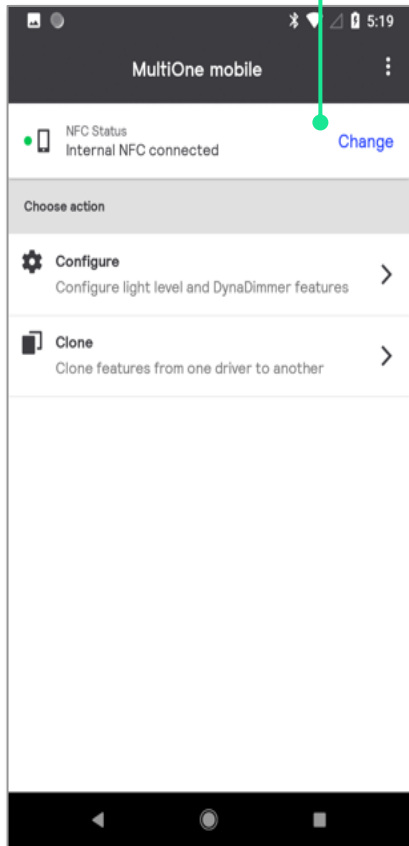
Screen with App details

- Terms and conditions
- Privacy policy
- Product security
- Help (this document)

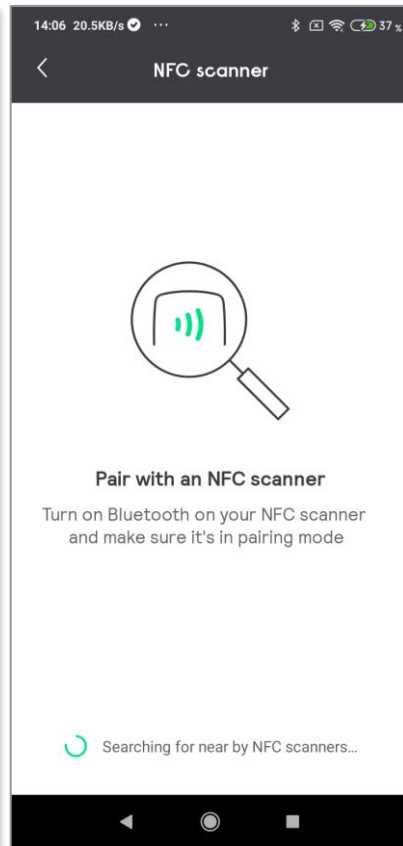
To verify the configured values.

# Connect external NFC scanner

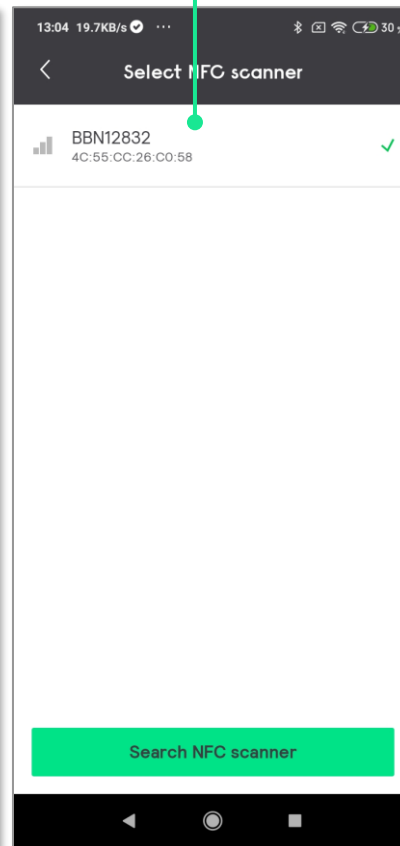
Change from internal to external NFC scanner



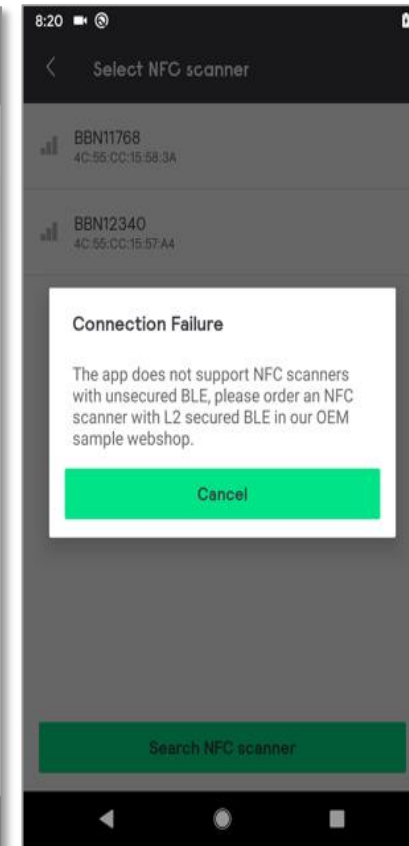
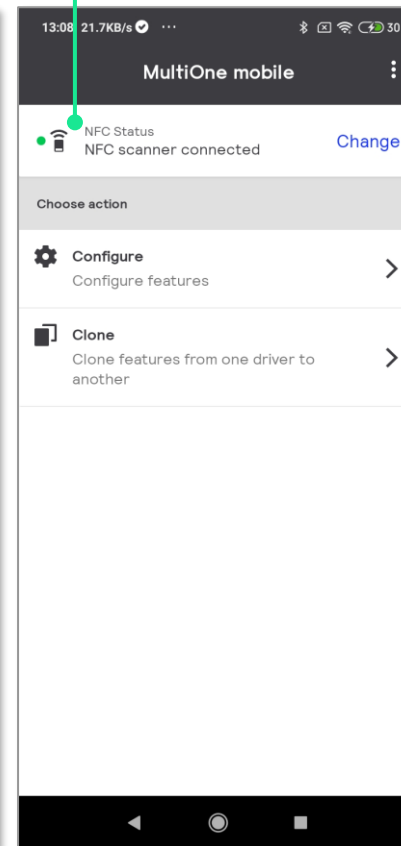
Grant permission to use Bluetooth (BLE) connection



Select your scanner



Green dot: Indication NFC scanner is paired



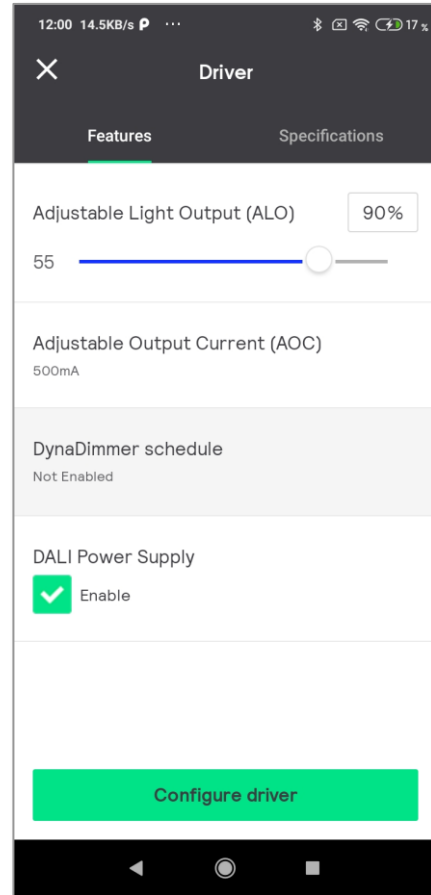
The app can only connect to external NFC scanner with secured BLE



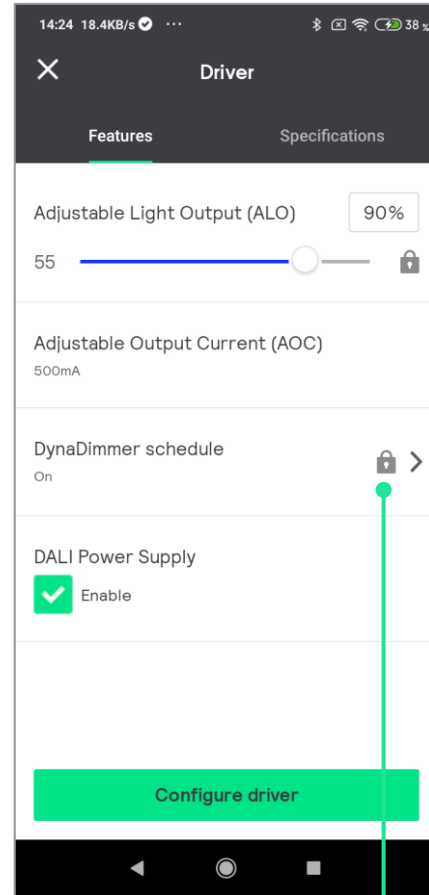
# Supported features: ALO, AOC, MultiChannel AOC, DynaDimmer (dimming schedule), DALI Power Supply



Hold your smartphone with the Internal NFC antenna close to the driver, at the marking on the driver

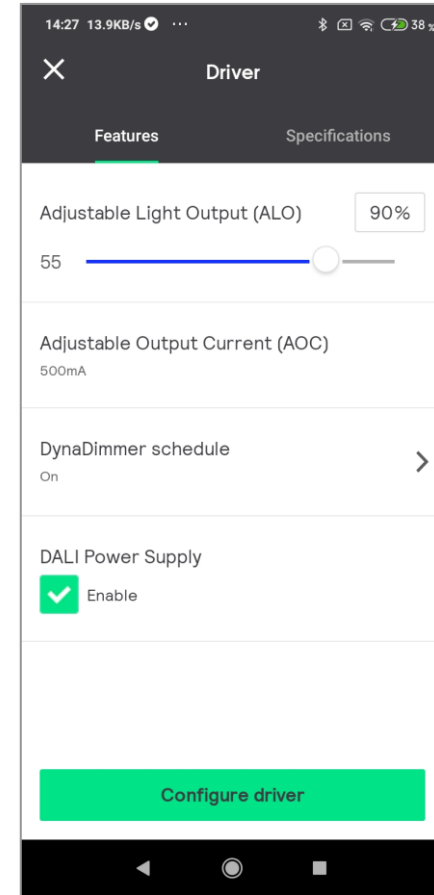


DynaDimmer should be enabled by the luminaire supplier (OEM), otherwise you cannot configure this feature



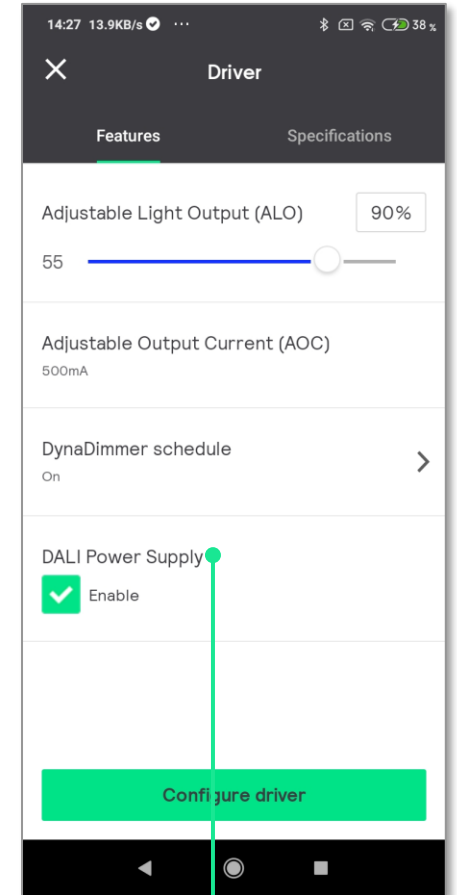
For this driver ALO and DynaDimmer is password protected during initial configuration (OWP).

To configure these features you will need the Supplier Protection Key.



The Adjustable Light Output (ALO) is always configurable.

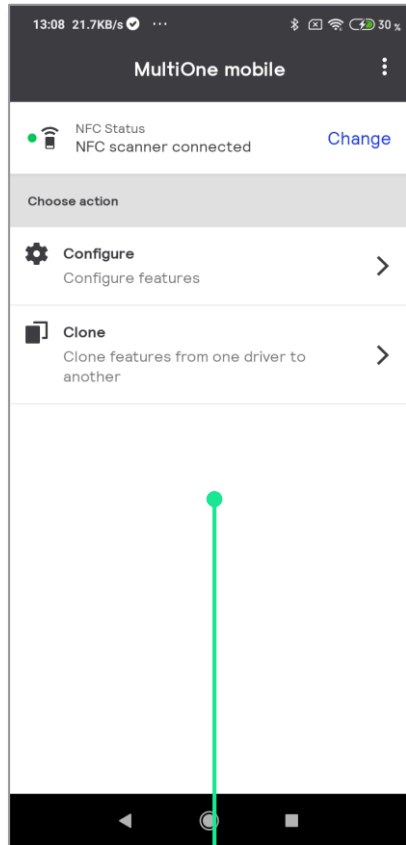
The DynaDimmer schedule is only configurable when it was originally enabled, like in this driver



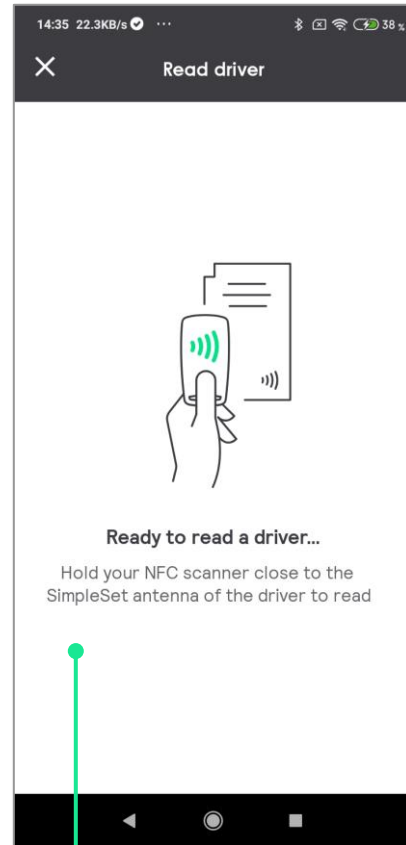
Use the DALI Power Supply (DALI PSU) feature to enable the device so it will deliver the power supply for DALI communication by itself.



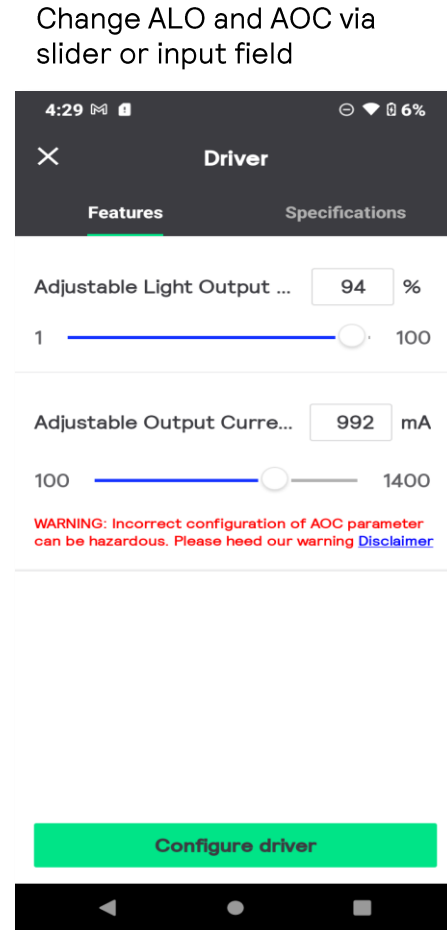
# Read and change settings via internal/external NFC antenna



Choose the action you want to perform

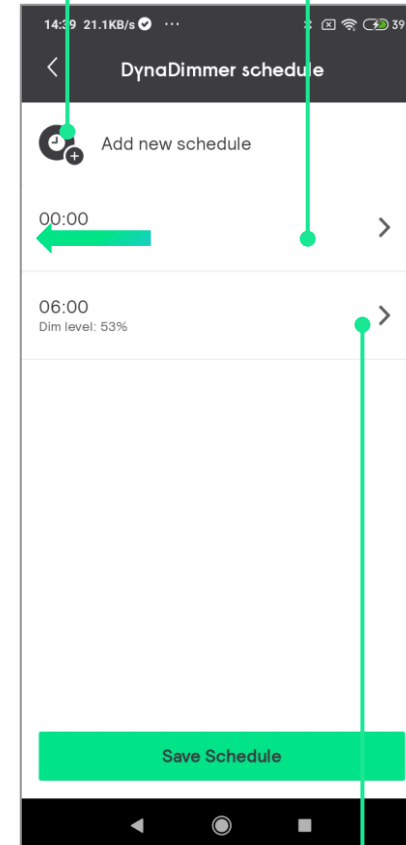


Keep alignment of internal NFC antenna or external NFC scanner until all parameters are read.



Open DynaDimmer schedule

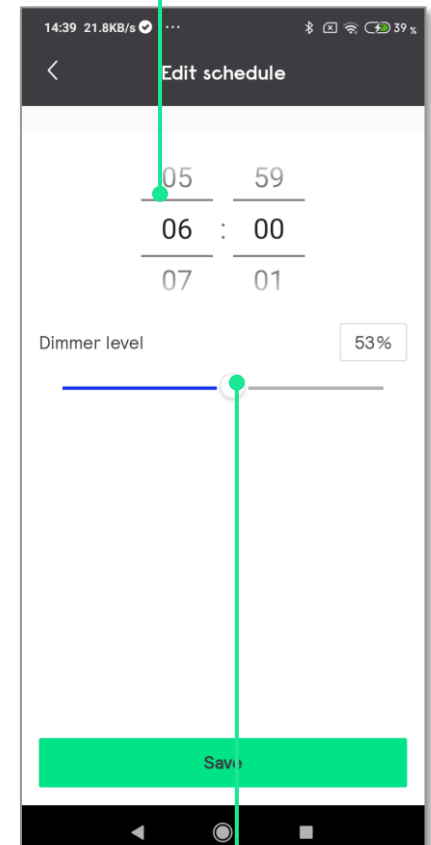
Add Dynadimmer step



Click to modify step

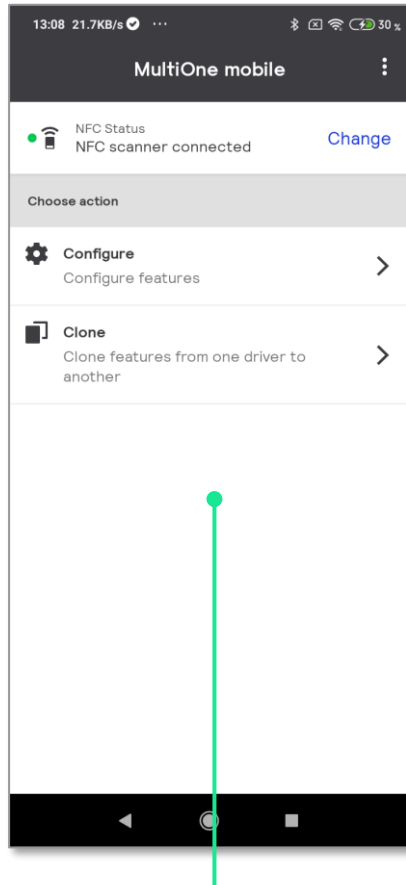
Swipe to remove step

Change step time

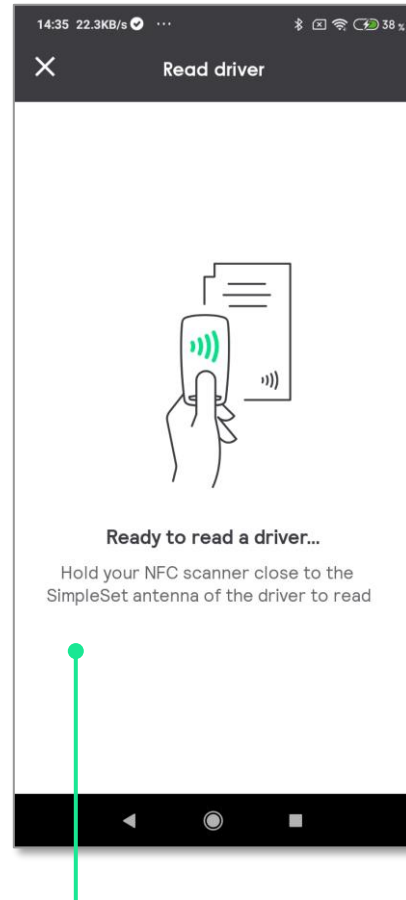


Change step level

# Multi-Channel AOC

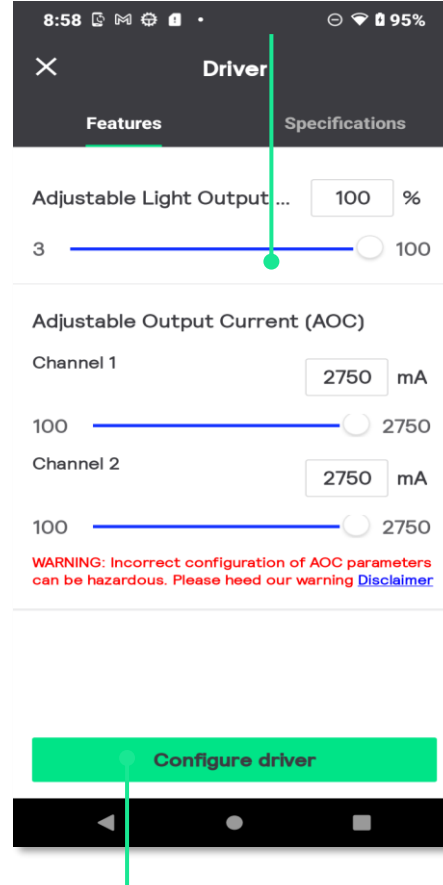


Choose the action you want to perform

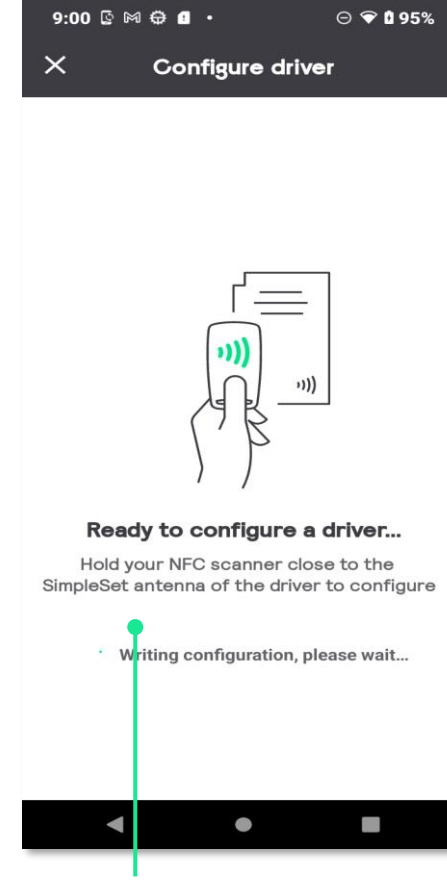


Keep alignment of internal NFC antenna or external NFC scanner until all parameters are read.

