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## PROXN`ROLL USER MANUAL

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<b>AB</b>	30/01/09	JCH				Technical specification : Add Device is powered by a limited power source
<b>AC</b>	05/03/09	JCH				Adding FCC informations
<b>AD</b>	20/03/09	JCH				Operational description upgraded

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## 1. PRODUCT DESCRIPTION

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### 1.1. OPERATIONAL DESCRIPTION

Prox'N'Roll is a versatile 13.56 MHz contactless USB smartcard reader and encoder for PC/Laptop. It reads and writes all ISO 14443 compliant contactless smartcards within a distance from 0 to 5 cm.

It supports USB full speed (12Mbps) and fastest smartcard baud rate (up to 848kbps). Prox'N'Roll is directly powered by the PC/Laptop through its USB connection.

Prox'N'Roll can be used with legacy (Prox'N'Roll is detected as a serial communication port) or PC/SC driver (Prox'N'Roll is detected as a USB smartcard reader).

Prox'n'Roll generates a RF field permanently and uses inductive coupling (magnetic field) to power the smartcards and communicate with them using AM modulation. The ID tag answer is demodulated and decoded by the Prox'N'Roll and sent to the PC/Laptop.

Prox'N'Roll has three different LED lightning circuits (blue, green, red) integrated. These LEDs are used as status indicators :

Blue Led : Prox'N'Roll is fully operational, connected and recognized by laptop

Green Led : the TAG had been read successfully

Red Led : an error occurred during reading or writing operation of the tag

There is also a buzzer indicating the presence of a Tag the RF field.

### 1.2. TECHNICAL DESCRIPTION

Name :	ProxNRoll
Part Number :	PRNU11
Power supply :	USB Bus powered : 5V +/-10%
	Device is powered by a limited power source
	In accordance with EN 60950-1:2006.
Current consumption :	typ : 200mA - Max :250mA
Operating temperature :	-20 / +70°C
Storage temperature:	-40 / +85°C
Weight:	150gr
Length USB cable:	1.80m
Overload protection:	Polyswitch 500mA, Transil 5V on USB power line
ESD protection:	On USB power line and data line
	15kV ( air discharge)
	8kV (contact discharge)
Mechanical	UL-HB class
RoHS compliance	

### Intentional Radiator informations

Frequency range : 13.56Mhz – AM modulation 106 – 848kbps

Antenna : integrated

Local oscillator: 13.56Mhz – 24Mhz .

Regulatory

FCC Part 15 class B

FCC ID: TYQPRNU11

## **1.3. CAUTION TO USERS**

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

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment

FCC Compliance Statement according to Section 15.105 (b):

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.

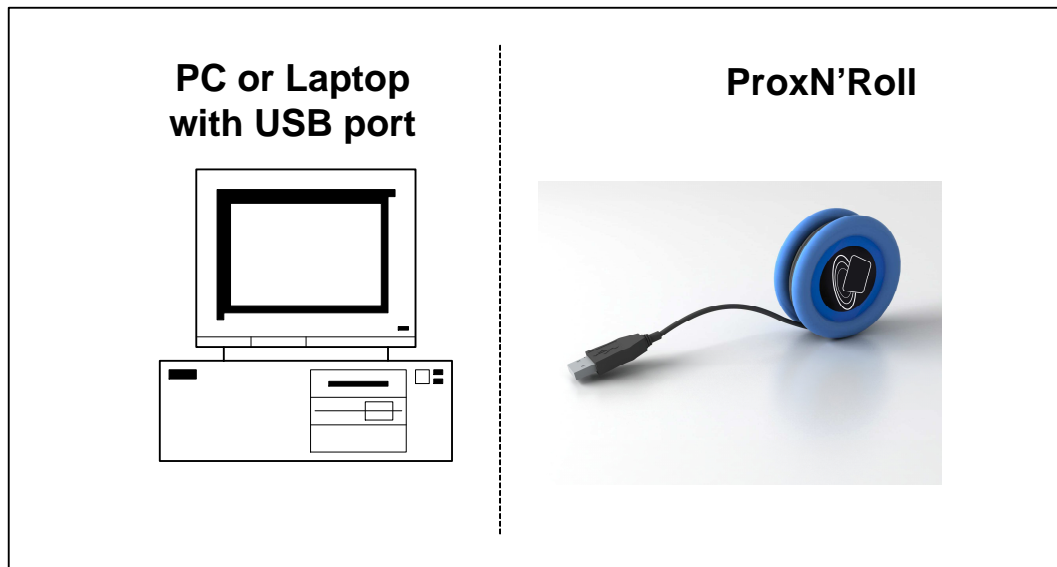
--Increase the separation between the equipment and receiver.

--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.

## 1.4. CONVENTIONNAL OPERATION

### 1.4.1. Arrangement Diagram



## 1.5. INSTRUCTION FOR TEST SETUP

- Install CSB6 Family legacy driver SDD470-BA.EXE
- Connect the reader to PC or Laptop
- In panel configuration Check for the Com Number used ( Comx).
- Launch HyperTerminal with settings ( 38400, 8, N, 1 without flow control)
- Put contactless Smartcard on the reader
- Type "tag" command
- Check contactless smartcard serial number response.

Example: contactless Smartcard found:

```
> tag
2375656 0004 28
OK
```

Example : contactless Smartcard not found

```
> tag
err -1
```

In this way, after typing "tag" command the RF field is active all the time.

Close hyperterminal before unplug the reader from USB port.

There is no safety restriction for hot unplug the reader from USB port.







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