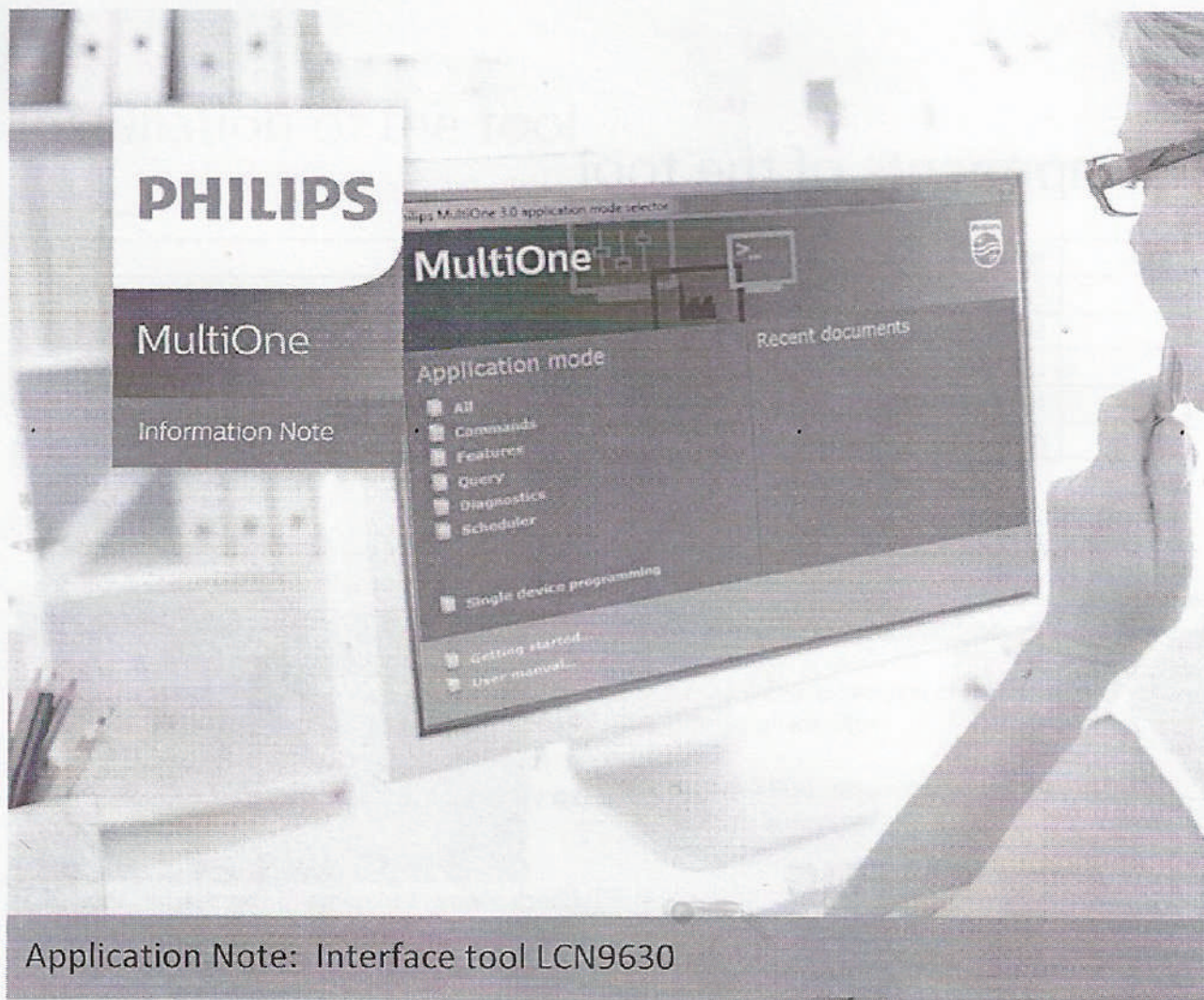




Application Note: Interface tool LCN9630

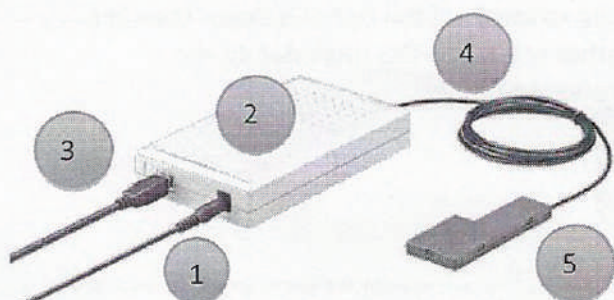
Intro

This Application Note contains information to get started with the FEIG interface tool connected with the Philips configuration tool MultiOne Engineering or Workflow.

MultiOne Engineering or Workflow is built as a universal software for our total programmable driver and devices portfolio, it is used to configure our drivers/systems in the production environment.

The LCN9630 is the interface tool that communicated wireless (NFC) with the drivers and via USB with the PC or laptop

Interface tool FEIG LCN9630



The tool consist of

1. Power converter
2. NFC reader
3. USB cable
4. Antenna cable
5. Antenna with housing

Components of the tool

Item	Name	Description
1	Power converter	Wall power supply 12W, 12VDC with plug EU, US GB
2	NFC reader	ID ISC.MR102- LCN9630
3	USB cable	USB cable connectors type A / B, USB 2.0, length 1.8m
4	Antenna cable	ID ISC.MR102- LCN9630 antenna
5	Antenna with housing	

1. Power converter

Power converter is a power plug that can be used at different regions (adapter EU & UK & US) depending on the use of the available components

2. NFC reader

Reader marked ID ISC.MR102-**LCN9630**, core part used for contactless data exchange via an external antenna.



