

RealPass-N

Multifunctional Full-page Document Reader

User Manual

REV03

[RealPass-N-REV03-250902-EN]

Introduction

RealPass-N is a multifunctional document reader capable of reading multiple types of documents simultaneously, including ICAO standard documents such as e-passports, e-visas, ID cards, and 1D and 2D barcodes. This product can swiftly and accurately capture and extract data from the VIZ page and the electronic chip of documents. With innovations in design and performance, it offers 500 DPI high resolution, USB 2.0, reinforced glass with an IP54 surface, and hologram anti-reflection technology, allowing it to capture images and data under various lighting conditions including white light, infrared (IR), and ultraviolet (UV).

RealPass-N is an ideal and ergonomic product for easy integration into space-saving self-service kiosks, e-gates, and counters.

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Disclaimer

1. Restrictions of Use

This passport reader must be used only for legal and authorized purposes. We are not responsible for any illegal activities or unauthorized usage.

2. Accuracy of information

The content of this manual is accurate as of the date of writing. Although the passport reader is designed to read the provided information as accurately as possible, the accuracy of the information cannot be guaranteed due to data input errors, technical issues, or other external factors. We are not responsible for any damage or loss resulting from these inaccuracies. The information in this manual is subject to change without notice due to product improvements.

3. Technical Support

This product must be installed and maintained according to the technical support provided by the manufacturer. We are not responsible for any damage or loss resulting from unauthorized repairs, modifications, or alterations.

4. Interference and Malfunction

This device may generate, use, and radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. We are not responsible for any interference or malfunction occurring in specific environments.

5. Legal Compliance

This product is designed to comply with various international and domestic regulations. Users are responsible for complying with local laws and regulations, and we are not responsible for any issues arising from non-compliance with legal requirements.

6. Liability

We are not liable for any direct, indirect, incidental, special, or consequential damages arising from the use of this product. This includes, but is not limited to, loss of profits, loss of data, inability to use the product, or other economic losses.

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The name Xperix Inc. and other trademarks are registered trademarks of Xperix Inc. This copyright notice applies to all products and documents of Xperix Inc.

This manual provides reliable information, but we accept no liability for any loss caused by typographical errors. The information in this manual is subject to change without notice due to product improvements.

Safety Instructions

Please read the following instructions carefully before using this product. This information is crucial to ensure user safety and prevent damage to the user's property.



WARNING

Failure to follow these instructions may result in serious injury or death.

Installation Instructions

Do not install the product in direct sunlight or in locations with high humidity or dust.

- This can cause fire or electric shock.

Install the product in a dry location.

- Moisture can cause product damage or electric shock.

Do not install the product near heat sources such as electric heaters.

- Overheating can cause fire or electric shock.

Install the product in a location free from electromagnetic interference.

- This can cause product damage or electric shock.

Install and repair the product through a qualified professional.

- Failure to do so may result in fire, electric shock, or injury.
- If the product is damaged due to unauthorized installation or disassembly by the user, repair costs will be charged.

Operation Instructions

Take care not to spill liquids such as water, beverages, or chemicals into the product.

- This can cause fire, electric shock, or product damage.



CAUTION Non-compliance may cause minor injury or product damage.

Installation Instructions

Protect the power cord from damage by foot traffic or pinching.

- This can cause product damage or injury.

Keep the product away from strong magnetic objects such as magnets, TVs, monitors (especially CRT monitors), and speakers.

- This can cause product malfunction.

When installing the kiosk and gate, ensure that they are placed at least 5 cm away from any metal surfaces.

- The antenna may be affected by metal, which could lead to malfunction or failure of the product.

Operation Instructions

Do not drop the product or subject it to impact or collision during use.

- This can cause product malfunction.

Do not press the product's buttons with excessive force or use sharp tools.

- This can cause malfunction.

Revision History

Version	Change	Date
REV01	Initial creation of the User Guide	2024-08-22
REV02	Add as a section in the Trouble Shooting Guide. Add system requirements section	2025-07-16
REV03	Added specification note: Supports 1D/2D barcode decoding from both paper and digital screens (e.g., phone or monitor)	2025-09-02

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System Requirements

Before installing the SDK, please ensure the following.

- A device with administrative privileges.
- A device with the following specifications:
 - Operating System: Windows 8/10/11, Linux, Java 21 or higher
 - Hardware: Core i4 3.0GHz, at least 8GB RAM, USB 2.0 port or higher
- If installing multiple readers with RFID options, maintain a minimum distance of 25 cm (10 inches) between the readers to prevent potential interference.
- This scanner must be used in an environment that supports USB 2.0 or higher to ensure stable data transmission. If a USB hub is used, it must provide sufficient power. In cases where the power supply is unstable or disconnected, please connect the scanner directly to a USB port on the main PC.

RealPass-N Unpacking Procedure

Before unboxing the RealPass-N, please check the list below.

- Remove the contents from the box and separate the components from the packaging material.
- Verify that all parts have been received. If any parts are missing, contact Xperix service.
- Check the product for damage. If the product is damaged, contact Xperix Service.

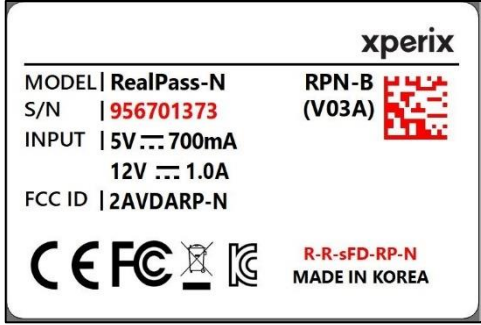
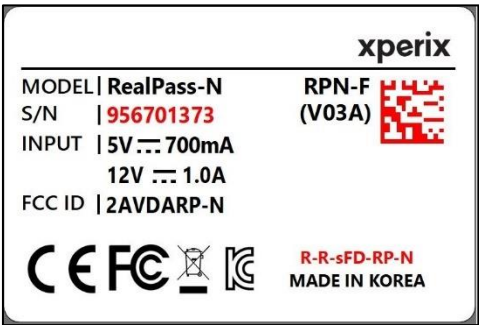
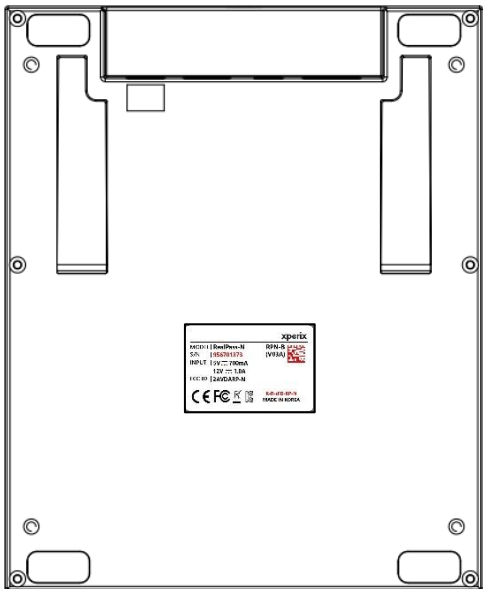
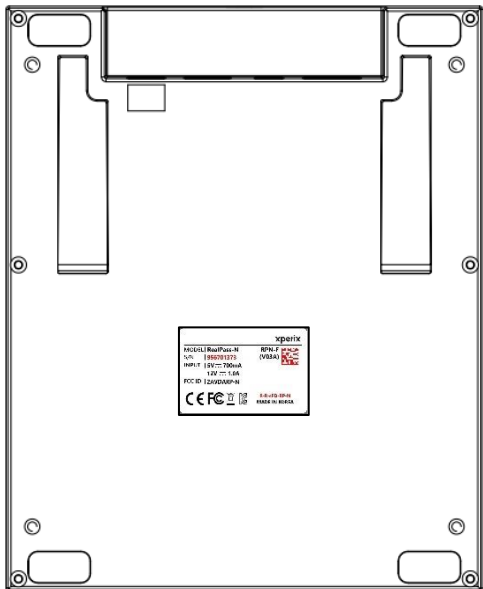
Components

To use the product at its best performance, please use only the provided USB cable and power adapter.

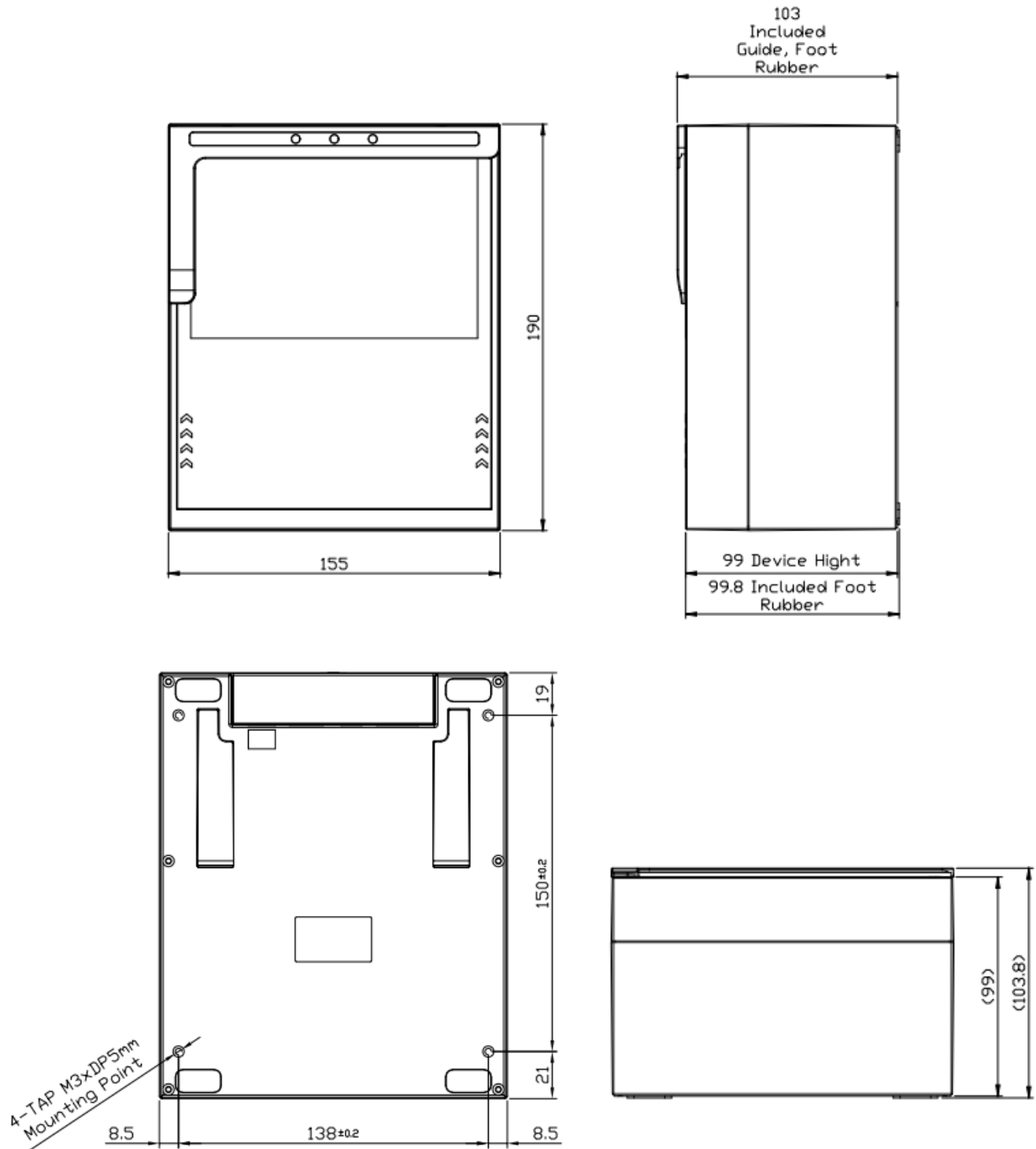
Using any cable or adapter may result in reduced performance or damage to the product. Failure to follow these precautions will void the warranty.

Components	Quantity	Image
RealPass-N	1EA	
USB3.0 Cable	1EA	
Power Adapter	1EA (Only RPN-F)	
Adapter Cable	1EA (Only RPN-F))	
Cloth	1EA	

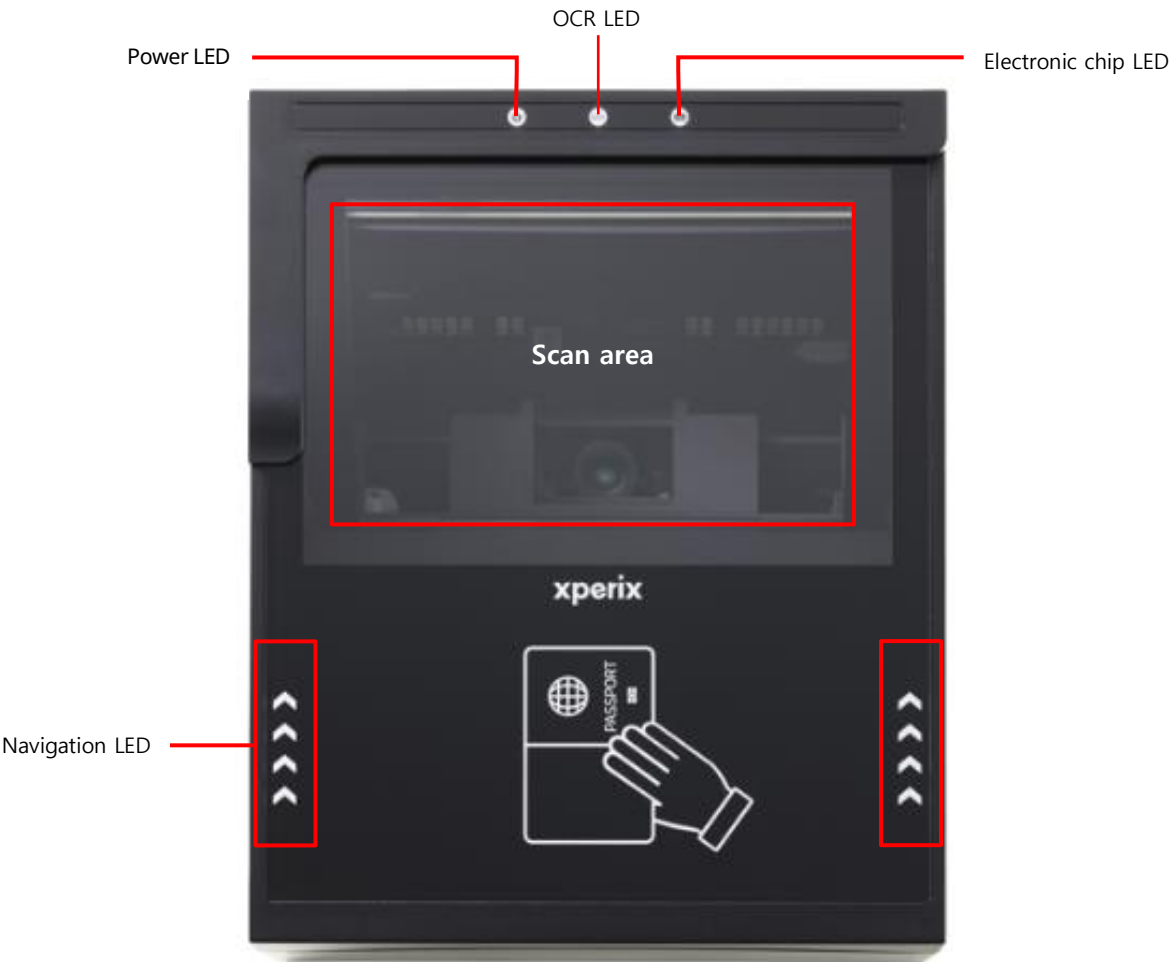
Product Labeling



External View (Diagram)



External View



Name	Function
Power LED	Lights up according to the power supply to the device.
OCR LED	Lights up according to OCR reading.
Electronic chip LED	Lights up according to electronic chip reading.
Navigation LED	Lights up according to reading status.

Power LED Operation

Red		Lights up when the device is powered on.
Green		Lights up when the device is connected to the SDK application.

OCR LED Operation

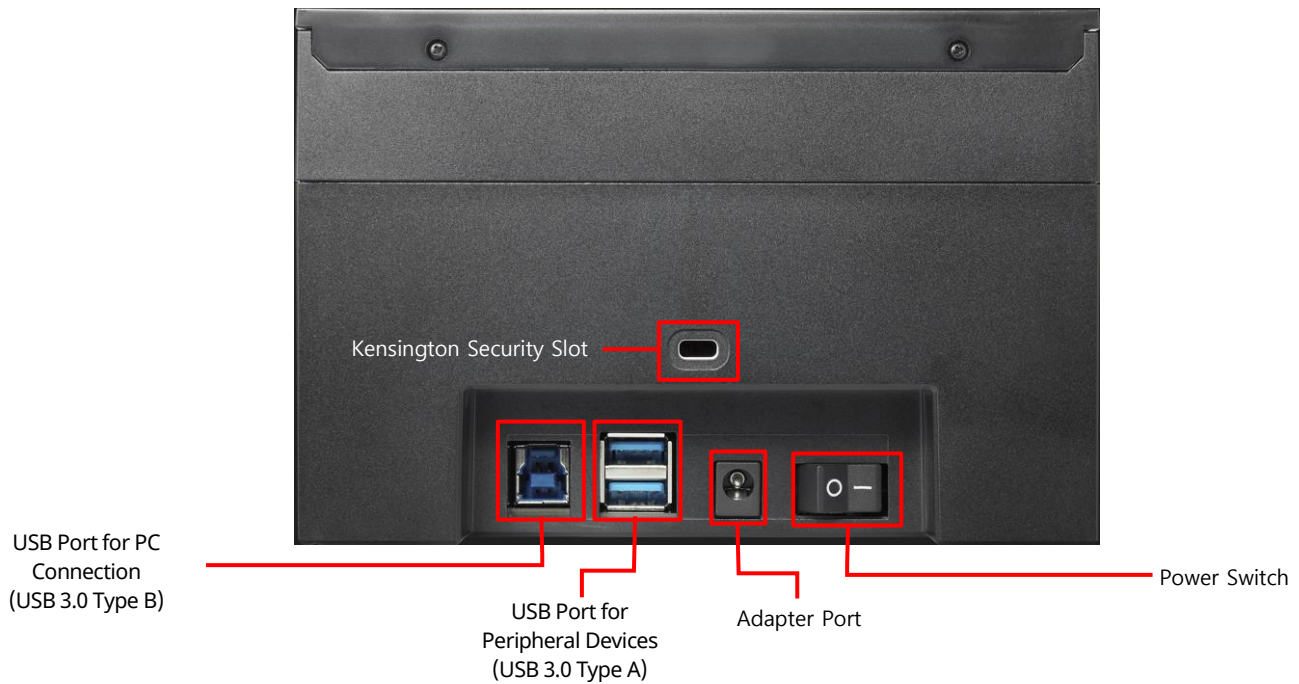
Green		Lights up when OCR reading is successful.
Red		Lights up when OCR reading fails.
Blue		Lights up when OCR reading is in progress.

RF LED Operation (Only functions with RPN-F)

Green		Lights up when electronic chip reading is successful.
Red		Lights up when electronic chip reading fails.
Blue		Lights up when electronic chip reading is in progress.

Navigation LED Operation

Green		Lights up when reading is successful.
Red		Lights up when reading fails.
Blue		Lights up sequentially during reading.

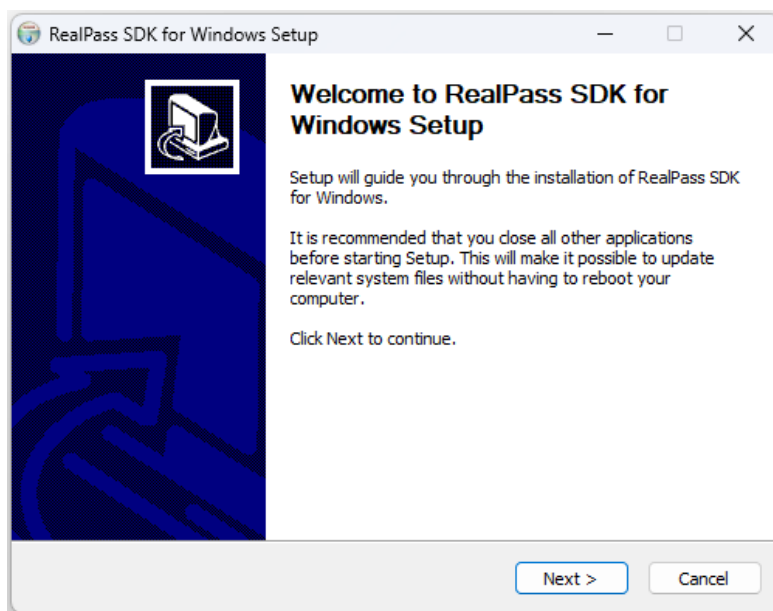


Name	Function
USB Port for PC Connection	This port is for connecting the USB to the PC.
USB Port for Peripheral Devices	This port is for external peripheral devices.
Adapter Port	This port is for providing smooth power supply.
Power Switch	This switch allows you to turn the power ON and OFF.
Kensington Security Slot	This is a slot that prevents theft by connecting a security cable.

SDK Installation Guide

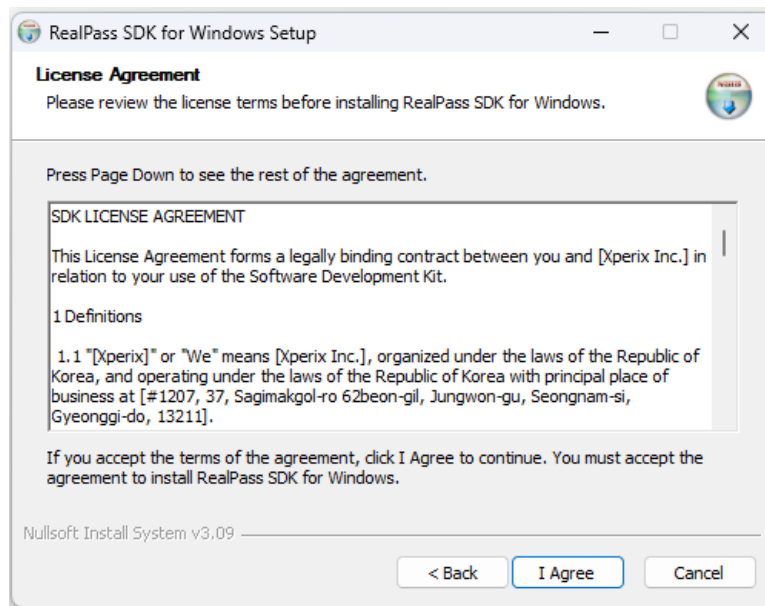
This page provides instructions for installing the SDK. Please follow the guide below to proceed with the installation.

1. Run the file `RealPassSDK_for_Windows_Installer_v3.x.x.xxx.exe`.
2. SDK Introduction Screen.



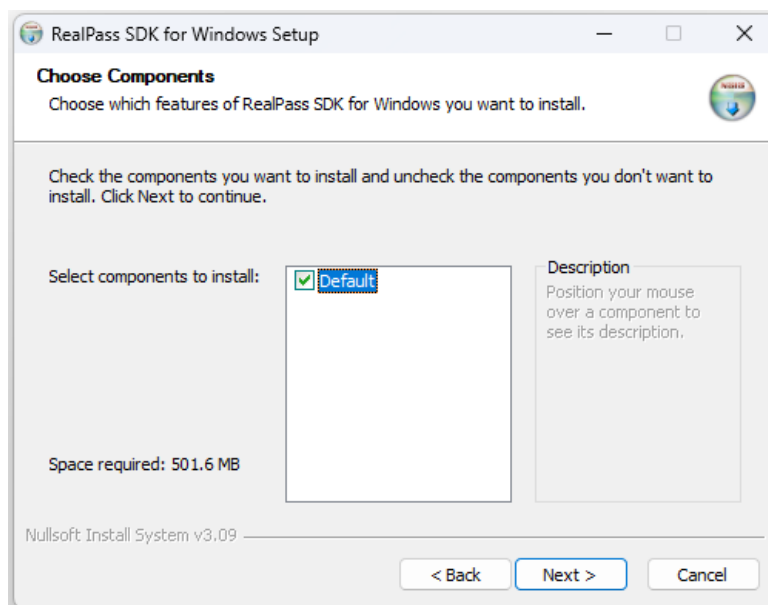
➔ Click the [Next] button.

3. License Agreement



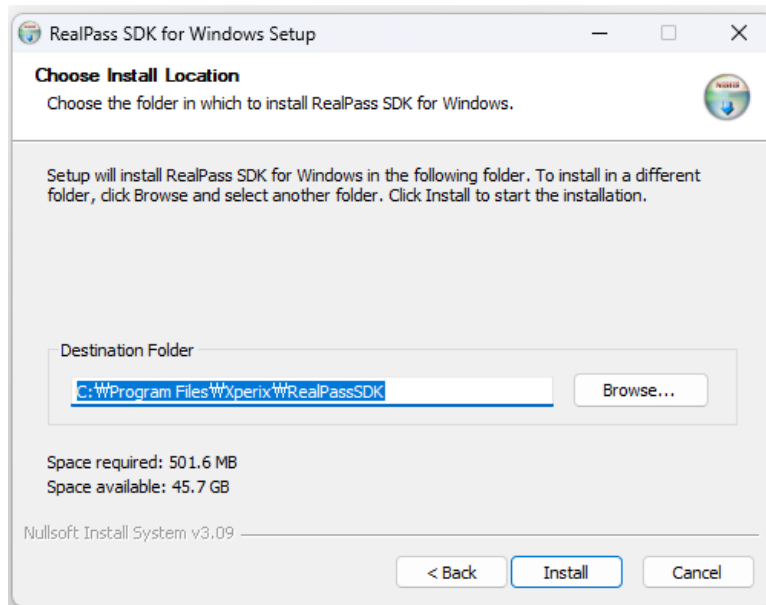
→ Click the [I Agree] button.

4. Component Selection



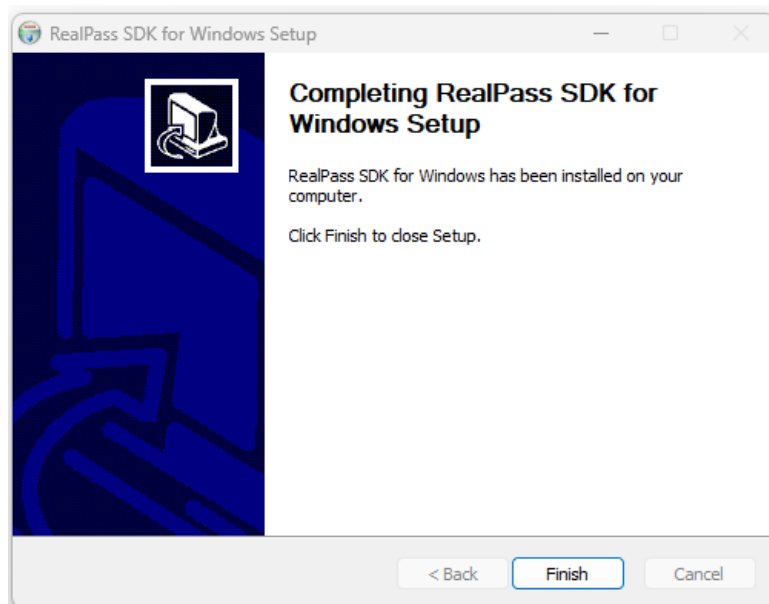
→ Click the [Next] button.

5. Choose Installation Location



➔ Click the [Install] button.

6. Installation Successful



➔ Click the [Finish] button.

Device Driver Installation Guide

This page provides instructions for installing the device driver. Please follow the guide below to proceed with the installation.

Note:

If the driver is installed while the device is connected to the PC via USB cable, the installation may not complete successfully. Ensure that the USB cable is disconnected from the PC before proceeding with the driver installation.

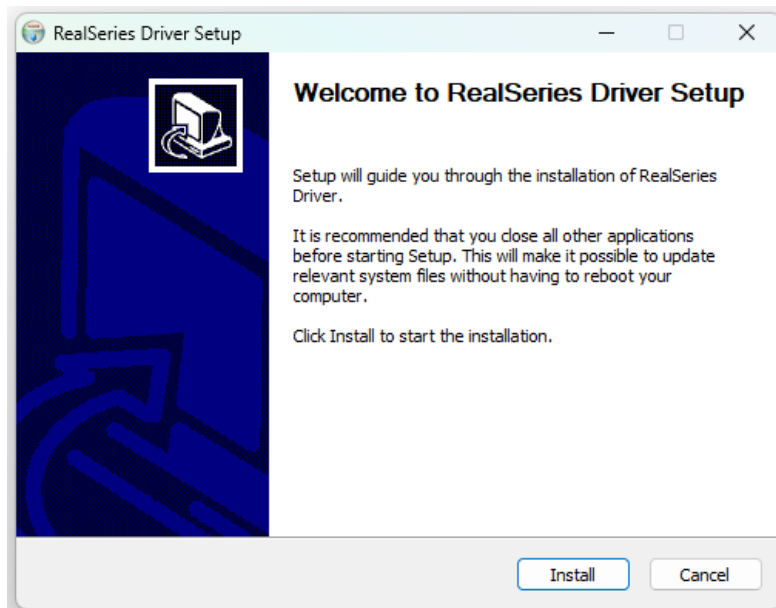
1. Navigate to the Driver folder located at \Program Files\Xperix\RealPassSDK.

Name	Date modified	Type	Size
Bin	2024-07-15 오전 10:10	File folder	
Document	2024-07-15 오전 10:10	File folder	
Driver	2024-07-15 오전 10:10	File folder	
Example	2024-07-15 오전 10:10	File folder	
Install	2024-07-15 오전 10:10	File folder	
Uninstall.exe	2024-07-15 오전 10:10	Application	56 KB

2. Run the file RealSeries_Driver_v3.0.0.1.exe.

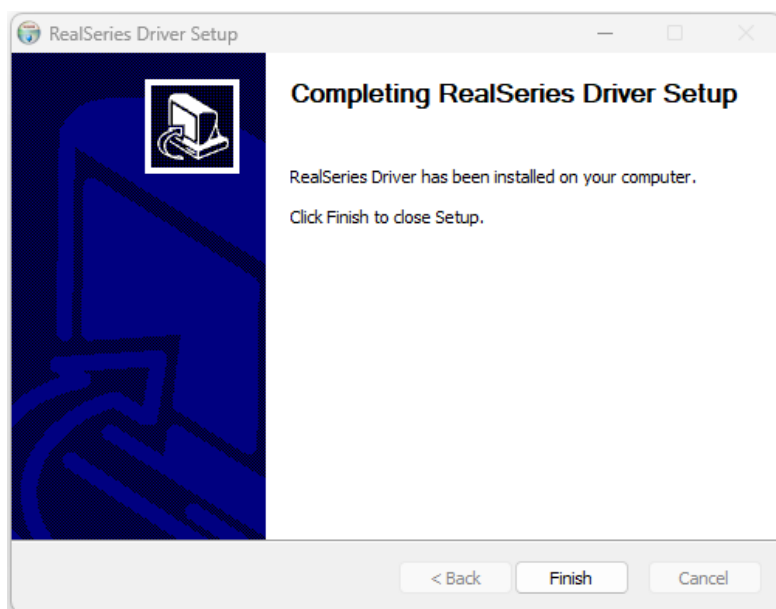
Name	Date modified	Type	Size
Old Driver	2024-07-15 오전 10:10	File folder	
RealSeries_Driver_v3.0.0.1.exe	2024-03-19 오후 1:36	Application	3,092 KB

3. SDK Introduction Screen



➔ Click the [Next] button.

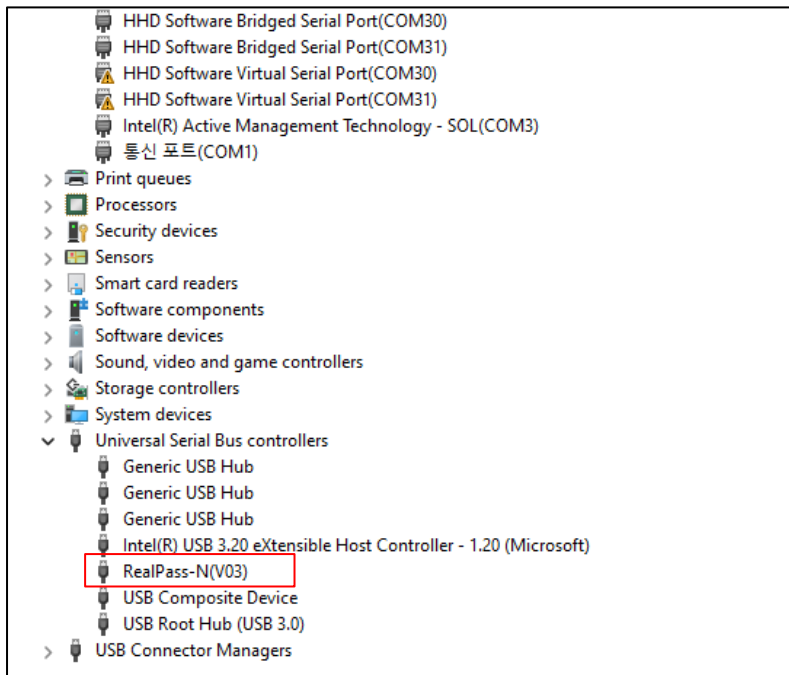
4. Installation Successful



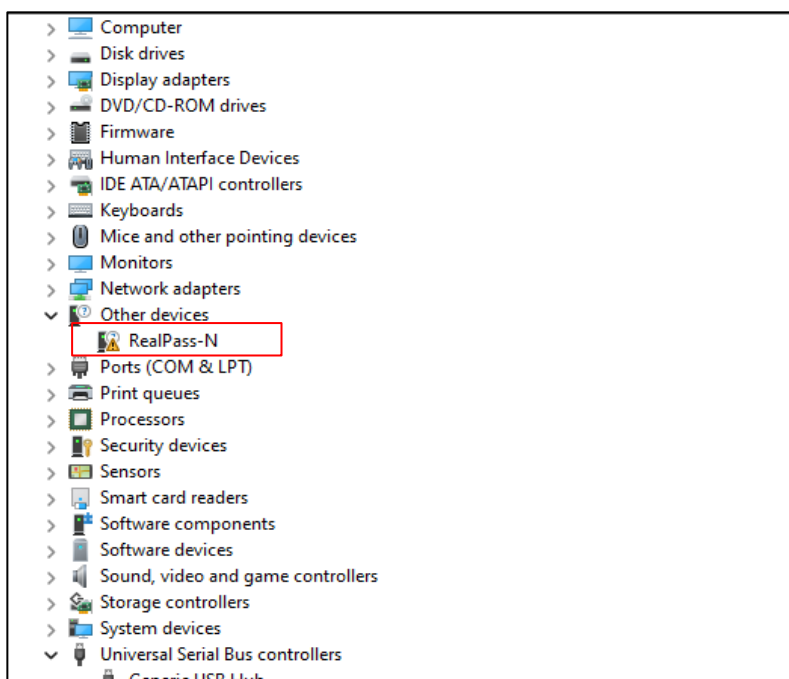
➔ Click the [Finish] button.

2-5. After installation, you need to check in Device Manager to see if the device driver is installed properly.

Press the Windows key + R to open the Run dialog, type devmgmt.msc, and click OK. If the device is installed correctly, it will appear under 'Universal Serial Bus Controllers' as RealPass-N(Vxx).



2-7. If the driver is not installed correctly, RealPass-N will appear under 'Other Devices'. In this case, reboot the PC and reinstall the driver.



Sample APP(Example) User Guide

This page provides instructions on how to use the Sample APP. Please follow the guide below to utilize the Sample APP.

1. Navigate to the BIN folder located at \Program Files\Xperix\RealPassSDK.

Bin	2024-06-17 오후 1:06	파일 폴더	
Document	2024-06-17 오후 1:06	파일 폴더	
Driver	2024-06-17 오후 1:06	파일 폴더	
Example	2024-06-17 오후 1:06	파일 폴더	
Install	2024-06-17 오후 1:06	파일 폴더	
Uninstall.exe	2024-06-13 오후 1:12	응용 프로그램	56KB

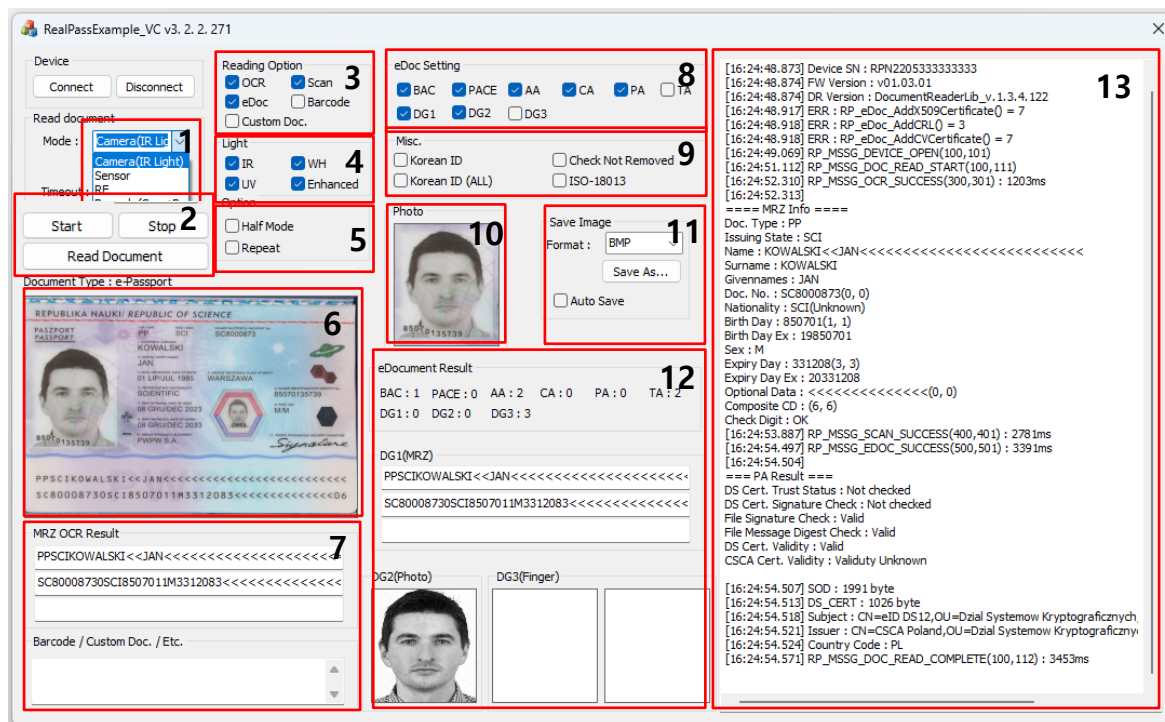
2. Move to the folder corresponding to your PC specifications.

x64	2024-06-17 오후 1:06	파일 폴더	
x86	2024-06-17 오후 1:06	파일 폴더	

3. Run the program RealPassExample_VC.exe.

BarcodeReaderLib.dll	2024-03-19 오후 1:36	응용 프로그램 확장	874KB
DocumentReaderLib_N.dll	2024-04-25 오전 1:47	응용 프로그램 확장	93,938KB
EdgeDecoder.dll	2024-03-19 오후 1:36	응용 프로그램 확장	1,172KB
ePassportAPI.dll	2024-03-19 오후 1:36	응용 프로그램 확장	6,070KB
ePassportAPI_CSDK.dll	2024-03-19 오후 1:36	응용 프로그램 확장	4,747KB
ePassportCrypto.dll	2024-03-19 오후 1:36	응용 프로그램 확장	4,754KB
ePassportSPKI.dll	2024-03-19 오후 1:36	응용 프로그램 확장	1,872KB
ePassportLogger.dll	2024-03-19 오후 1:36	응용 프로그램 확장	292KB
ePassportReader.dll	2024-03-19 오후 1:36	응용 프로그램 확장	353KB
opencv_world343.dll	2024-03-19 오후 1:37	응용 프로그램 확장	75,954KB
RealPassBarcode.json	2024-06-13 오후 12:37	JSON 파일	2KB
RealPassDocument.json	2024-04-25 오전 11:34	JSON 파일	45KB
RealPassExample_CSharp.exe	2024-06-13 오후 12:44	응용 프로그램	46KB
RealPassExample_CSharp.exe.config	2024-03-19 오후 1:36	VisualStudio.conf...	1KB
RealPassExample_VC.exe	2024-06-13 오후 12:44	응용 프로그램	164KB
RealPassSDK.dll	2024-06-13 오후 12:44	응용 프로그램 확장	1,426KB
RealPassSDK.json	2024-06-13 오후 12:41	JSON 파일	4KB
tensorflowlite_c.dll	2024-03-19 오후 1:36	응용 프로그램 확장	2,324KB
Xperix.RealPassSDK.dll	2024-06-13 오후 12:44	응용 프로그램 확장	40KB

6. Sample App Configuration



(1) Document reading mode options (Document Detection Mode)

Item	Function
Camera (IR Light)	Document detection mode using the camera (default)
Sensor	Document detection mode using the proximity Sensor
RF	Electronic chip detection mode using the RF Antenna
Barcode(Cam+Bar)	Barcode reading mode using LED when movement is detected
Bar&Pass	Barcode or document reading mode using LED when movement is detected
Barcode Only	Barcode reading mode using LED

(2) Capture Button

Item	Function
Start	Start document detection based on the configured settings
Stop	Stop document detection mode
Read Document	Capture document immediately

(3) Reading Option

Item	Function
OCR	Read the MRZ area of the passport
Scan	Capture the document
eDoc	Read the electronic chip (This menu requires OCR to be enabled)
Custom doc	Read the ID card (This menu requires scan to be enabled)

(4) Light

Item	Function
IR	Capture document using Infrared LED
WH	Capture document using White Light LED
UV	Capture document using Ultraviolet LED
Enhanced	Function to enhance the quality of each image

(5) Option

Item	Function
Half mode	Function to capture document at half size
Repeat	Continuous shooting function

(6) Image

Item	Function
Image	Area for displaying captured document images

(7) OCR, Barcode Data

Item	Function
MRZ OCR result	OCR results of captured MRZ
Barcode/ Etc.	OCR results of captured barcode or ID Card

(8) eDoc Setting

Item	Function
BAC, PACE etc..	Set readable elements among electronic passport data groups and security features

(9) Misc.

Item	Function
Korean ID	Function to read Korean ID cards
Korean ID(ALL)	Function to read additional information from Korean ID Cards
Check not removed	Function to verify device usage without removing the document
ISO-18013	Function to read ID cards compliant with ISO-18013 standard

(10) Photo

Item	Function
Photo	Area for displaying the face region of the captured ID card

(11) Save Image

Item	Function
Image Save	Function to save images of captured documents

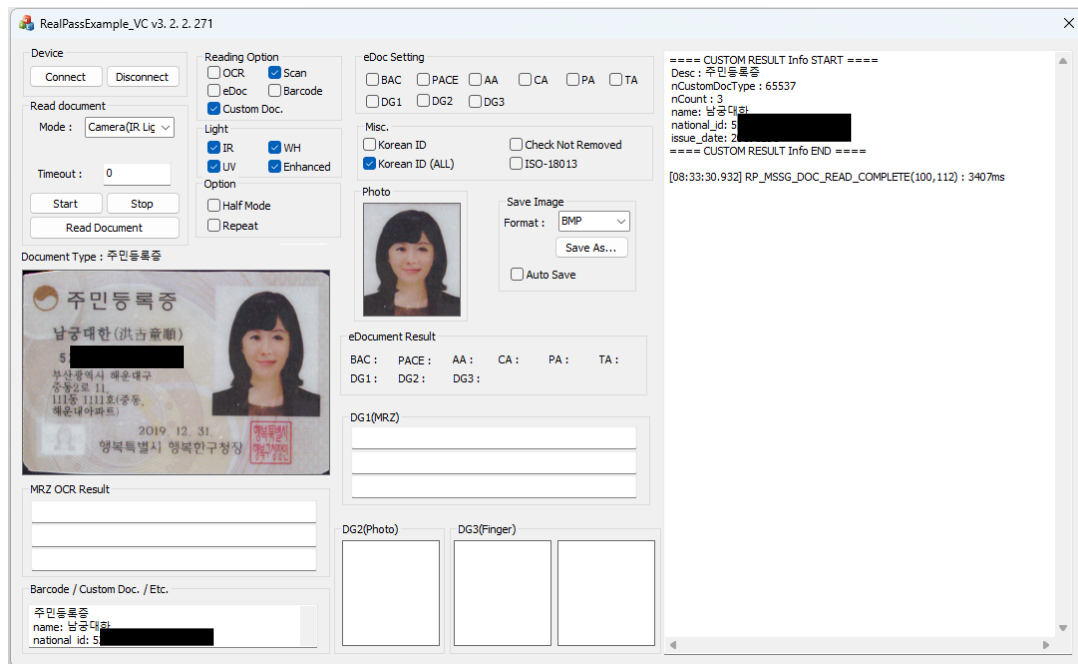
(12) eDocument result

Item	Function
Electronic Document Results	Area for displaying results of read electronic passports

(13) Text Box

Item	Function
Text Box	Text area for displaying occurred events

8. Korean ID Card Capture Method (Example)



(1) Active Items

Item	Function
Scan	Capture the document
Custom Doc	Read the ID card (This menu requires scan to be enabled)
IR	Capture document using Infrared LED
WH	Capture document using White Light LED
UV	Capture document using Ultraviolet LED
Enhanced	Function to enhance the quality of each image
Korean ID (ALL)	Function to read Korean ID cards

Trouble Shooting Guide

This document provides instructions on how to handle errors that frequently occur while using the product.

If you need any further technical support, please visit, please visit <https://tech.xperix.com> to create a new ticket and share your inquiry.

If you would like to learn more about error handling methods, please visit <https://tech.xperix.com/en/support/solutions> and refer to the FAQ section.

Symptoms	Causes	Solutions
The device is not powering on.	This occurs when the device connection is not smooth.	Check the connection status of the USB cable.
		Ensure that the device's power switch is turned on.
		Connect the device to a different USB port on your PC.
The electronic chip is not being read.	The RPN-B Model does not support electronic chip reading.	If you wish to purchase a device that supports electronic chip reading, please contact the following email: (korea@xperix.com)
	This occurs when the smart card license is not installed.	Install the smart card license.
	This occurs when the smart card does not function due to service settings.	Set the Windows app 'Services' -> 'Smart Card' to "Startup type: Automatic / