Manual
MultiOne Mobile version 1.2

2021-07-22

PG Services and Tools

MultiOne Mobile

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

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

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

Drivers with NFC have this symbol

Supported features of the app:

- LED current (AOC) (only read)
- Light Level (ALO) (read & write)
- Dynadim (read & write when originally enabled)
- Cloning (copy all the features to another driver)
- E-mail the driver's specification
- Connect an NFC scanner

signify

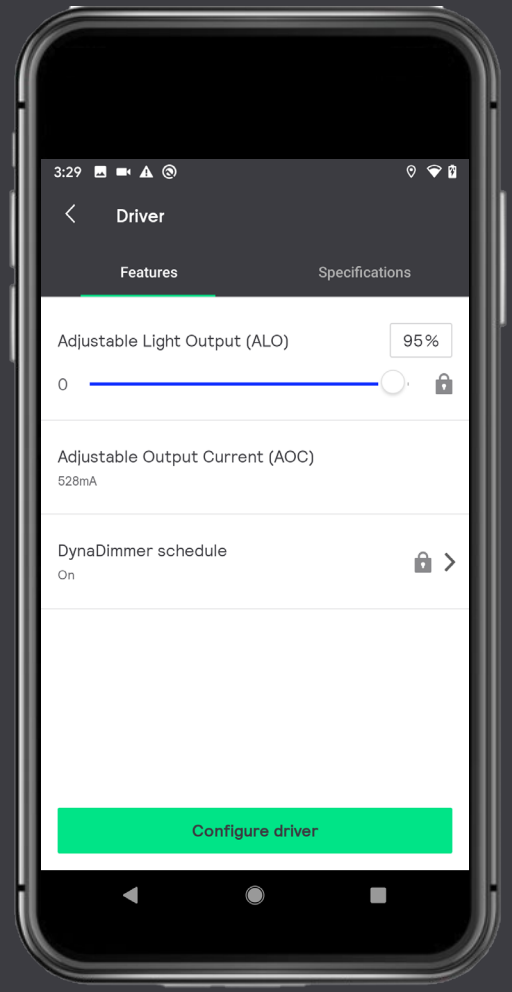
Good to know (1)

The app will work on smartphones with Android version 8 or higher.

The manufacturer of the fixture could have protected the features with a so-called Supplier Protection Key (OEM password), please contact the OEM to change feature settings.

Only remove the smartphone or the NFC scanner when you are sure that the configuration is finished. You can see the result on the screen. In case the writing is interrupted, there is a chance that the driver is not correctly configured.

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



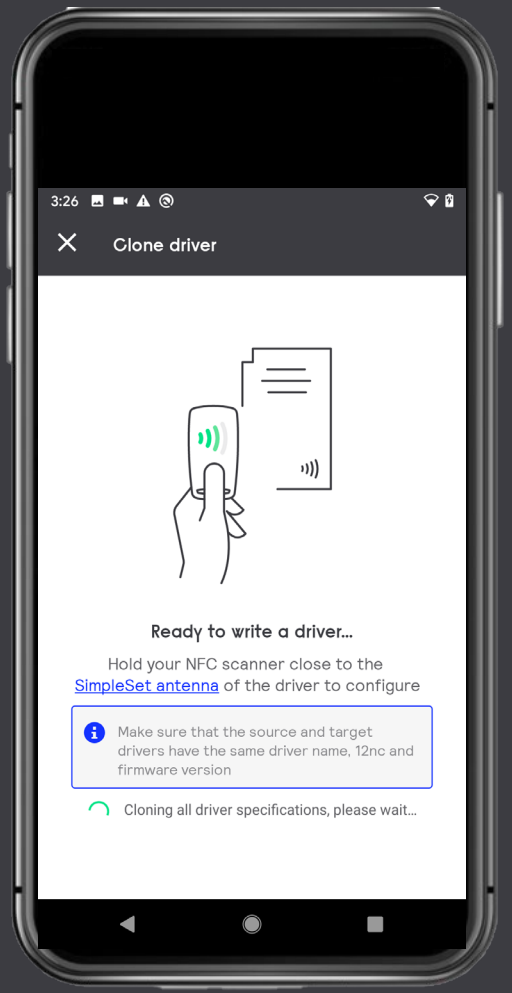
signify

Good to know (2)

For security reasons the App can only be used in combination with L2 secured NFC scanner. These scanners can be found in the Signify OEM sample web-shop.

When the summary was sent via e-mail but is not visible in the inbox, please check your spam-box.

If you have problems with reading of a driver, we suggest to start using an NFC scanner. See slide 6.



Details on Cloning

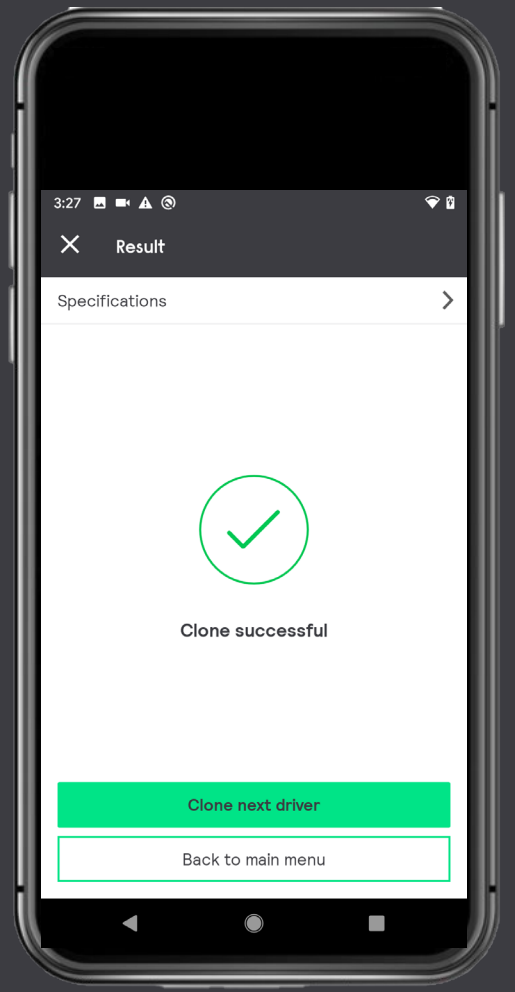
For cloning, the original and destination driver should be identical (including firmware version). This feature enables you to replace a defect driver in the field by copying the full content of a driver into a replacement driver. Characteristics of the fixture will remain identical.

All features and parameters are copied into the new driver, except the items which are related to the driver.
Not copied is:

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

If the original driver has an OEM Protection Key (OWP), the content can be copied without Knowing/Entering the password! The OWP will be copied to the destination driver.

The destination driver should not be protected with an OWP!



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NFC scanner

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

- When your smartphone has no or weak 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 (or higher). This NFC scanner will solve this.

This device communicates via BLE with your smartphone.

The NFC scanner has a secure BLE connection with the smartphone
The NFC scanner is available in the sample web shop:

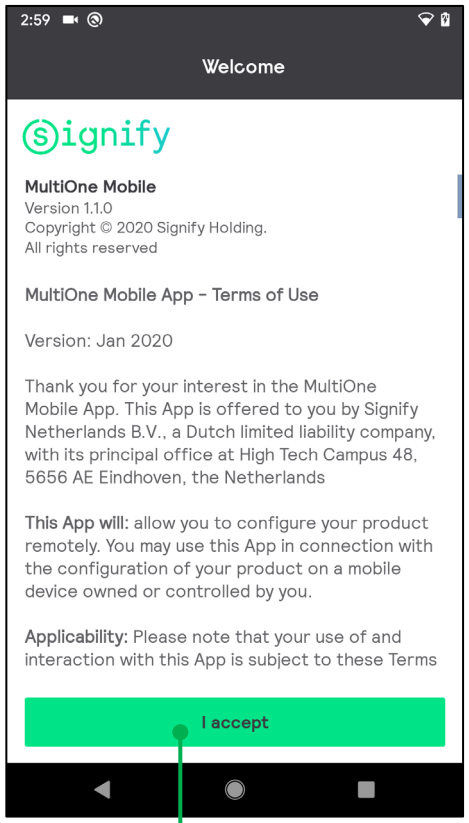
Home page | Philips OEM Sample Shop EMEA

BLE = Bluetooth Low Energy

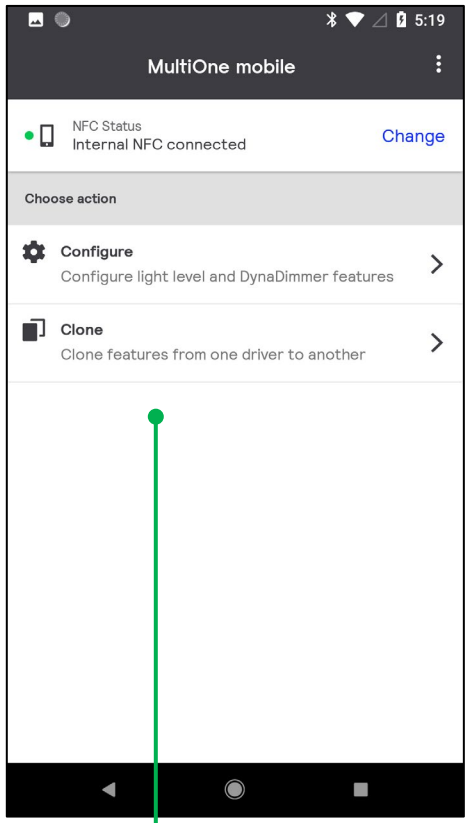
NFC = Near Field Communication

The NFC scanner enables you to read/write Philips drivers

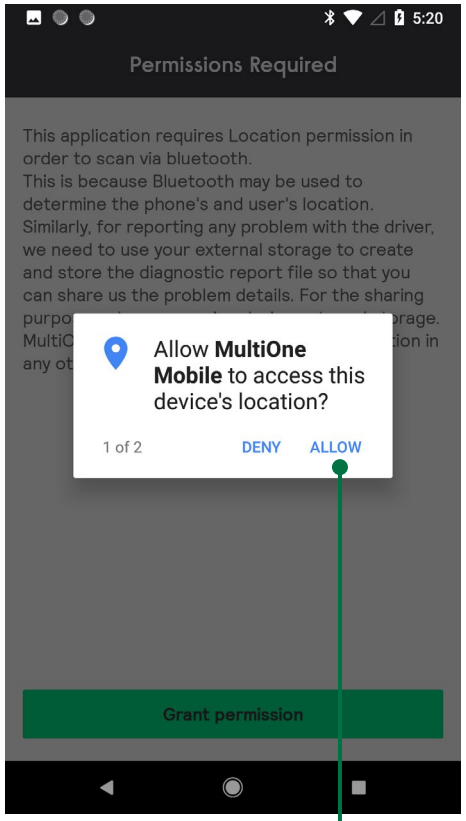
MultiOne Mobile – Opening screens



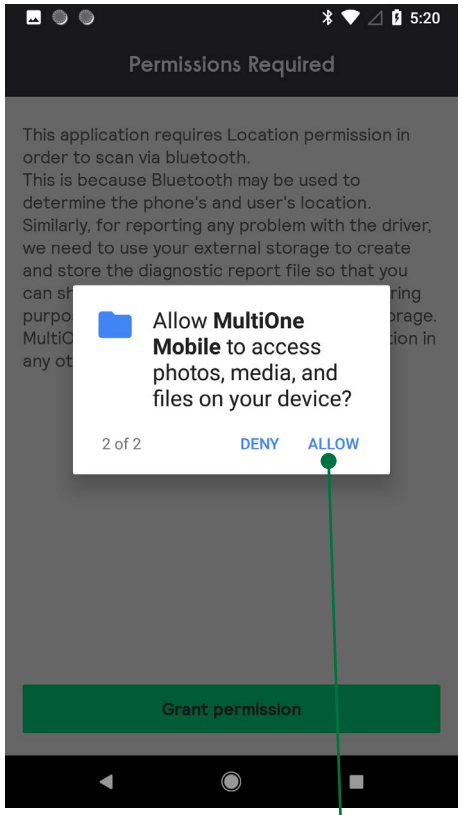
Agree with term of use to continue



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

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MultiOne Mobile – General screens

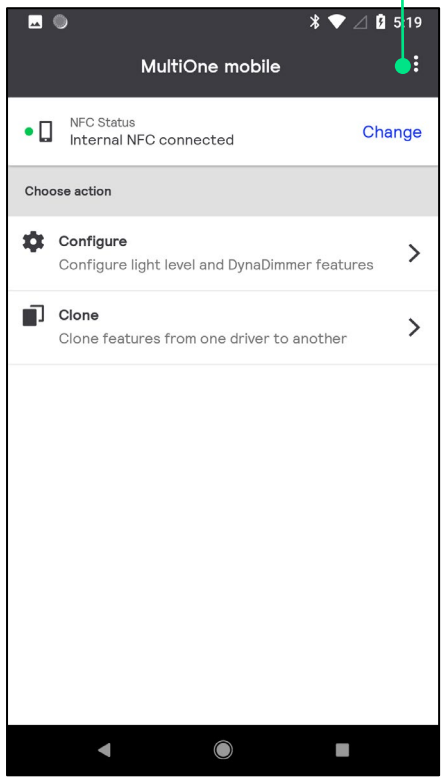
Open “Disclaimer” and “About” screen

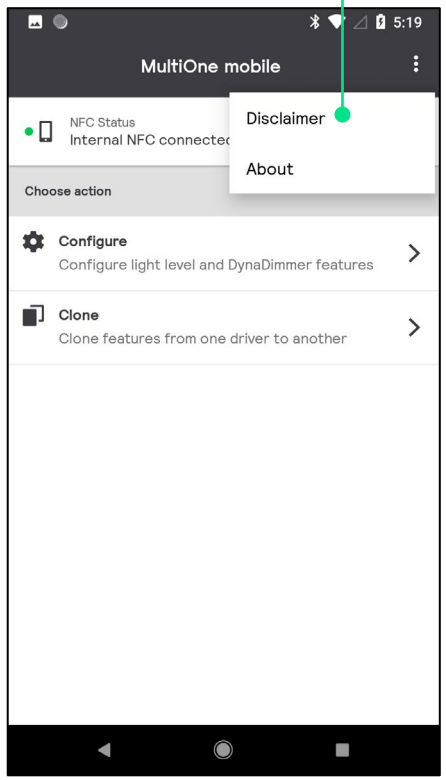
Open “Disclaimer”

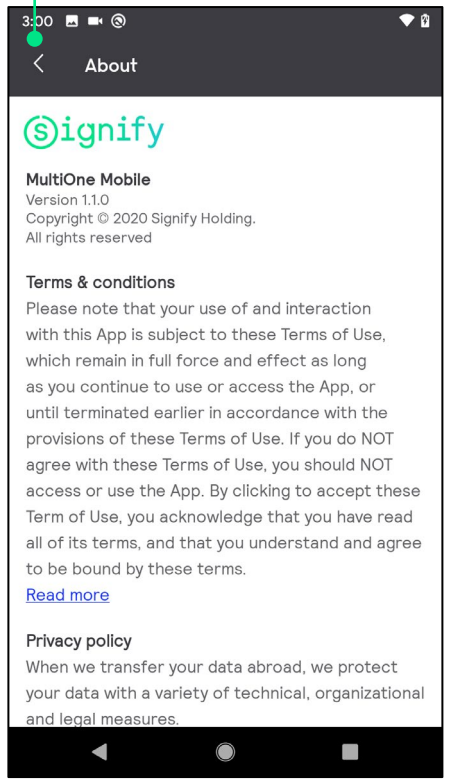
Back to previous screen

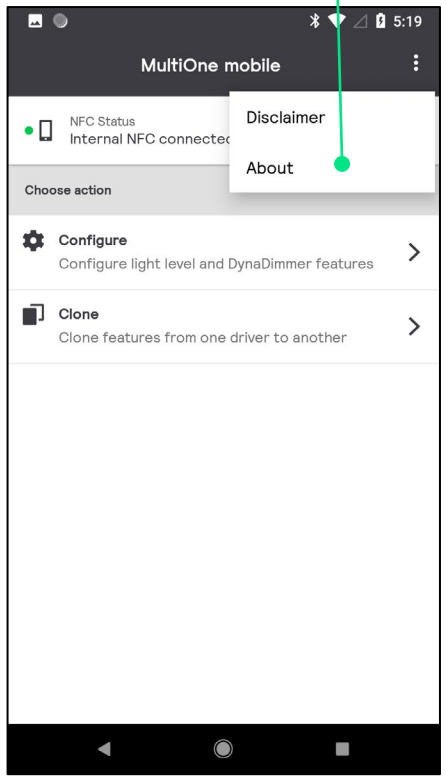
Open “About” screen

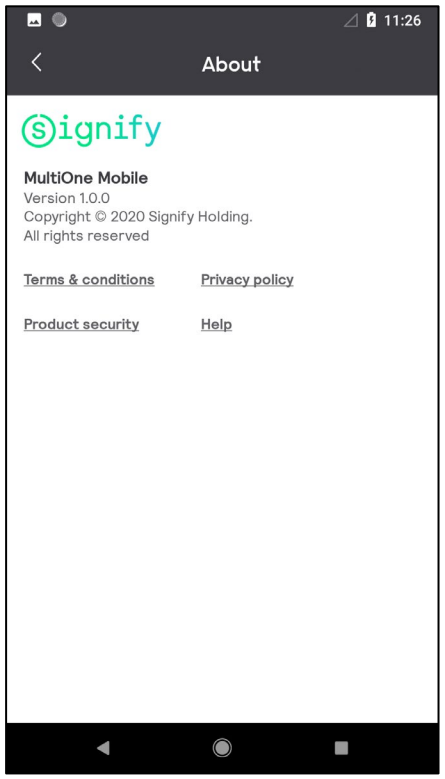
Screen with App details
- Terms and conditions
- Privacy policy
- Product security
- Help (this document)





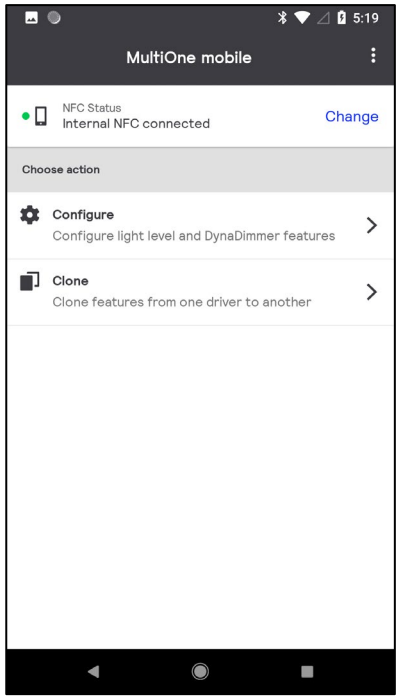


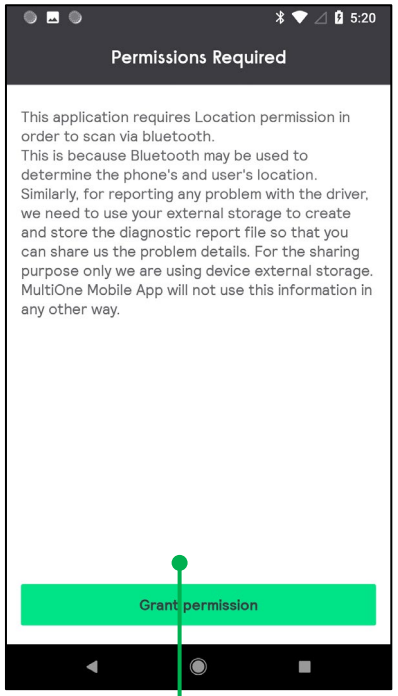




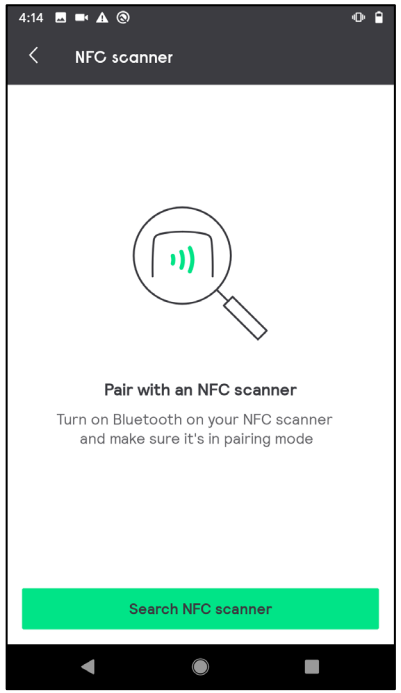
MultiOne Mobile – Connect external NFC scanner