Check always the name of this reader: the. The MultiOne software is aligned and released with the FEIG firmware, to guarantee correctness.

Note: LCN9620 and LCN9630 use the same FEIG software

3. USB cable

Connects the PC or laptop with the NFC reader.
Standard USB 2.0 or 3.0 port needed

4. Antenna cable

Connects the antenna with the NFC reader.
Length 1.5 m
Do not clamp this cable to prevent damaging

5. Antenna with housing

The PCB antenna is assembled in a small compact plastic housing, to protect the PCB.

The strength of the signal is larger than the other released FEIG tools due to the powered reader.

Note:

- metal can detune the signal
- this solution is mostly used for late stage configuration
- adjustment of housing is possible but on own

MONTAGE / INSTALLATION

ID ISC.MR102-LCN9630

Anschluss und Inbetriebnahme

Vielen Dank, dass Sie sich für den Kauf Tool ID ISC.MR102-LCN960 mit Leser ID ISC.MR102 entschieden haben.

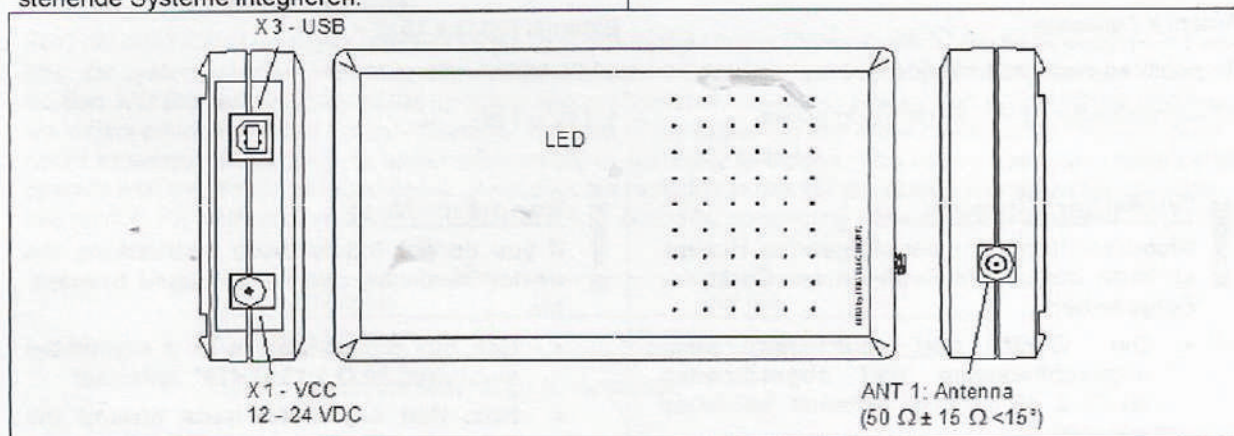
Der ID ISC.MR102 ist ein Gerät zum berührungslosen Datenaustausch mit gängigen Transpondern nach ISO 15693. Dazu benötigt er eine externe Antenne. Der Anschluss an einem Computer oder sonstiges Gerät erfolgt über die USB Schnittstelle. Der Mid Range Reader für unterschiedlichste Anwendungen in den Bereichen Handel, Logistik und Industrie geeignet und lässt sich problemlos in bestehende Systeme integrieren.

Installation and starting up

Thank you for deciding to purchase tool ID ISC.MR102-LCN9630 with reader ID ISC.MR102

The ID ISC.MR102 is a device for contactless data exchange with common Transponder according ISO 15693. To this it requires an external Antenna. The connection to a computer or other equipment is carried out via the USB interface.

The HF Mid Range Reader ID ISC.MR102 is suitable to be used in fields of applications like library, retail, logistics and industry and is easy to integrate in existing systems.



Für Nutzer von Philips Softwareprodukten:
Bitte installieren Sie nicht die Treiber von FEIG ELECTRONIC. Folgen Sie den Installationsanweisungen der Philips Software. Der Treiber ist in der Philips Software enthalten.

Bei Problemen mit dem Gerät in Verbindung mit Philips Softwareprodukten wenden Sie sich bitte an Ihren zuständigen Philips Vertriebsmitarbeiter.

For Philips software users: Please do not install the driver provided by FEIG ELECTRONIC! Please follow Philips software installation in-struction. Philips software includes the driver.

In case of any problem using the device in combination with Philips software please contact your local Philips sales representative.

Inhalt

Das Produkt ID ISC.MR102-LCN9630 enthält den Leser ID ISC.MR102, Steckernetzteil inklusive der Adapter für EU & USA & UK, USB Anschlusskabel, Antenne mit 1,5 m Anschlusskabel und diese Kurzmontageanleitung.

Contens

The product ID ISC.MR102-LCN9630 include the reader ID ISC.MR102, wall power supply include adapter EU & UK & US, USB cable, antenna with 1,5m antenna cable and this short installation guide

Technische Daten**Technical Data**

Gehäuse / housing	ABS plastic
Gewicht / weight	200 g / 0,44 lbs
Schutzart / protection class	IP 30
Spannungsversorgung / supply voltage	12 – 24 V DC/—
Leistungsaufnahme / power consumption	max. 6 W
Schnittstelle / Interface	USB (2.0)
Temperaturbereich / temperature range	
• Betrieb / operation	-25°C to +55°C / -13°F to +131°F
• Lagerung / storage	-25°C to +85°C / -13°F to +185°F
relative Luftfeuchte / relative air humidity	5-95 % (non-condensing)
Antenne / antenna	External (50 Ω $\pm$ 15 Ω < 15°)
Betriebsfrequenz / operating frequency	13,56 MHz
RF-Sendeleistung / RF- transmitting power	1,2 W $\pm$ 1 dB

Wichtiger Hinweis:

! Nichtbeachtung der nachfolgenden Hinweise kann irreparable Schäden am Gerät zur Folge haben.

- Der Gerät darf nur mit einer angeschlossenen und abgestimmten 50 Ω $\pm$ 15 Ω <15° Antenne betrieben werden!
- Beachten Sie, dass Metallteile in der Nähe der Antenne zu einer Verstimmung der Antenne führen!

Important Note:

! If you do not follow these instructions the device hardware can be damaged irreparable.

- Use this device only with a connected and tuned 50 Ω $\pm$ 15 Ω <15° antenna!
- Note that any metal parts around the antenna can detune the antenna!



Die Funkanlage entspricht, bei bestimmungsgemäßer Verwendung den grundlegenden Anforderungen des Artikels 3 und den übrigen einschlägigen Bestimmungen der R&TTE Richtlinie 1999/5/EG vom März 99.

Equipment Classification gemäß
ETSI EN 300 330 und ETSI EN 301 489: Class 2

When properly used this radio equipment conforms to the essential requirements of Article 3 and the other relevant provisions of the R&TTE Directive 1999/5/EC of March 99.

Equipment Classification according to
ETSI EN 300 330 and ETSI EN 301 489: Class 2

Notice for USA and Canada	FCC ID: PJMMR102, IC: 6633A-MR102
This device complies with Part 15 of the FCC Rules and with RSS-210 of Industry Canada. 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. Unauthorized modifications may void the authority granted under Federal communications Commission Rules permitting the operation of this device. 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 own expense. Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.	

Warning: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Installation with FCC / IC Approval:

FCC-/IC-NOTICE: To comply with FCC Part 15 Rules in the United States / with IC Radio Standards in Canada, the system must be professionally installed to ensure compliance with the Part 15 certification / IC certification. It is the responsibility of the operator and professional installer to ensure that only certified systems are deployed in the United States / Canada. The use of the system in any other combination (such as collocated antennas transmitting the same information) is expressly forbidden. This device has been designed to operate with the antennas listed below. Antennas not included in this list are strictly prohibited for use with this device. An SMA socket is provided on the circuit board for connecting the external antenna.

Article No.	Part No.
1967.000.00	ID ISC.ANT40/30-A

Table 1: Antennas with FCC / IC Approval

Hinweis zum Netzteil:

Power supply reference:

Der Reader darf nur von einer Spannungsversorgung gemäß EN 60950-1 Kapitel 2.5 Stromquellen begrenzter Leistung (LPS) oder mit einem nach NEC Class 2/LPS zertifizierten Netzteil versorgt werden.	The reader has to be supplied by a limited power supply (e.g. NEC Class 2/LPS power supply) according IEC EN 60950, only
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Sicherheits- und Warnhinweise

- Das Gerät darf nur für den vom Hersteller vorgesehenen Zweck verwendet werden.
- Die Bedienungsanleitung ist zugriffsfähig aufzubewahren und jedem Benutzer auszuhändigen.
- Unzulässige Veränderungen und die Verwendung von Ersatzteilen und Zusatzeinrichtungen, die nicht vom Hersteller des Gerätes verkauft oder empfohlen werden, können Brände, elektrische Schläge und Verletzungen verursachen. Solche Maßnahmen führen daher zu einem Ausschluss der Haftung und der Hersteller übernimmt keine Gewährleistung.
- Für das Gerät gelten die Gewährleistungsbestimmungen des Herstellers in der zum Zeitpunkt des Kaufs gültigen Fassung. Für eine ungeeignete, falsche manuelle oder automatische Einstellung von Parametern für ein Gerät bzw. ungeeignete Verwendung eines Gerätes wird keine Haftung übernommen.
- Reparaturen dürfen nur vom Hersteller durchgeführt werden.
- Anschluss-, Inbetriebnahme-, Wartungs-, und sonstige Arbeiten am Gerät dürfen nur von Fachkräften mit einschlägiger Ausbildung erfolgen.
- Alle Arbeiten am Gerät und dessen Aufstellung müssen in Übereinstimmung mit den nationalen elektrischen Bestimmungen und den örtlichen Vorschriften durchgeführt werden.
- Bei Arbeiten an dem Gerät müssen die jeweils gültigen Sicherheitsvorschriften beachtet werden.
- Besonderer Hinweis für Träger von Herzschrittmachern:
Obwohl dieses Gerät die zulässigen Grenzwerte für elektromagnetische Felder nicht überschreitet, sollten Sie einen Mindestabstand von 25 cm zwischen dem Gerät und Ihrem Herzschrittmacher einhalten und sich nicht für längere Zeit in unmittelbarer Nähe des Geräts bzw. der Antenne aufhalten.

Safety Instructions

- The device may only be used for the intended purpose designed by for the manufacturer.
- The operation manual should be conveniently kept available at all times for each user.
- Unauthorized changes and the use of spare parts and additional devices which have not been sold or recommended by the manufacturer may cause fire, electric shocks or injuries. Such unauthorized measures shall exclude any liability by the manufacturer.
- The liability-prescriptions of the manufacturer in the issue valid at the time of purchase are valid for the device. The manufacturer shall not be held legally responsible for inaccuracies, errors, or omissions in the manual or automatically set parameters for a device or for an incorrect application of a device.
- Repairs may only be executed by the manufacturer.
- Installation, operation, and maintenance procedures should only be carried out by qualified personnel.
- Use of the device and its installation must be in accordance with national legal requirements and local electrical codes.
- When working on devices the valid safety regulations must be observed.
- Special advice for carriers of cardiac pacemakers:
Although this device doesn't exceed the valid limits for electromagnetic fields you should keep a minimum distance of 25 cm between the device and your cardiac pacemaker and not stay in an immediate proximity of the device respective the antenna for some time.

ID ISC.MR102-LCN9630

Input 12-24V --- max. 0.5A

FCC ID: PJMMR102 IC: 6633A-MR102

FEIG ELECTRONIC
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 unit has to be supplied by a Listed NEC Class 2/LPS Supply only. For use with connections to Listed ITE equipment and accessories only.

 Serial No.:
1234567

 Made in Germany
RoHS


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Liefermöglichkeiten und technische Änderungen vorbehalten.

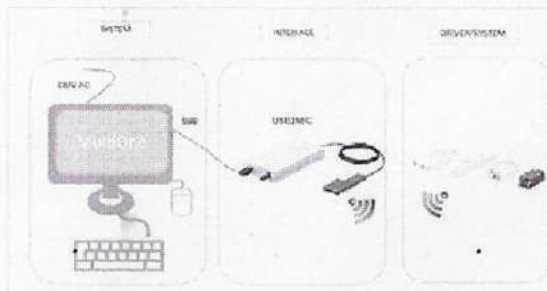
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Installation of the tool



Minimum setup needed :

1. PC or laptop
2. LCN9630 interface tool of FEIG
3. Configurable Philips drivers

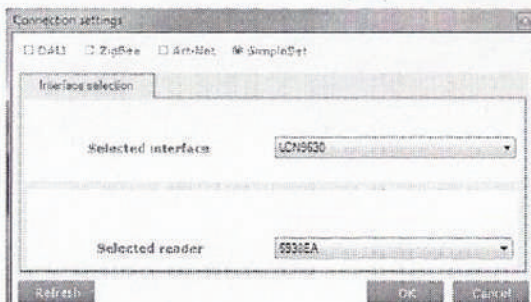
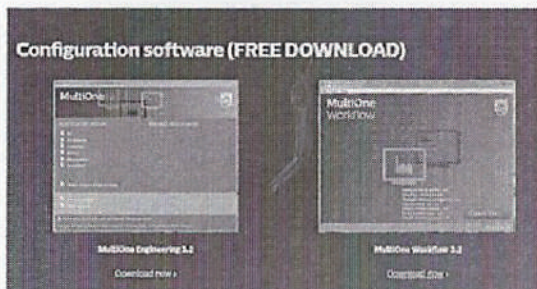
*Note: Focus on FEIG LCN9630 in this set up
(more technical info see datasheet of FEIG)*

Connect the tool before installation of the MultiOne software

Go to : www.Philips.com/MultiOne

Download the latest version of MultiOne Engineering or workflow

The required FEIG software is automatic installed on the PC or laptop.



Activate the connected tool by selecting the interface type

Select Tools -> connection settings -> SimpleSet -> Refresh -> OK

Selected interface : LCN9630

The SimpleSet icon on the right corner (down) becomes green -> communication is ok

The system is ready to use

Information given is indicative and needs validation in the end application by the integrator and customer. On request design-in support can be provided by Philips Lighting.



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