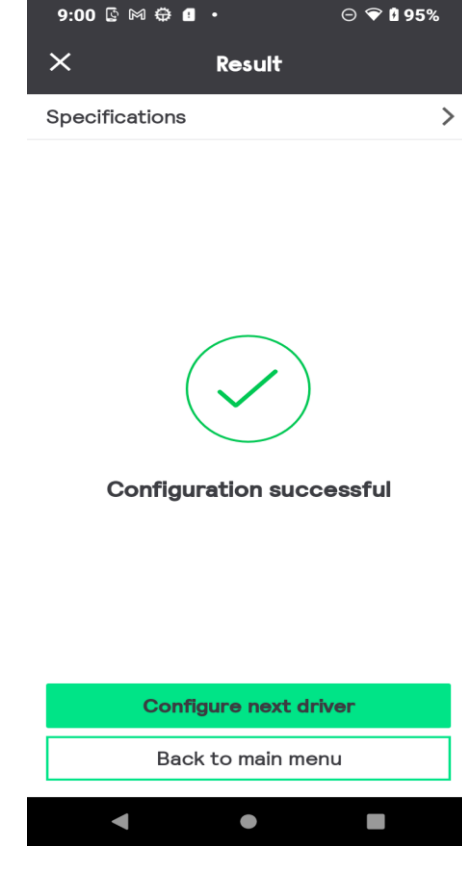
Change ALO and AOC via slider or input field



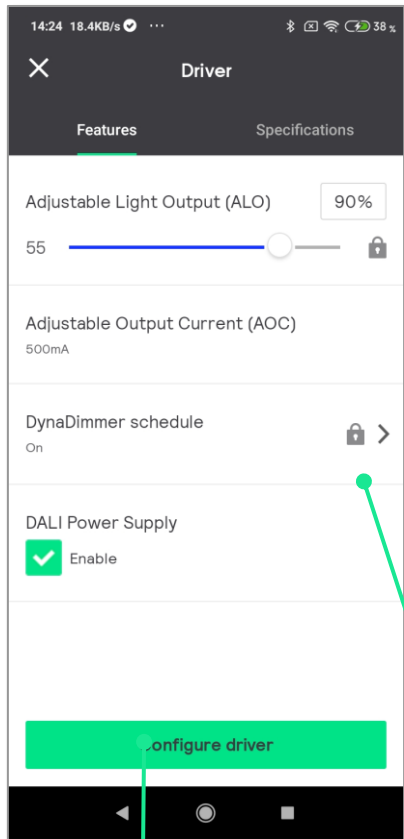
Press configure driver to proceed with writing the settings to the device.



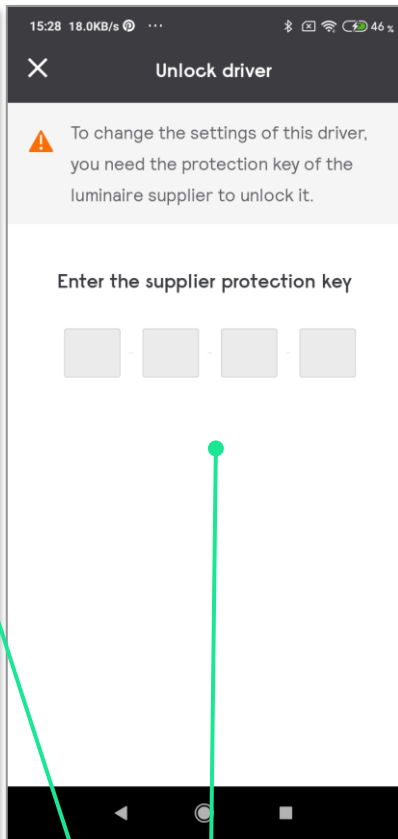
Keep alignment of internal NFC antenna or external NFC scanner until all parameters are written.



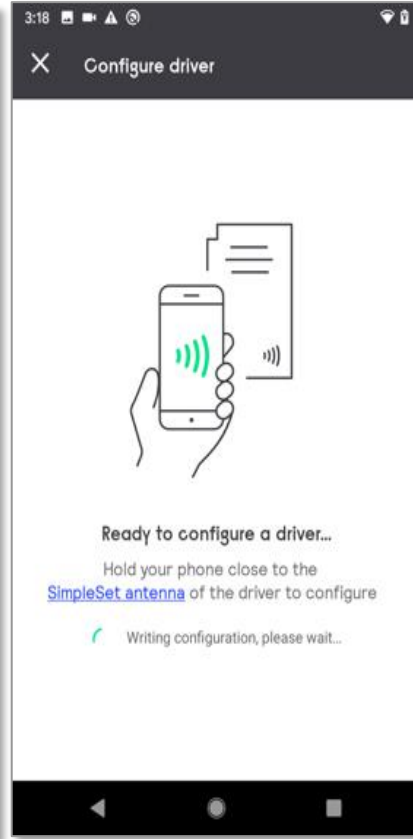
# Configure- Steps (write)



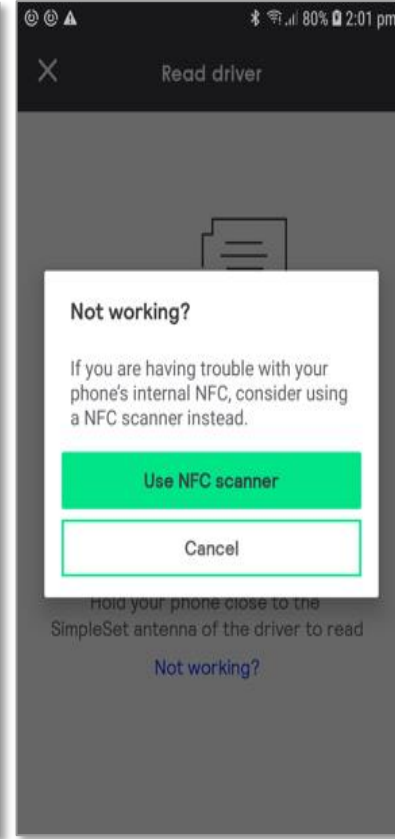
Configure driver



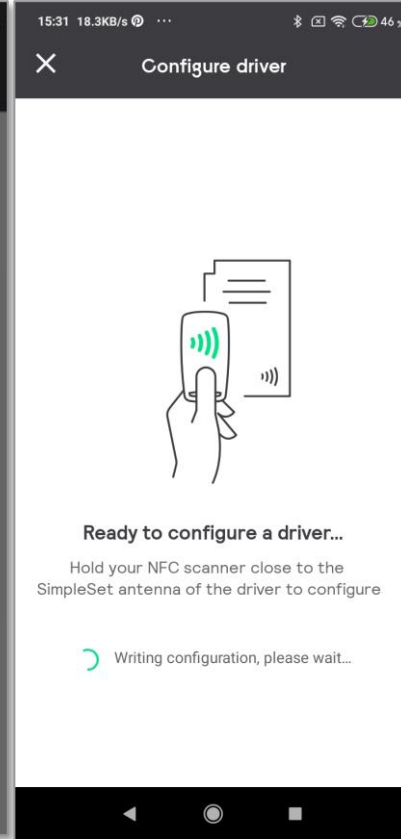
A lock indicates that you will need a Supplier Protection KEY (OEM write protection) to configure the driver



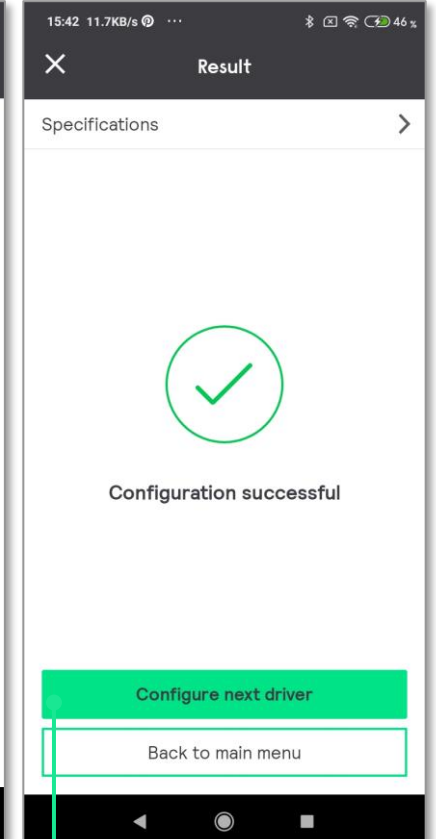
Align driver with NFC antenna



When the internal antenna cannot communicate, you can consider to use an external antenna



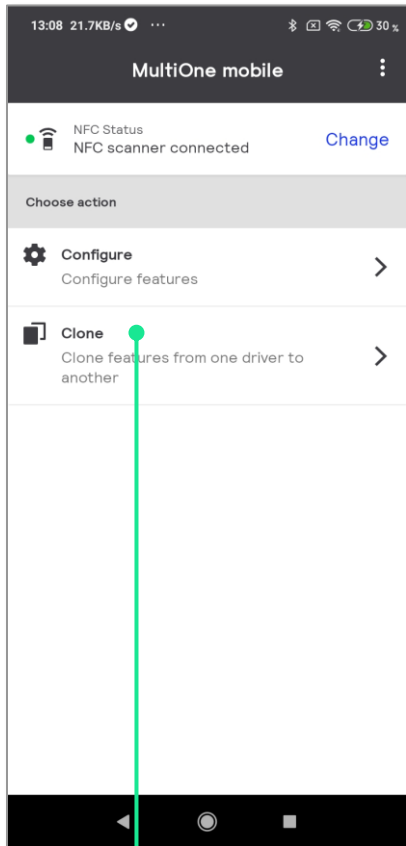
Keep alignment until all parameters are written.



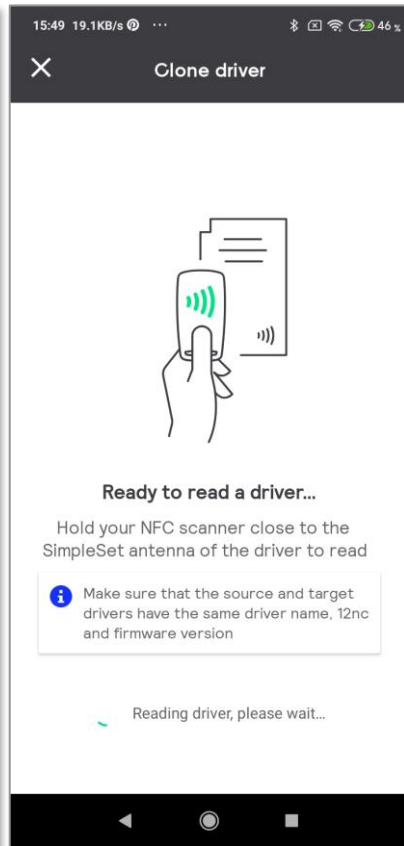
Same configuration in another driver



# Cloning – Steps

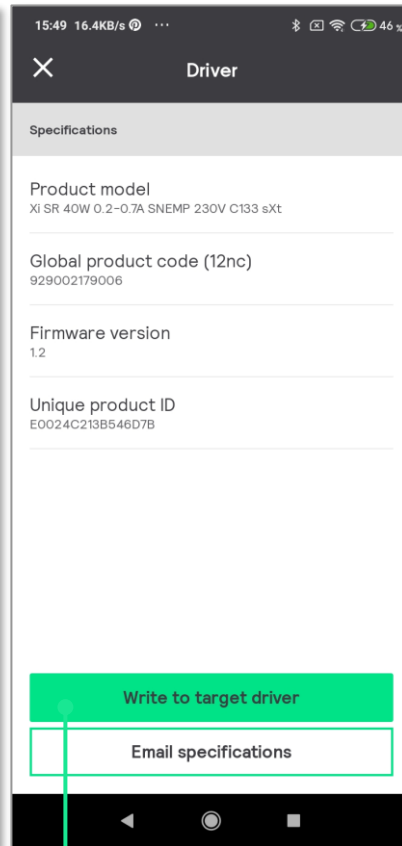


Choose cloning

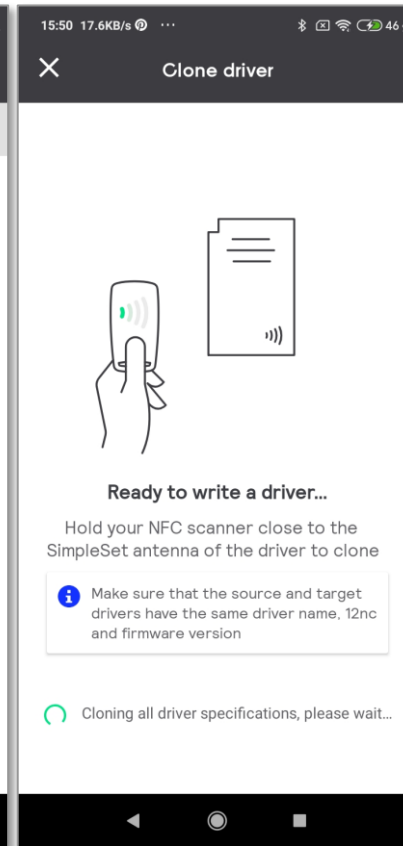


Copy the data from the source driver

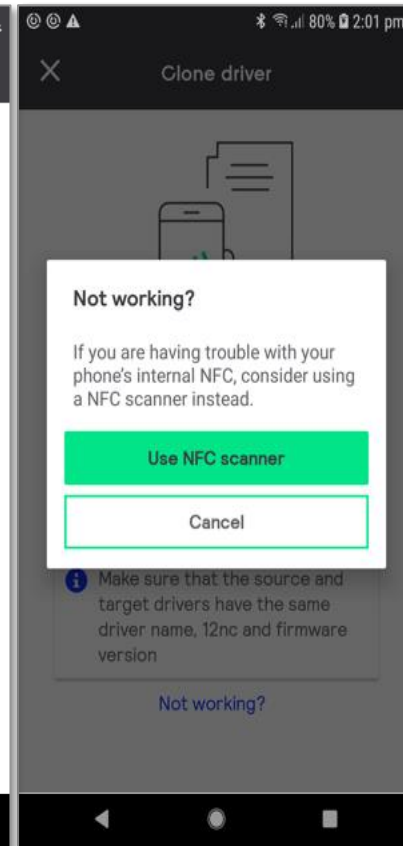
Keep alignment until all parameters are read.



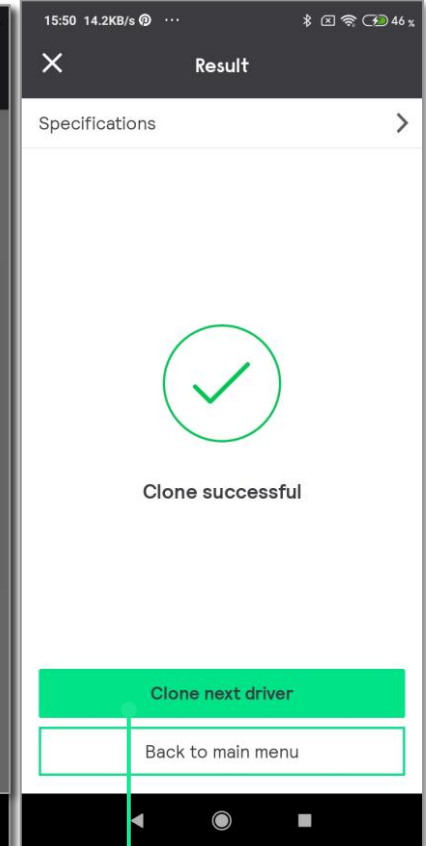
Paste the data in a similar driver



Keep alignment until all parameters are written.



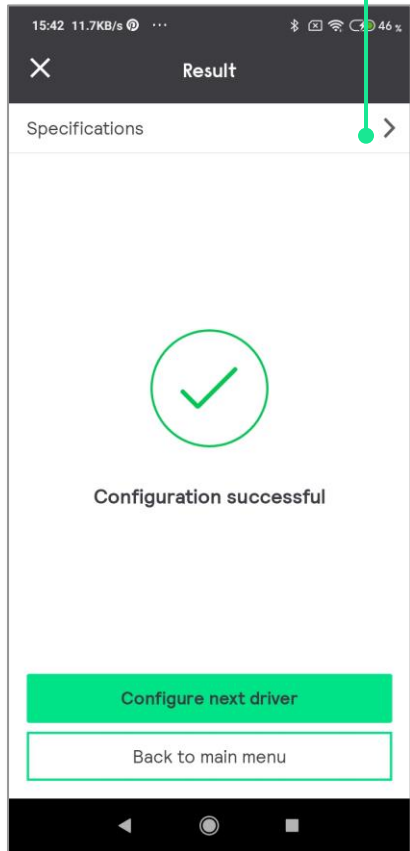
When the internal antenna cannot communicate, you can consider to use an external antenna



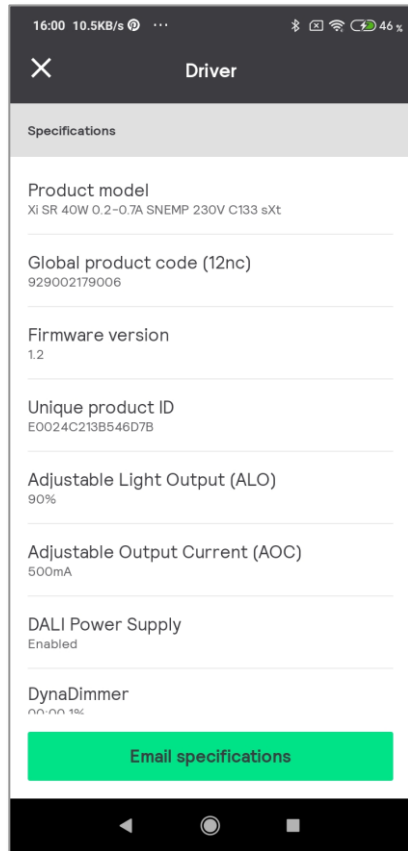
You can clone another identical driver

# Reporting specifications and diagnostics

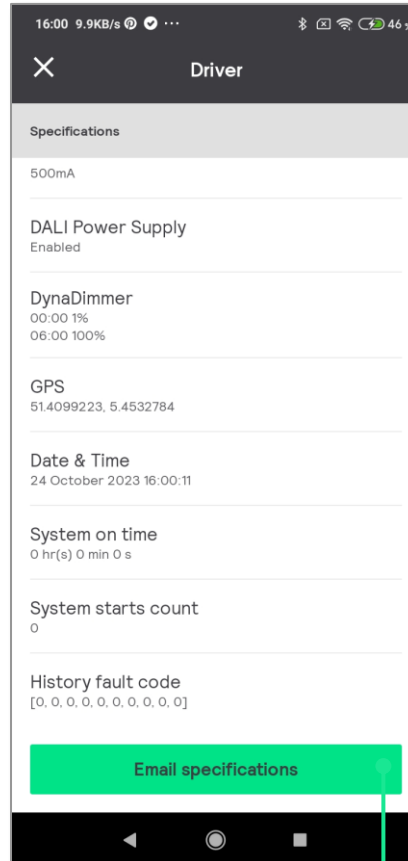
Specification report of last configuration



Specification (top)

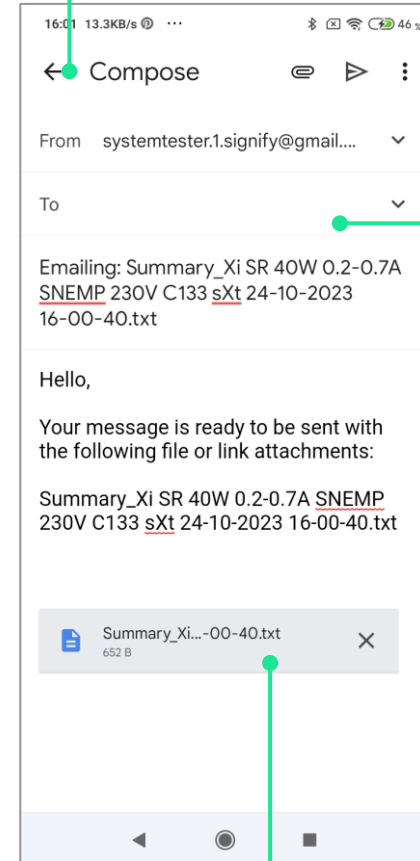


Specification (bottom)



Send e-mail with the specification for traceability

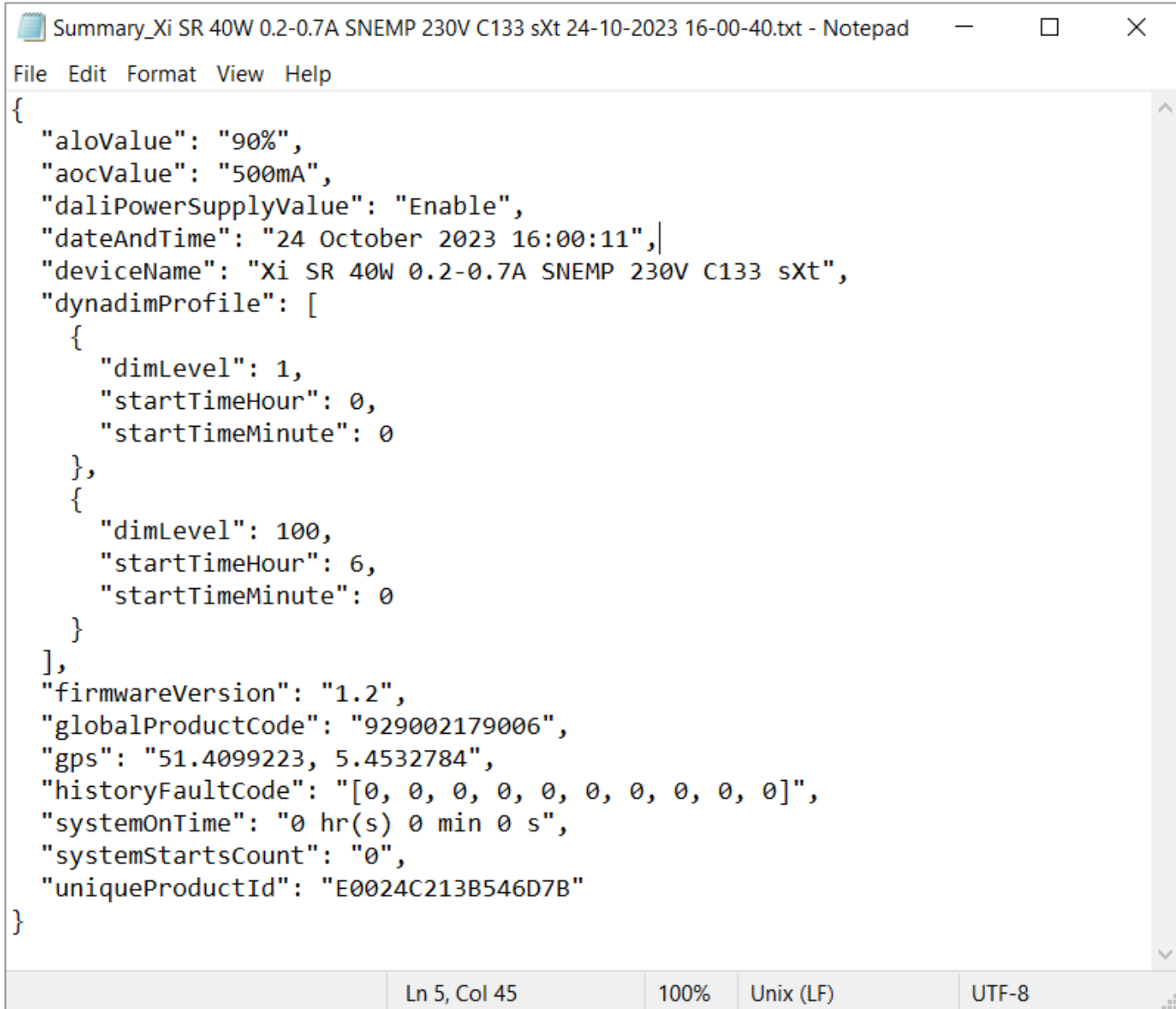
Back to previous



Include e-mail address

See annex for format

# Example of Specification and Diagnostic format email

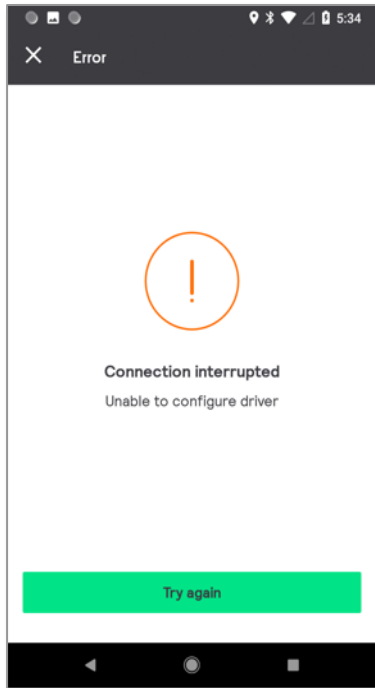


The image shows a Notepad window titled "Summary\_Xi SR 40W 0.2-0.7A SNEMP 230V C133 sXt 24-10-2023 16-00-40.txt - Notepad". The window contains a JSON object representing device specifications and diagnostic data. The JSON is as follows:

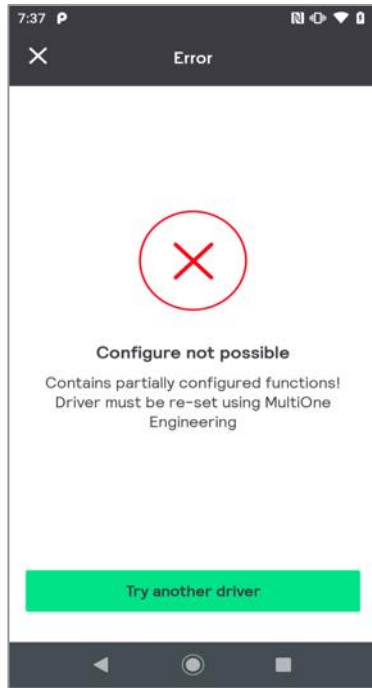
```
{
  "aloValue": "90%",
  "aocValue": "500mA",
  "daliPowerSupplyValue": "Enable",
  "dateAndTime": "24 October 2023 16:00:11",
  "deviceName": "Xi SR 40W 0.2-0.7A SNEMP 230V C133 sXt",
  "dynadimProfile": [
    {
      "dimLevel": 1,
      "startTimeHour": 0,
      "startTimeMinute": 0
    },
    {
      "dimLevel": 100,
      "startTimeHour": 6,
      "startTimeMinute": 0
    }
  ],
  "firmwareVersion": "1.2",
  "globalProductCode": "929002179006",
  "gps": "51.4099223, 5.4532784",
  "historyFaultCode": "[0, 0, 0, 0, 0, 0, 0, 0, 0]",
  "systemOnTime": "0 hr(s) 0 min 0 s",
  "systemStartsCount": "0",
  "uniqueProductId": "E0024C213B546D7B"
}
```

The status bar at the bottom of the Notepad window shows "Ln 5, Col 45", "100%", "Unix (LF)", and "UTF-8".

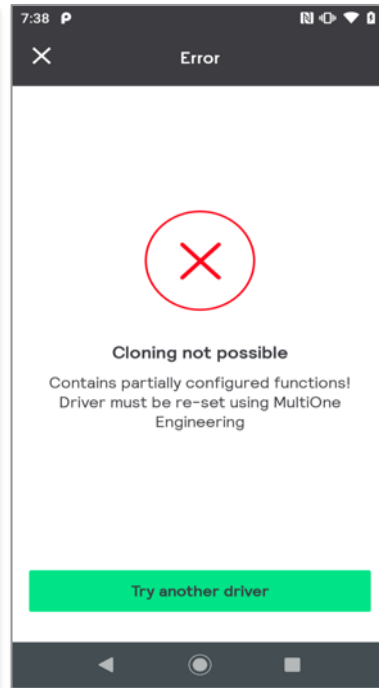
# Error messages



Reading or configuring was interrupted. Try again. Antenna should be aligned during complete read cycle.

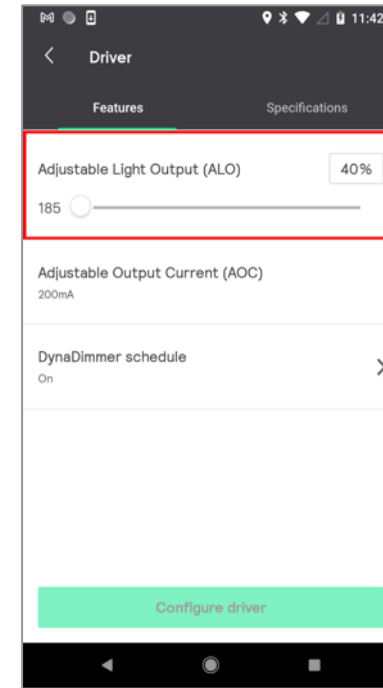


Configuring has failed and corrupted the internal memory. Please contact your luminaire supplier to repair this with MultiOne Engineering

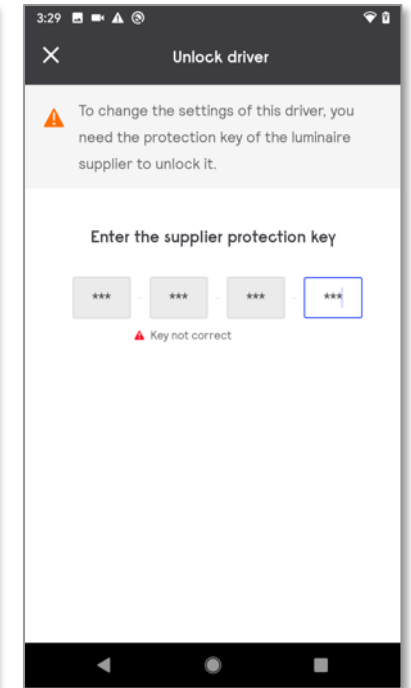


The driver cannot be cloned:

- Firmware mismatch
- Feature not available
- Driver/ 12nc's mismatch



Yellow or red box: (possibly) Incorrect configuration of the driver



When the driver is protected by the manufacturer of the luminaire, you will need the Supplier Protection KEY (OEM write protection) to be able to configure the driver.



Manual for  
External NFC scanner  
used with  
MultiOne Mobile



Key for power on/off, reset and scanning (for specific setting)

Blue LED to indicate battery charge status and BLE connection

Yellow LED for scanning active HW reset

Antenna



Key ring

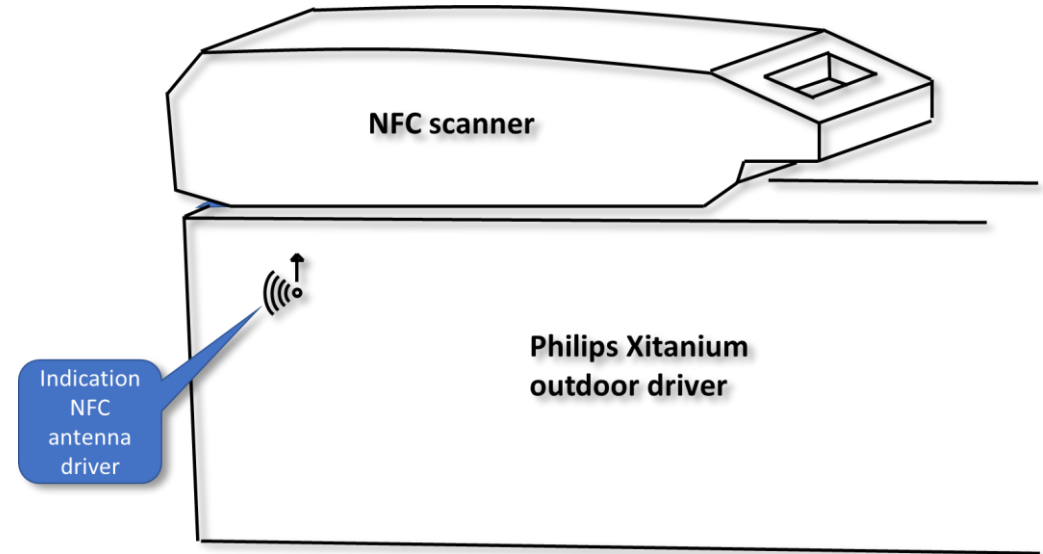
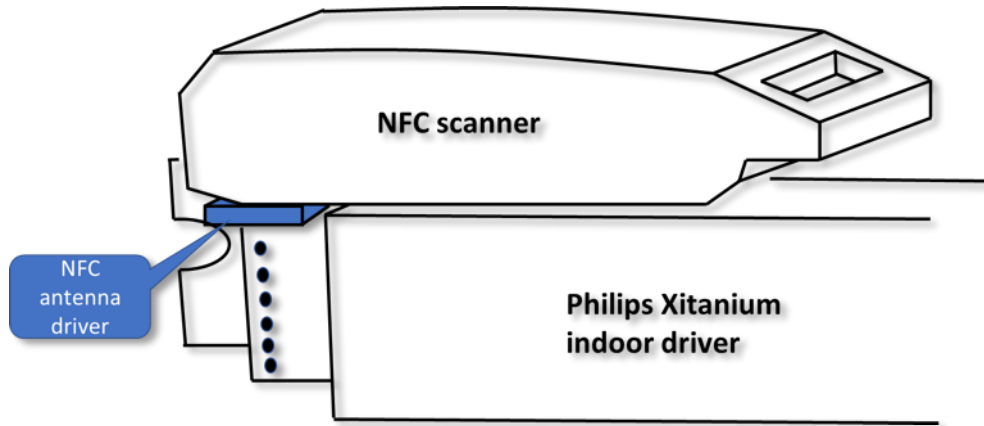


Micro USB connector

## Annex – How to use the external NFC scanner?

- Make sure the battery of the external NFC scanner is charged sufficiently, use the micro-USB connector near the key-ring to charge. A low battery will have less good communication capabilities
- Switch on the external NFC scanner by the pushbutton (see previous slide) and pair it with the phone.
- Position the antenna of the scanner parallel to the antenna of the driver for optimal connection (see explanation next slide)
- Position the scanner first correctly to the driver, and then activate the requested action on the smartphone
- In case the communication is not as good as can be expected, please experiment by changing the position of the NFC scanner relative to the driver
- When reading or writing data to or from the driver you do not need to push the pushbutton
- The scanner will switch off automatically after approximately 5 minutes

## Annex – Best position of the external NFC scanner





# Annex – Button, LED's and Beeper external NFC scanner

Action	Light Displayed	Light Sequence	Beeper Sequence	Status - Function
				Off
1 sec. hold				Start Devices
				Power On
				Scanning
				Successful reading
				Reading error

Scan Functions

2 sec. hold				Shutdown
				Battery Low
USB connected				Battery Recharge
plugging USB				Start Devices
				Battery Low no operations allowed
				Bluetooth disconnected
6 sec. hold				Hardware reset

Battery Status

## Annex – specifications NFC scanner

Details	Specifications
Man/Machine Interface	1 function key for RFID read activation, Multitone Beeper, 2 LED for device operation signaling
Internal Devices	Frequency: 13.56 MHz ; Power: 200 mW Standard: ISO 15693, ISO 14443A/B, NFC Type-2 Tag, NFC Type-4 Tag, NFC Type-5 Tag, ST25TB ; Read range: up to 6 cm ; Embedded antenna
Interfaces	Micro USB type B, Bluetooth® Low Energy
OS Compatibility	iOS, Android, RIM, Windows Mobile/Phone, Windows, macOS, Linux
Processor	Texas Instruments MSP430 (16bit RISC a 16MHz)
Power Supply	USB powered: 230mA peak @ 5Vdc (RF active full power), 30mA @ 5Vdc (idle mode) Battery powered: Li-Poly Battery 3.7Vdc 300mAh, rechargeable via micro-USB Battery life 15000 readings, 14 h in idle mode
Working Temperature	-20°C / 60°C
Dimension	Height 7.7 cm – Width 4.3 cm – Depth 1.7 cm
Weight	21 g
Protection Degree	IP 54
Datasheet	<a href="https://www.tertiumtechnology.com/TERTIUM_NFC_SCANNER_DataSheet_EN">TERTIUM_NFC_SCANNER_DataSheet_EN(tertiumtechnology.com)</a>

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