Change from internal to external NFC scanner

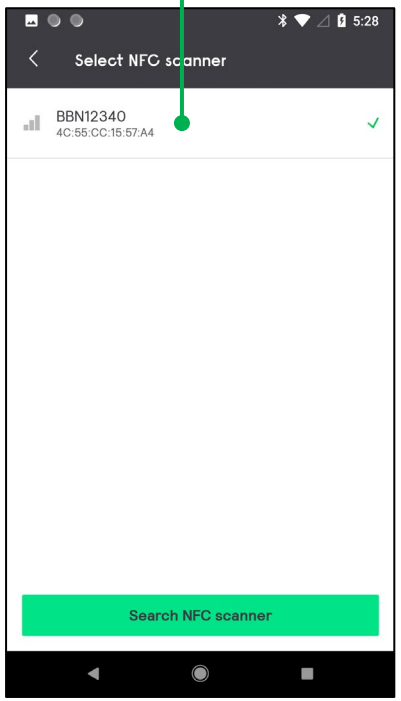




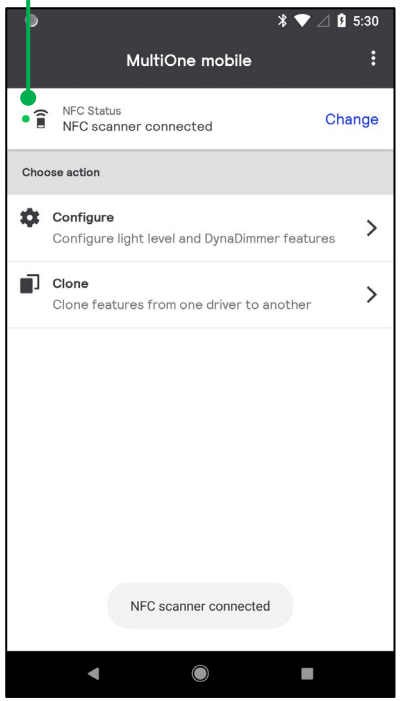
Grant permission to use BLE

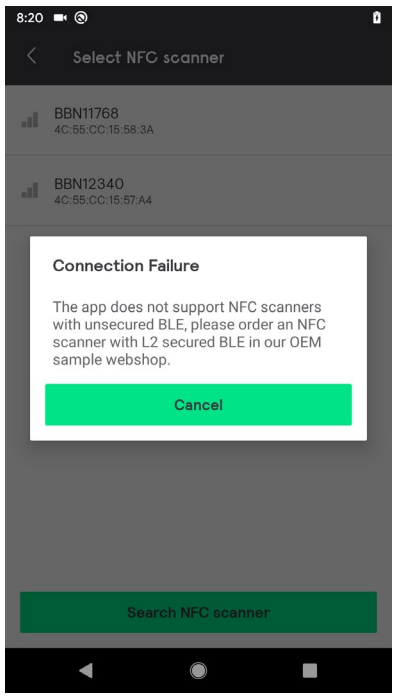


Select your scanner



Green dot: Indication NFC scanner is paired

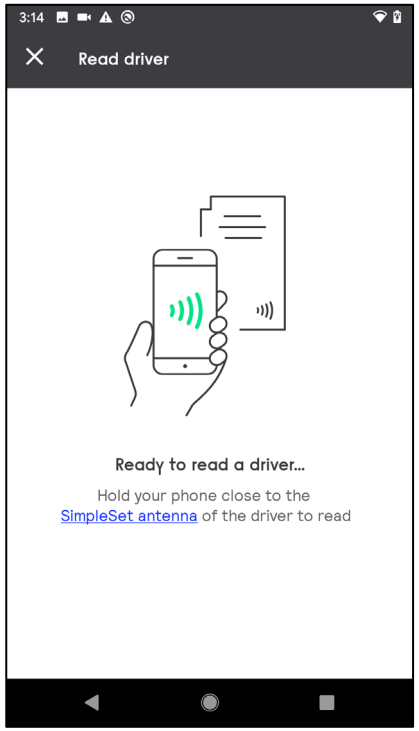




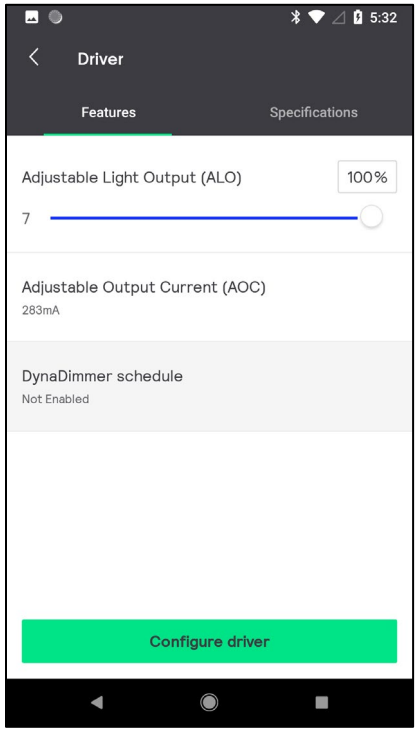
The app can only connect to NFC scanners with secured BLE (L2)

signify

MultiOne Mobile – supported features: ALO, DynaDimmer (dimming schedule)

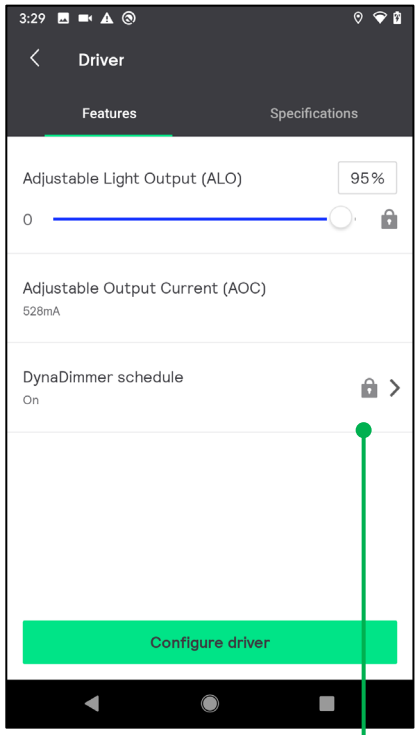


Hold your smartphone with the Internal NFC antenna close to the driver, at the marking on the driver



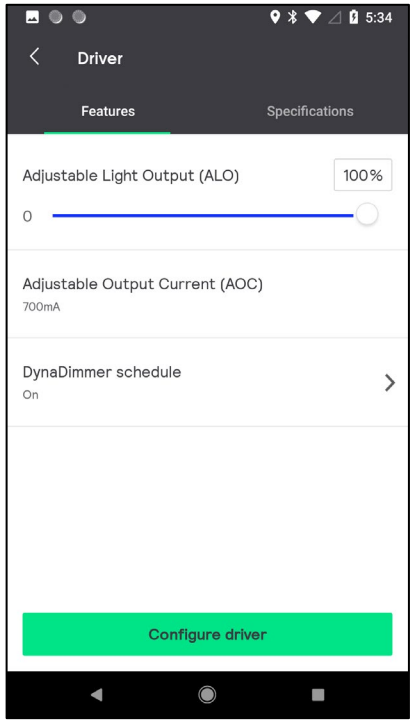
Adjustable output current (AOC) is read only. You cannot change the value.

For this driver DynaDimmer is NOT enabled during initial configuration.
You cannot configure this feature



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

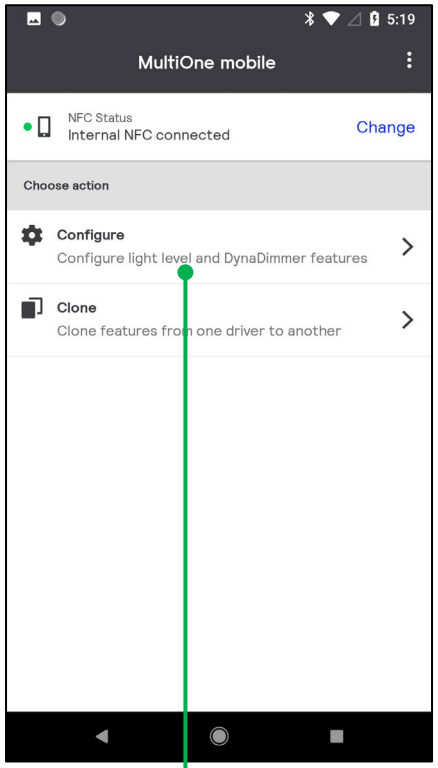
To configure these features you will need the password.



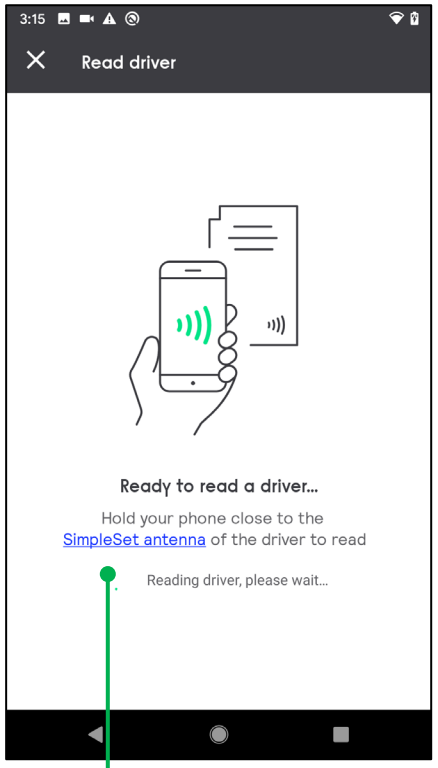
The ALO is always configurable.

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

MultiOne Mobile – Read and change settings

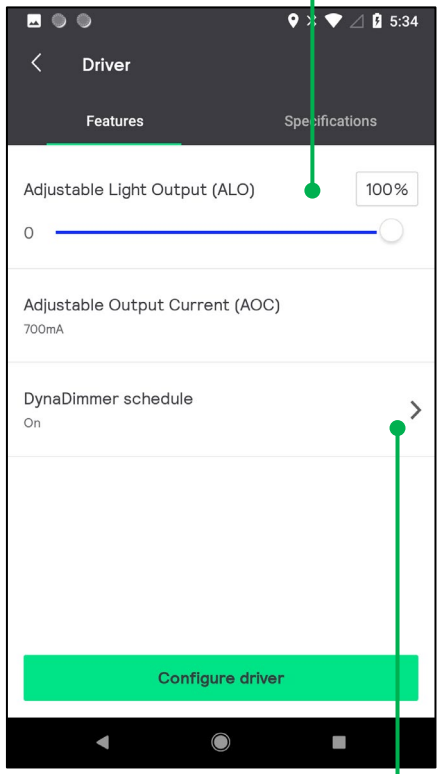


Choose the action you want to perform
Align device with NFC antenna



Keep alignment until all parameters are read.

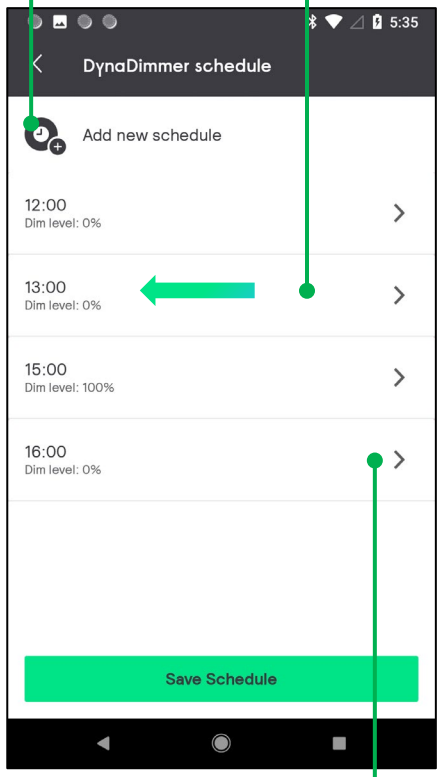
Change ALO via slider or input field



Open DynaDimmer schedule

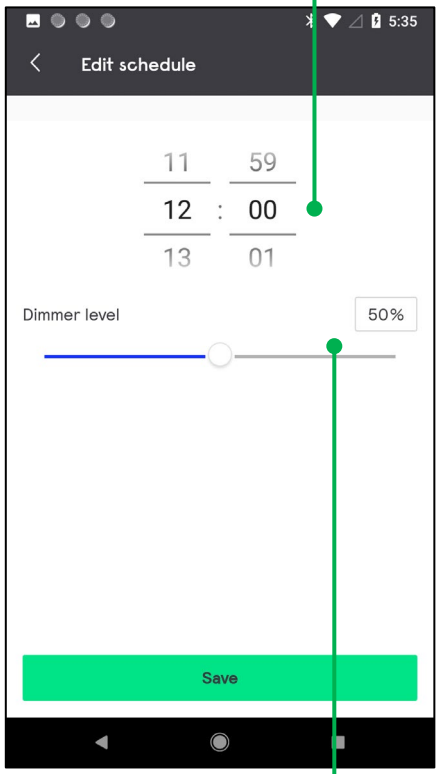
Add DynaDimmer step

Swipe to remove step



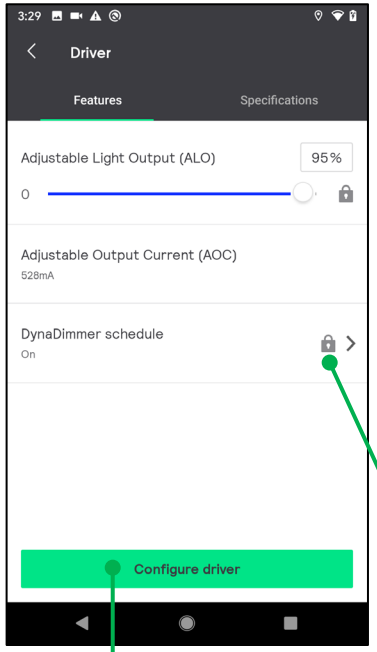
Click to modify step

Change step time

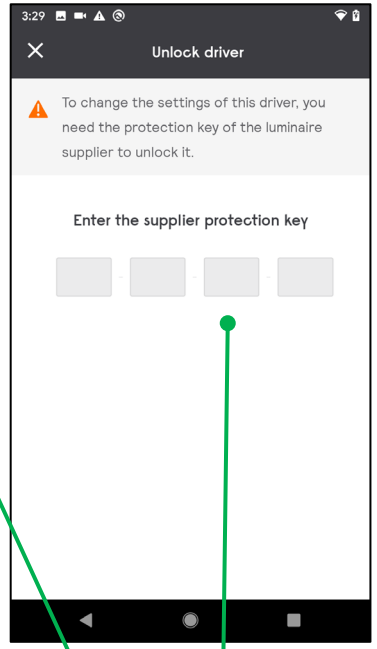


Change step level

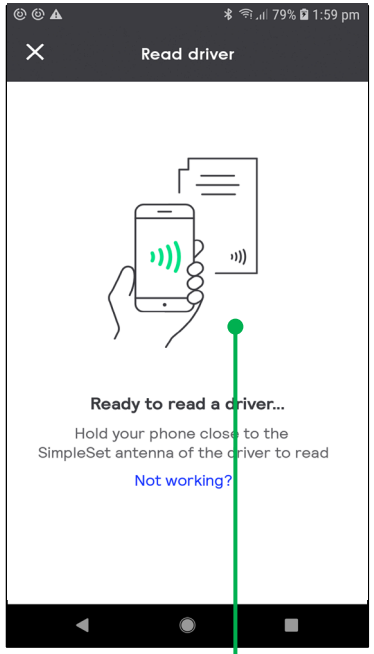
MultiOne Mobile – Configure driver (write)



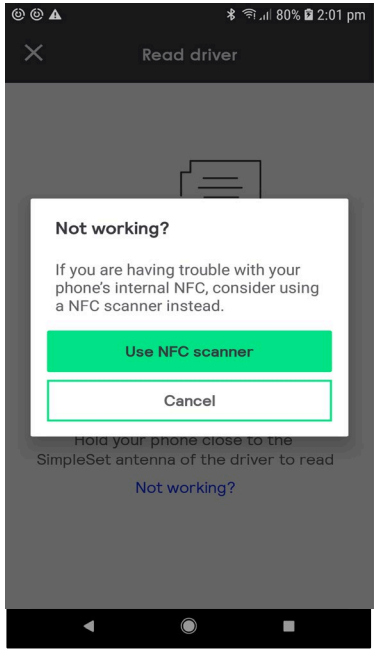
Configure device



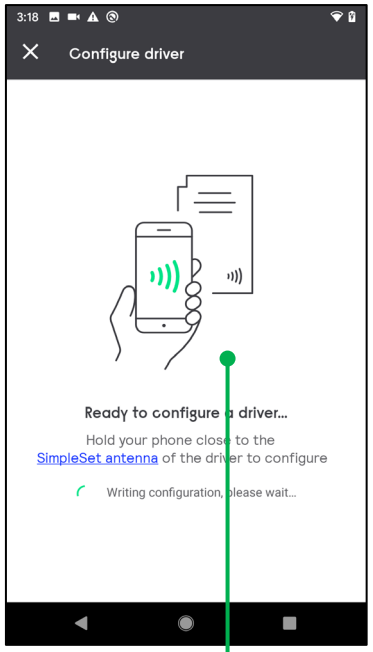
A lock indicate: write protection.
You will need a Supplier Protection KEY (OEM write protection) to be able to configure the driver



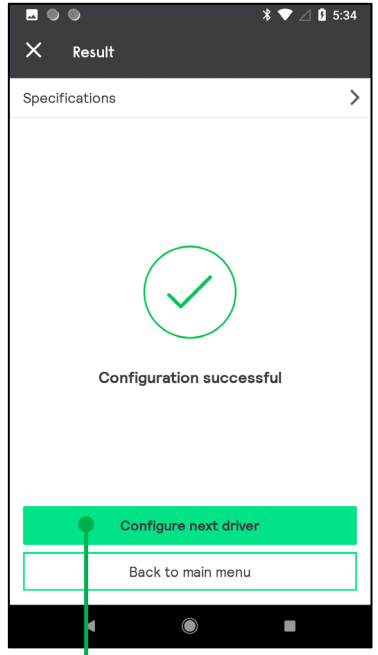
Align device with NFC antenna



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

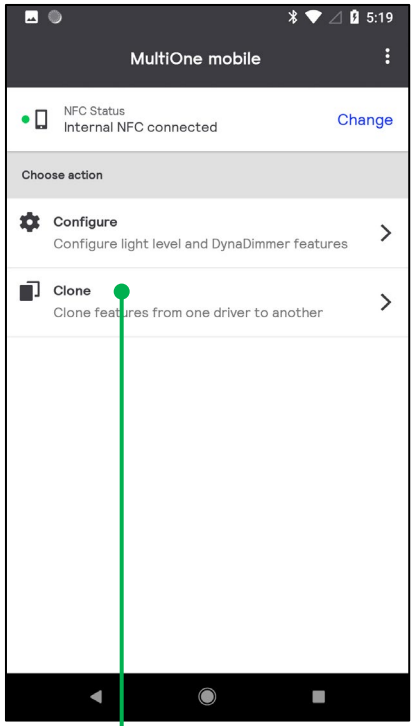


Keep alignment until all parameters are written.

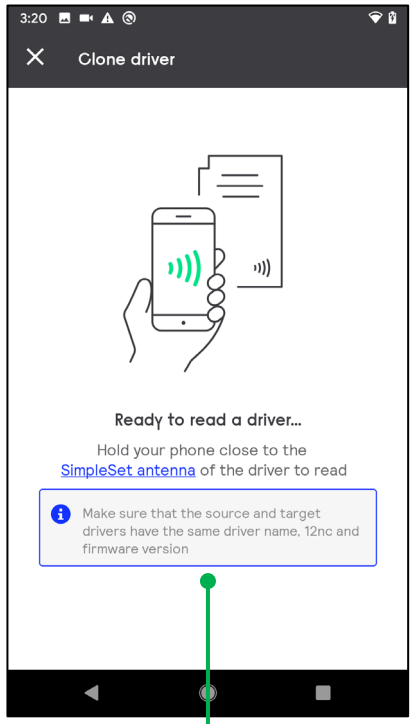


Same settings in another driver

MultiOne Mobile – Cloning

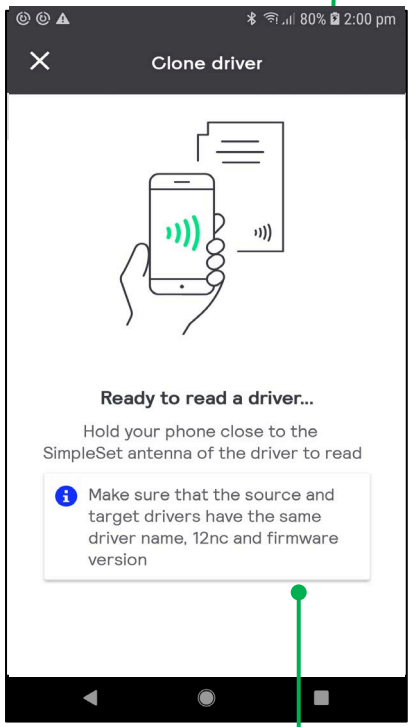


Choose cloning

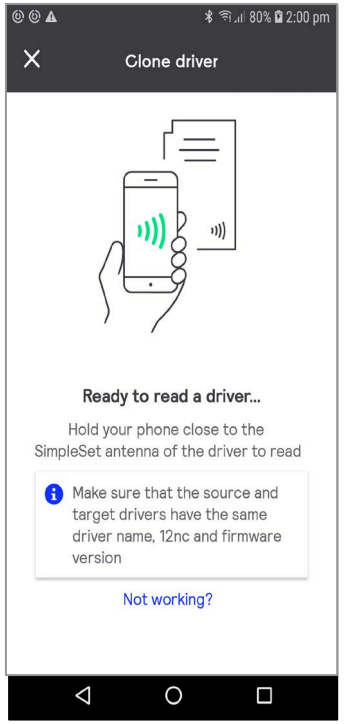


Copy the data from the source driver
Keep alignment until all parameters are read.

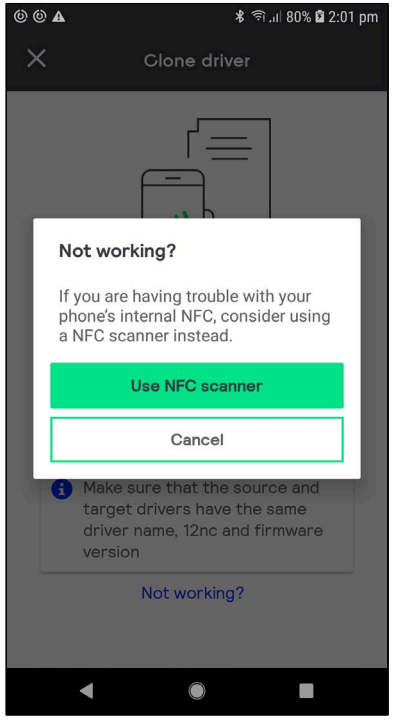
Driver specification are presented



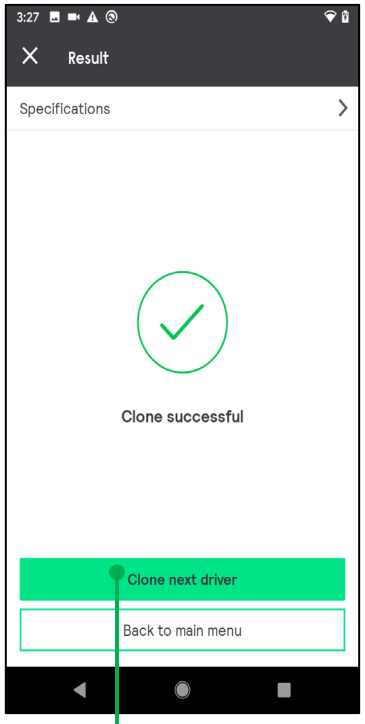
Paste the data in a similar driver



Keep alignment until all parameters are written.



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

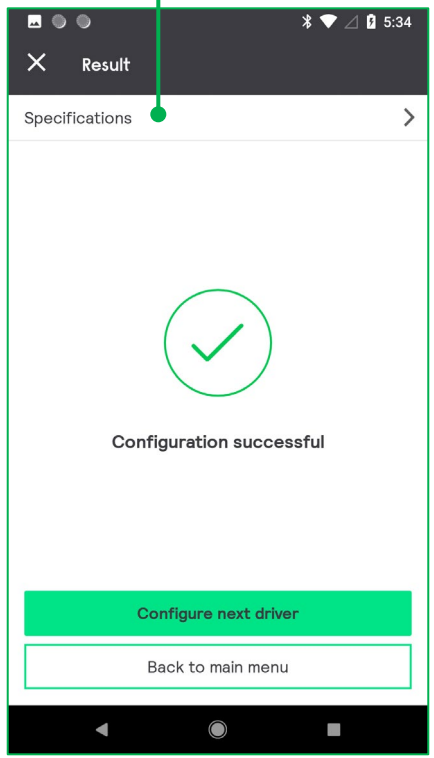


You can clone another identical driver

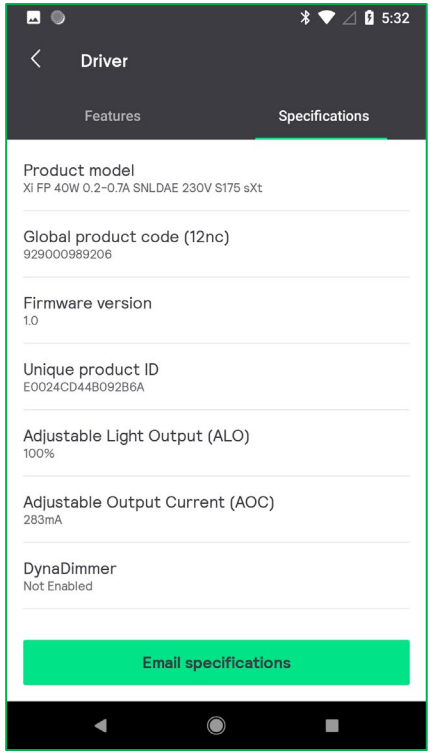
signify

MultiOne Mobile – Reporting

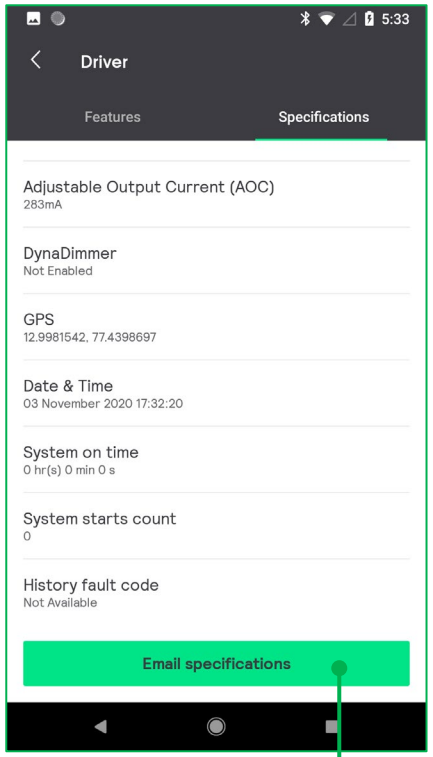
Specification report of last configuration



Specification (top)

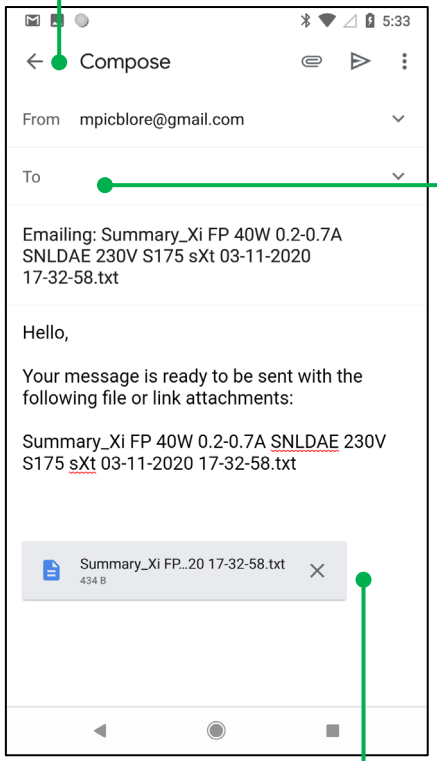


Specification (bottom)



Send e-mail with the specification for traceability

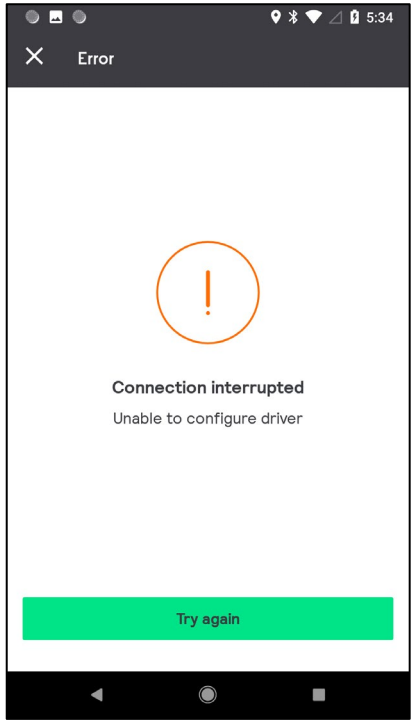
Back to previous



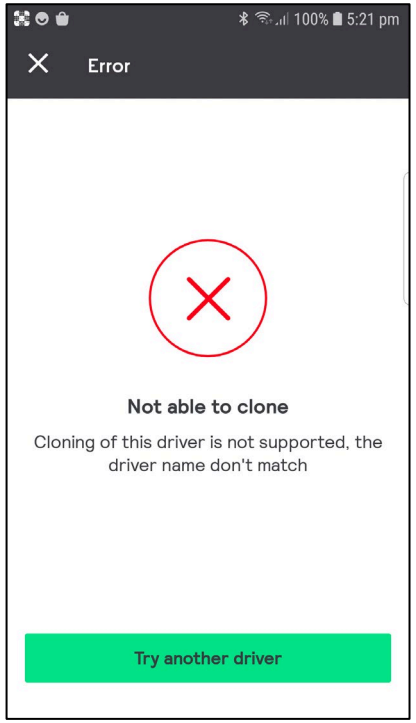
Include e-mail address

See annex for format

MultiOne Mobile – Some Error messages

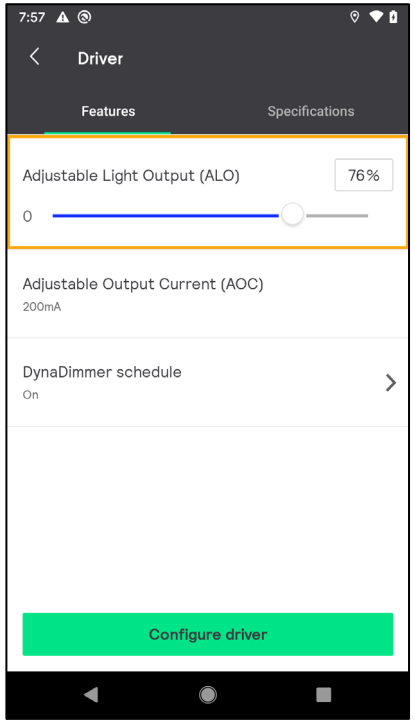


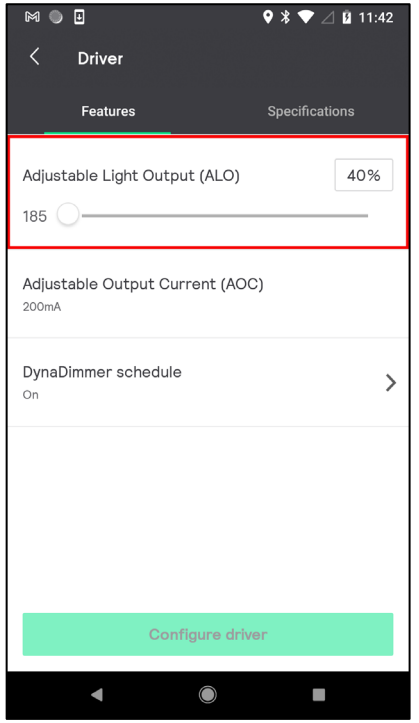
Reading or writing was interrupted. Try again. Antenna should be aligned during complete read cycle.



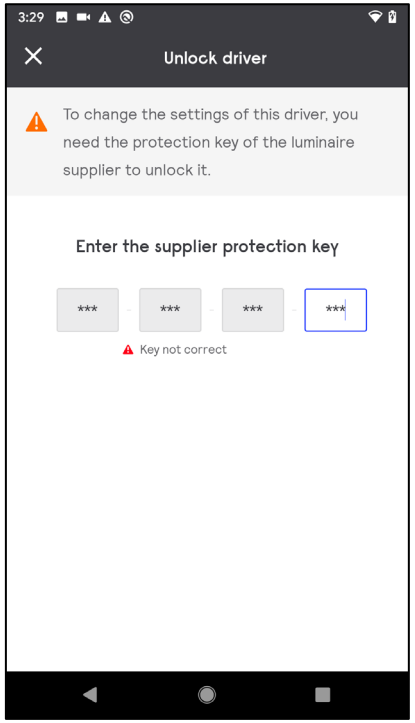
The driver cannot be cloned:

- Driver mismatch
- Firmware mismatch
- Feature not available





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.

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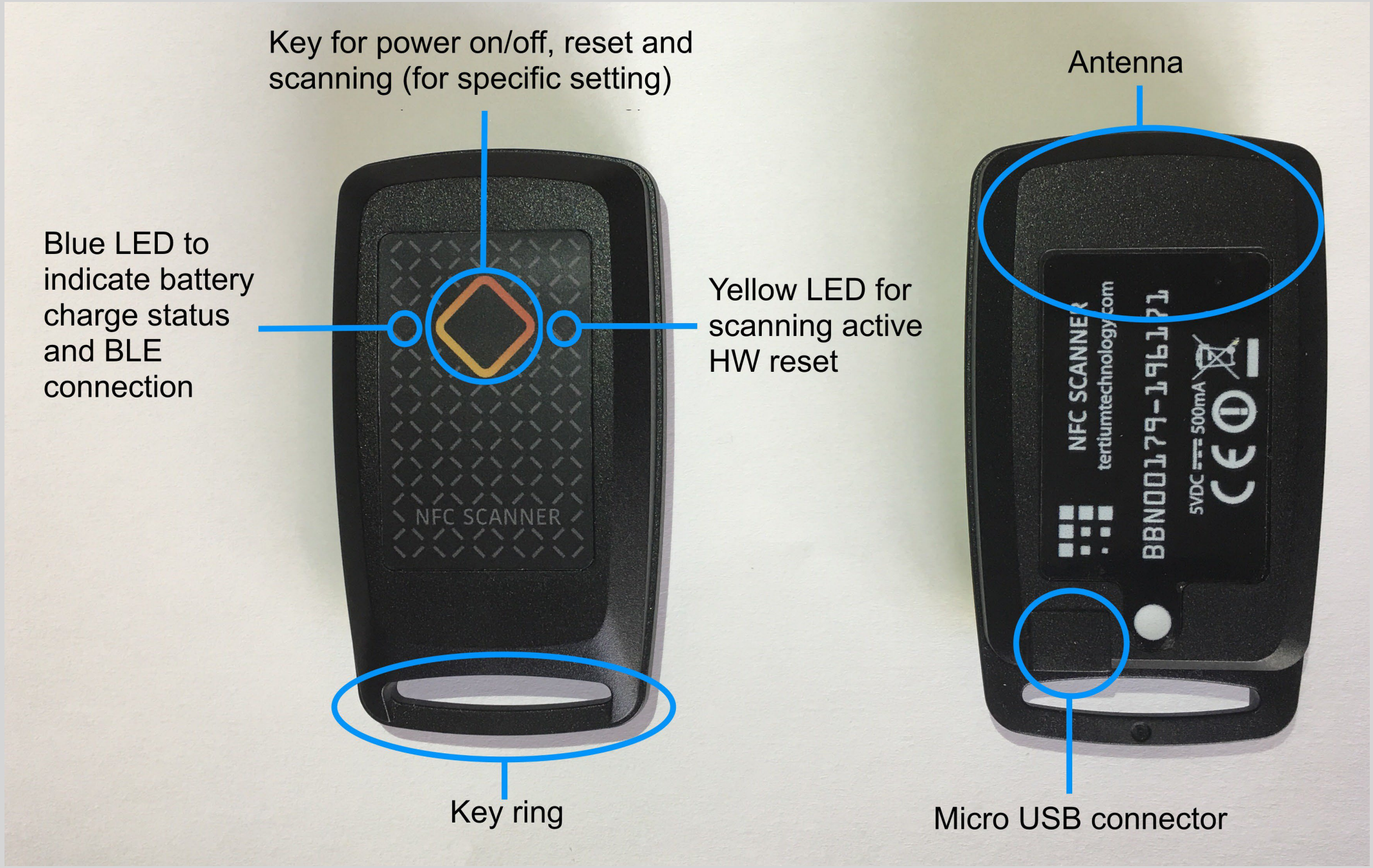
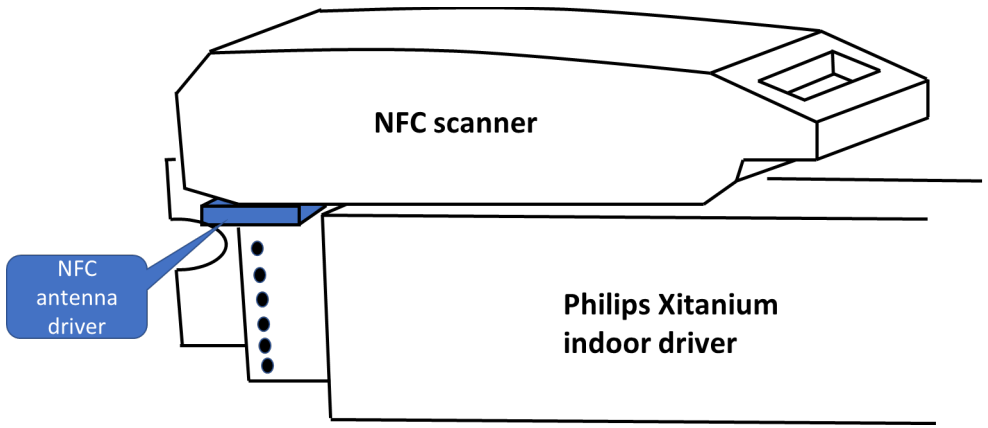
Manual
NFC scanner
to be used with MultiOne Mobile

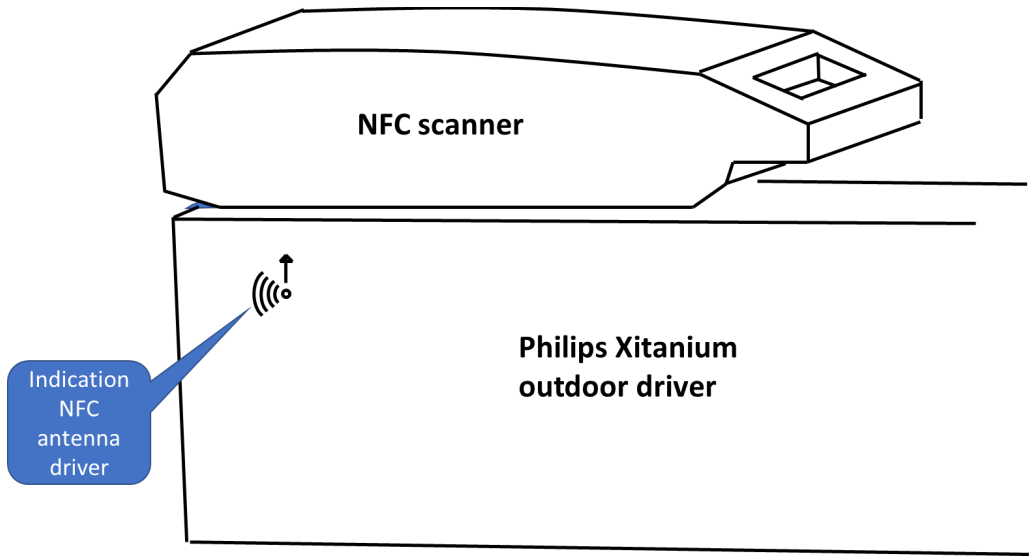

Key for power on/off, reset and scanning (for specific setting)
Blue LED to indicate battery charge status and BLE connection
Yellow LED for scanning active HW reset
Key ring
Antenna
Micro USB connector
NFC SCANNER
NFC SCANNER
tertiumtechnology.com
BBN00179-196171
5VDC 500mA

How to use the NFC scanner?

- Make sure the battery of the 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 NFC scanner by the pushbutton (see previous slide)
- The scanner will switch off automatically after approximately 5 minutes
- 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 than 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

Best position of the NFC scanner relative to the PHILIPS driver





Button, LED's and Beeper

Action	Light Displayed	Light Sequence	Beep 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
		Max 10 s		Battery Low no operations allowed
				Bluetooth disconnected
6 sec. hold				Hardware reset

Battery Status

Specifications

MAN/MACHINE INTERFACES	1 function key for RFID read activation, poweron/off
	Multitone Beeper
	2 LED for device operation signaling
INTERNAL DEVICES	Frequency: 13.56 MHz
	Channel occupancy in accordance with: • ETSI EN 302 330-2 V1.6.1, ETSI EN 300 328 V1.9.1
	Power: 200 mW
	Standard: ISO 15693, ISO 14443-A (only ID reading)
	Reading distance: up to 6 cm(*)
	Embedded antenna
INTERFACES	Micro USB type B
	Bluetooth® low energy technology
OS COMPATIBILITY	Android, iOS, RIM, Windows Mobile/Phone, Windows, OSX, Linux compatible with Bluetooth® low energy technology
PROCESSOR	Texas Instruments MSP430 (16 bit RISC a 16MHz)
POWER SUPPLY	**USB powered**: 230mA peak @ 5Vdc (RF active full power,beeper,battery charging), 30mA @ 5Vdc (idle mode,battery charged)
	Battery powered: Li-Poly Battery 3.7 Vdc 300mAh, rechargeable via micro USB, battery life 15000 reading, 24 h in idle mode
WORKING TEMPERATURE	-20°C / 60°C
DIMENSIONS	Width 4.3 cm – Height 7.7 cm – Depth 1.7 cm
WEIGHT	21 g
PROTECTION DEGREE	IP54

(*) depending on the TAG

Tertium manual

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ANNEX MultiOne Mobile – example of Specification format

Summary_Xi SR 40W 0.2-0.7A SNEMP 230V C133 sXt 22-10-2020 16-04-50.txt - Notepad

File Edit Format View Help


```
{
  "aloValue": "78%",
  "aocValue": "200mA",
  "dateAndTime": "22 oktober 2020 16:04:24",
  "deviceName": "Xi SR 40W 0.2-0.7A SNEMP 230V C133 sXt",
  "dynadimValue": "Not Enabled",
  "firmwareVersion": "1.0",
  "globalProductCode": "929001573506",
  "gps": "51.3584784, 5.3301111",
  "historyFaultCode": "[0, 0, 0, 0, 0, 0, 0, 0, 0, 0]",
  "systemOnTime": "0 hr(s) 0 min 0 s",
  "systemStartsCount": "0",
  "uniqueProductId": "E0024D84D8C27041"
}
```

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