CP-R27

DESFire EV1 / MIFARE Classic EV1 Desktop Programmer

Installation Guide

1. Introduction

The CP-R27 is a new contactless smart card and desktop reader to read/write 13.56 MHz technology, including, MIFARE Classic EV1 and DESFire EV1. It is compliant with ISO14443A/B.

The CP-R27 is designed as a Plug & Play smart card reader with a USB port, and is suitable for various smart card applications, such as smart card issuing and programming, personal identification.

1.1. Features

- Supports ISO/IEC18092 NFC peer-to-peer mode
- Supports high-level command of DESFire EV1 (DES/3DES, 3k3DES, AES) on hardware
- Supports high speed of ISO14443 up to 424 kbps
- Excellent and compact design, can be placed on metal surface

2. Configuring the CP-R27 with the AS-B01 Configuration Tool

The procedure to configure the CP-R27 with AS-B01 is given in the *AS-B01 Installation and User Guide*.

3. Operation

When the driver is successfully installed the CP-R27 appears as a **Civintec USB reader** and can be used with the AS-B01 software application configuration tool to create secured credentials and configuration cards.

4. Driver

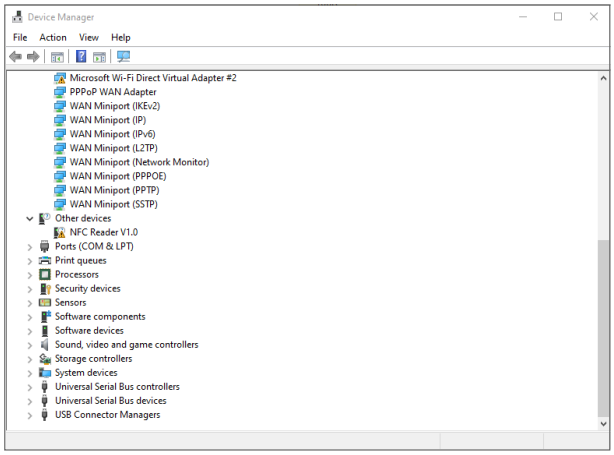
This section gives the procedure to download and install the driver for the CP-R27 Desktop Programmer.

1. Connect the CP-R27 Desktop Programmer to a PC using a USB cable.

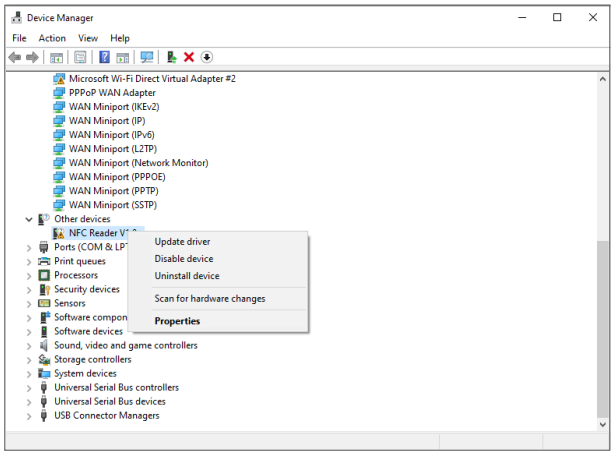
> One cable end connects to the PC USB host port output and the other end connects to the USB connector on the CP-R27 Desktop Programmer.

> Make sure the location for the CP-R27 driver is known.

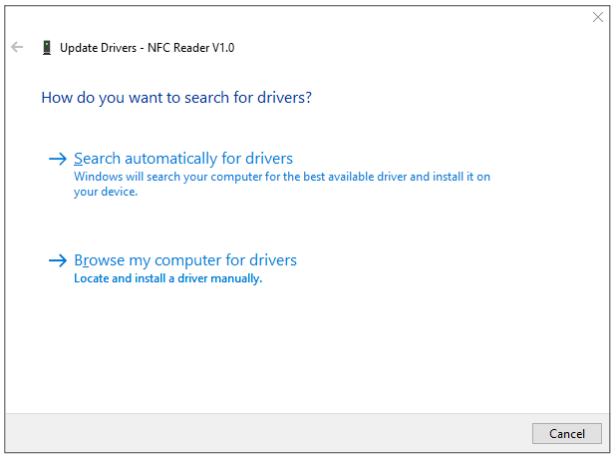
2. Select and hold (or right-click) the Start button, and then select **Device Manager**.
3. You can find **NFC READER Vx.x** under **Other Devices**.



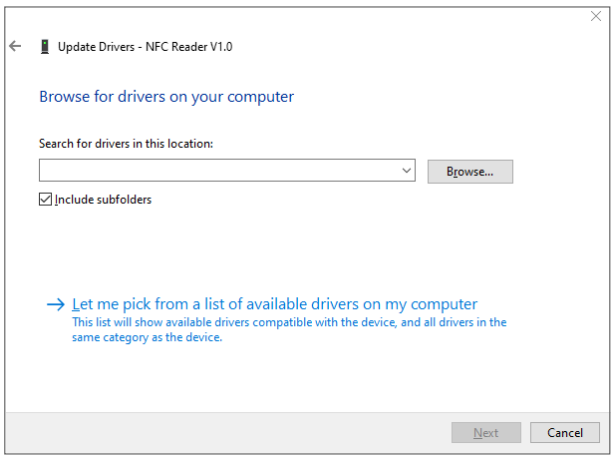
4. Right-click **NFC READER Vx.x** and select **Update driver**.



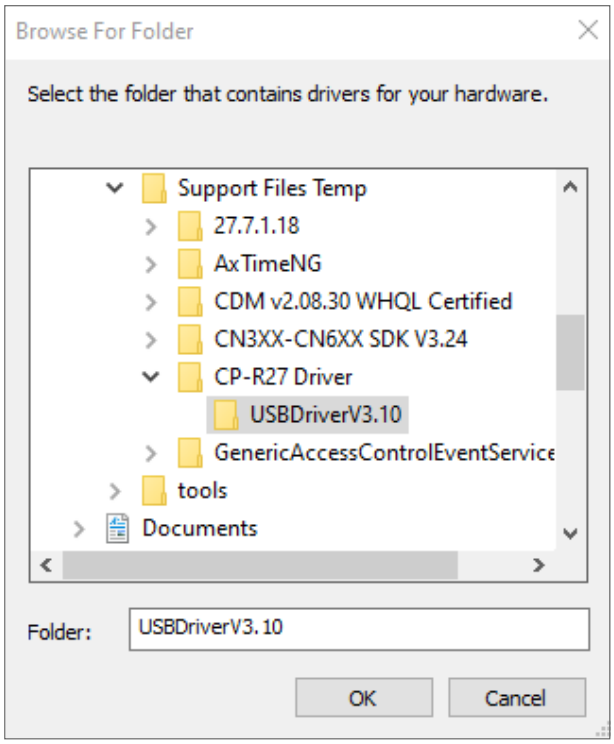
5. Select **Browse my computer for drivers**.



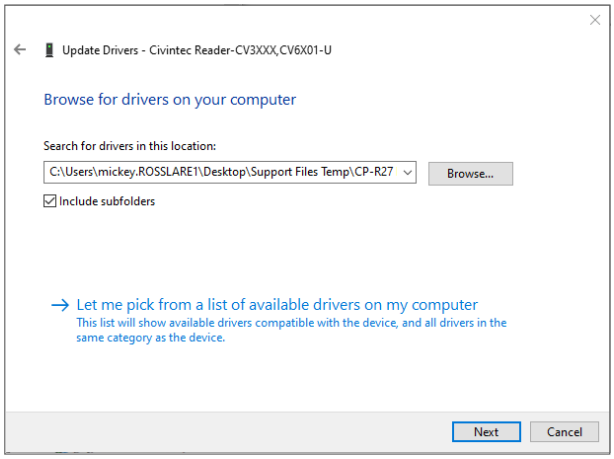
6. Click **Browse**.



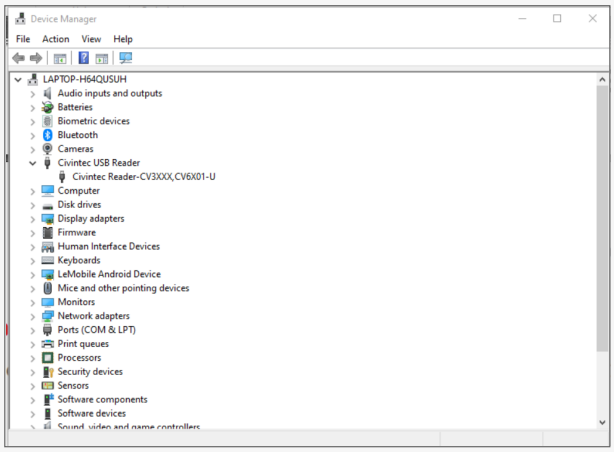
7. Select the **CP-R27 Driver** folder and click **OK**.



8. Click **Next**.



The Civintec USB Reader driver is installed.



5. LED Indications and Buzzer Sounds

The table below gives the LED indications and buzzer sounds during programming the CP-R27 Desktop Programmer.

Event	LED Indications	Buzzer Sounds
Supply power	One red LED lights comes on for several seconds, then all the LEDs will flash.	Beeps once and the LED comes on red.
Write / read card success	Red LED comes on for three seconds.	One short beep.
Write card failure	Red LED comes on for three seconds.	Two short beeps.

6. Technical Specifications

Electrical Characteristics	
Power Supply (from USB)	5 VDC (±5%)
Current Consumption	<120 mA
Data Specifications	
Communication Rate	106 -424 kbps High speed transaction
Baud Rate	9600 to 115200 bit/s (default 115200)
Indication	Controllable two-color LED, one buzzer: • Red LED for Power state • Green LED for Normal Reading state
Interface	USB (USB supplies power)
Communication Cable	1.5 meter long USB communication cable
Frequency	13.56 MHz; APDU command
Environmental Characteristics	
Environment	Indoor
Operating Temp. Range	0°C to 60°C (32°F to 140°F)
Storage Temp Range	-10°C to 65°C (22°F to 149°F
Operating Humidity Range	5 to 95% RH (non-condensing)
Standards	
Contactless	ISO14443A 4(part 1-4), MIFARE Classic EV1, DESFire EV1, ISO14443B
Contact	ISO 7816 1/2/3, Class B,C (3V,1.8V), T=0 and T=1
Signaling	
Signaling Type	Controllable two-color LED, one buzzer: • Red LED for Power state • Green LED for Normal Reading state
Power Down	Sleep Mode

Physical Characteristics	
Weight	79 g (2.8 oz)
Dimensions (L x W x H)	116 x 67 x 14 mm (4.6 x 2.6 x 0.6 in.)

0706-0960757+00

For more information regarding support, visit https://support.rosslaresecurity.com.