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Congratulations on your selection of the Inepro Red Spider RFID Reader. We are certain you will be pleased with your purchase of one of the flexibele solutions of the market.

We want to help you get the best result from your Red Spider RFID Reader. This manual contains information on how to do that; please read it carefully. Due to continuous product improvements this manual is subject to changes without notice.

We strongly recommend you read the license agreement to fully understand its coverage and your responsibilities of ownership.

Your Inepro dealer is dedicated to your satisfaction and will be pleased to answer your questions and your concerns.

Best wishes,
inepro.

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Directives

ATTENTION!!

Read this manual carefully before installing the Red Spider RFID Reader!

Guarentee

No guarantee can be given if safety regulations are not followed.

Changes and/or modifications

Changes and/or modfications whch have not been approved by the responsible party can void the user's authorty to operate the equitement.

Security

Always disconnect the power supply before handling anything inside the device.

For Indoor Use Only

This device may only be used indoors.

FCC Federal Communications Commission - US

This device is complies with part 15 of the FCC rules, operation is subject to two conditions:
(1) This device may not cause harmful interference.
(2) This device must accept any interference received, includng interference that may cause undesired operation.

CE Conformité Europeéne (Conform European Norm)

This device is in conformity with the EMC directive and low-voltage directive.

Industry Canada

Conformité d'Industrie Canada

Appareil concernés:
Spider

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.

Confirm Canada Industries

Relevant Devices:
Spider

This device complies with Industry Canada's licence-exempt RSSs. Operation is subject to the following two conditions:
(1) This device may not cause interference; and
(2) This device must accept any interference, including interference that may cause undesired operation of the device.

RCM Regulatory Compliance Mark

This device is in conformity with Australian law.

End of life directives

Inepro is paying a lot of attention to environmentally-friendly production. Your new device contain materials which can be recycled and reused. At the end of its life specialised companies can dismantle the discarded device to recycle the reusable materials and to minimise the amount of materials to be disposed of. Please observe the local regulations regarding the disposal of packaging materials, exhausted batteries and old requipment.

Introduction

In this manual you find the instructions to install and configure your Red Spider RFID Reader. This manual is meant for all the Inepro Red Spider RFID Reader.
This manual, the Red Spider RFID Reader hardware and software are subject to change, make sure you have the latest version of this manual, because the older versions may have become obsolete.

Function

The purpose of the Red Spider RFID Reader is to read the unique ID contained in the card that is presented to the reader and transfer this ID to a server. In most cases this data will be the card serial number. To facilitate this a variety of card reader software modules have been developed. Our configuration tool will enable you to change the settings on the Red Spider RFID Reader board.

Our reader can read Bluetooth Low Energy, 125KHz and 13,56 MHz Tags.

FCC Certified

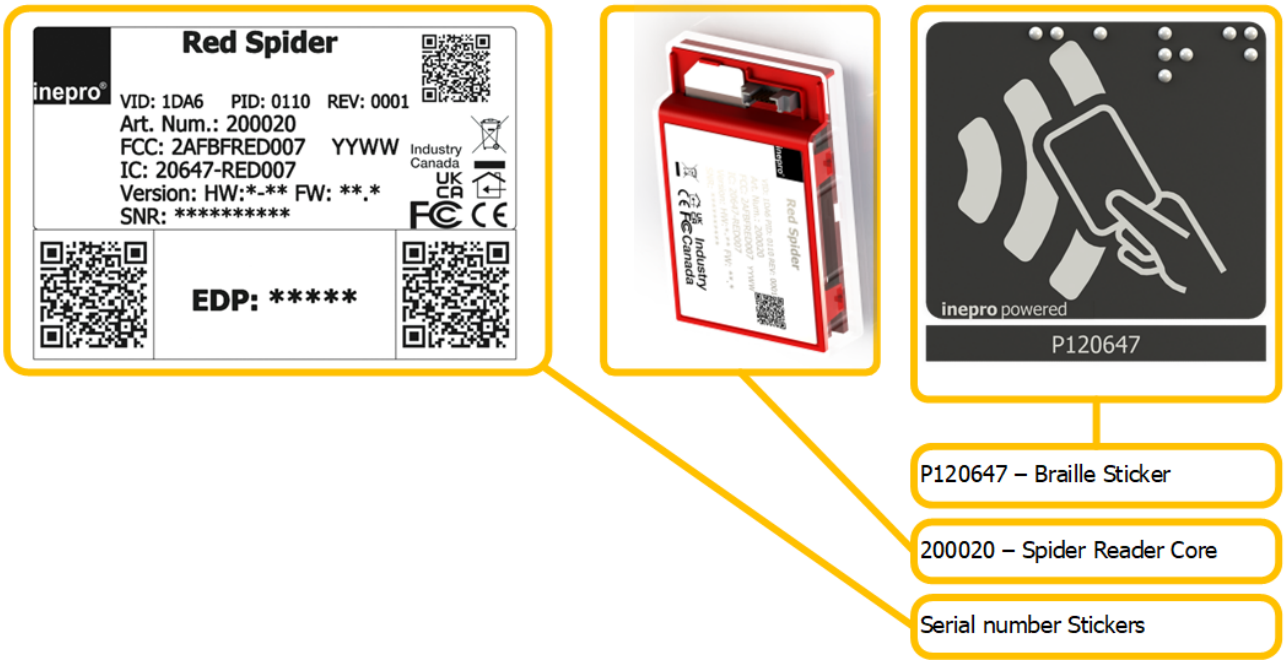
Caution! Changes or modifications not expressly approved by INEPRO B.V. could void the user's authority to operate the equipment.

Note:
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

Requirements

The Red Spider RFID Reader has no known requirements other than a USB host that can read a keyboard-like Human Interface Device

Components



- P551087 - Red Spider RFID Reader Cardboard box
- 200020 - Red Spider RFID Reader
  - Red Spider RFID Reader Core Housing Top
  - Red Spider RFID Reader Antenna Board I
  - Red Spider RFID Reader Antenna Board II
  - Red Spider RFID Reader Core Housing Bottom
- P120647 - External Red Spider RFID Reader Braille RFID Foil
- Red Spider RFID Reader Serial Stickers | Desktop sticker | EDP Sticker | 2x QR Serial sticker

Check Components

Please check if all the components are in the set before you continue with the installation and set-up. Some parts may already have been pre-assembled

Software

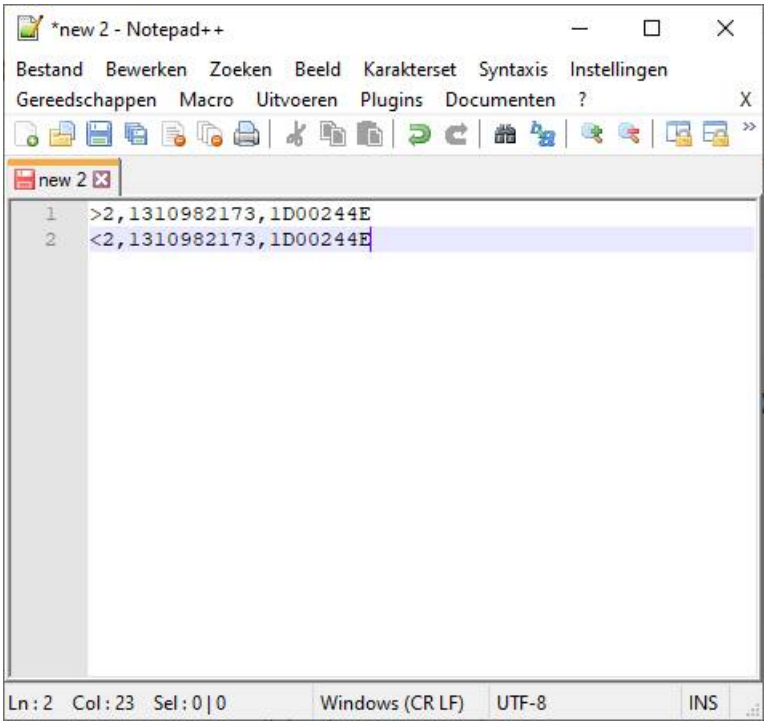
For the Red Spider RFID Reader there is are tools available each with its specific features. Connect the Red Spider RFID Reader to a computer or laptop and present a card to the reader. Please note that the reader needs to have the HID RAW Configuration. (See Inepro SCR-MCR-DCR RFID Programmer Tool Full Version manual for more details).

Inepro SCR-MCR-DCR Programmer

With this tool it is possible to change the behaviour of the card reader, by creating or editing it's configuration file. For example it is possible to change the read out of the RFID card but also the LEDs can be switched off or the volume of the beeper can be changed. Once finished it is possible to store the created settings in a special config file which can be programmed via the SCR-MCR-DCR RFID Programmer Tool. For more information regarding this SCR-MCR-DCR RFID Programmer Tool please consult it's user manual. This tool was developed for the predecessors of the Red Spider RFID Reader. Specific Red Spider RFID Reader tools might be created in a later stage.

Quick-Test with the Notepad:

1. Connect to Inepro Red Spider RFID Reader to the USB PC or laptop.
2. Start a Text Editor application on Windows, such as Word or Notepad.
3. Present a card to the Inepro Red Spider RFID Reader.
4. Remove the card from the Inepro Red Spider RFID Reader.
5. The data read should be displayed in the Text Editor.

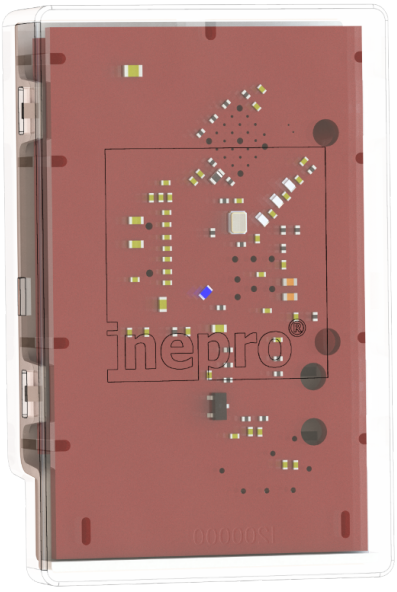


This concludes the hardware test ■

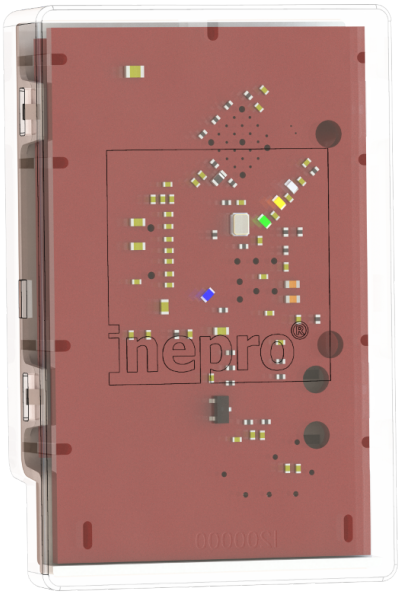
Hardware

Physical test Inepro Red Spider RFID Reader

1. Connect the Inepro Red Spider RFID Reader to the USB port of a computer.
2. Check the indicator LED's to see if the board is operating as it should.



Blue Led burning:
Reader is powered and has connection



Put a card on the Red Spider RFID Reader:
Besides the blue power LED, the yellow and the green LED should lit.
Yellow: card detected
Green: card recognised.

This concludes the hardware test

LED's

On the USB interface board are a number of LED’s. Each of the LED's has a label, explaining their use. See the table below

Image	Function	Standby / Normal	Triggered / Not OK
	Card is not recognized	Off	On
	Card in detection field	Off	On
	Card Recognized	Off	On
	Reader is on and connected	On	Flashes (no connection)

Technical Specifications

Specifications

Power

Power Supply	5V
Power Consumption DC	5V DC: At maximum (depending on the configuration) 0.5 A

Housing

Material	PCB | PCB/ABS
Colour	Transparent
Dimensions W x D x H	37.85 mm x 62.25 mm x 12.5 mm.

CPU

ARM	32-bit Cortex®-M3 CPU Core | STM32F103

Memory (working storage)

SRAM	20 Kb

Storage

Falsh Memory	64 Kb

Outputs

Pico Blade	USB RS232
PID (Product ID)	0110
VID (Vendor ID)	1DA6

User Interface

LED's	Red, Yellow/Orange, Green and Blue

Audio

Piezo Buzzer	4kHz, Max. 65 dB

Environmental conditions

EMI / Safety	CE, FCC Class A
Operating Temperature (Metric)	0-40 degrees Celsius
Operating Temperature (Non-Metric)	32-104 degrees Fahrenheit
Relative Humidity (Non Condensing)	10%-90%

Troubleshooting

Sometimes things do not work out as expected, if so please read through this section before contacting your service organisation or dealer. Changes are you are able to solve the issue yourself.
The section is set up in a Symptom - Prognosis - Resolution format, that is first the symptom is given, then the possible causes and then the resolution for those causes.

Symptom(s): Card not recognized

Prognosis: The Red Spider RFID Reader is not connected

Scope: All Devices

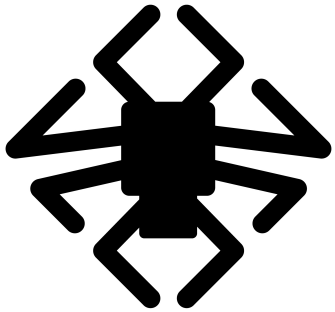
Resolution:

A - Check if the blue light is flashing, if it is the reader is not connected to the server. Please check the availability of the server with another device like a laptop on that network connection.

B - If the blue light burns constantly

1) Try again
2) Make sure your card has been linked to your account.
3) Check if the problem occurs also with other cards, or on other devices.

C - If the problem has not been solved, please contact your supplier

Troubleshooting

FCC Statement
1. 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.
(2) This device must accept any interference received, including interference that may cause undesired operation.
2. Changes or modifications not expressly approved by the party responsible for compliance could void the
user's authority to operate the equipment.
NOTE:
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to
Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.
This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.
If this equipment does cause harmful interference to radio or television reception,
which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
Reorient or relocate the receiving antenna.
Increase the separation between the equipment and receiver.
Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
Consult the dealer or an experienced radio/TV technician for help.
IC STATEMENT
This device complies with Industry Canada licence-exempt RSS standard(s)
Operation is subject to the following two conditions:
(1) This device may not cause interference, and
(2) This device must accept any interference, including interference that may cause undesired operation of the device.
This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. End user must follow the specific operating instructions for satisfying RF exposure compliance. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.
CAUTION
1. Operation temperature:-20~40ºC
2.The device complies with RF specifications when the device used at 20cm from your body.
Inepro BV hereby declares that this Spider is in compliance with the essential requirements
and other relevant provisions of Directive 2014/53/EU
This information has to be presented in such a way that the user can readily understand it. Typically, this will necessitate translation into every local language (required by national consumer laws) of the markets
where the equipment is intended to be sold. Illustrations, pictograms and using international abbreviations for country
names may help reduce the need for translation.
Max power
BLE:0.5dBm
Tx Frequency: BLE: 2402MHz~2480MHz
NFC: 13.56MHz, 125KHz
Rx Frequency BLE: 2402MHz~2480MHz, 125KHz
NFC: 13.56MHz
BLE and NFC can be used in Europe without restriction.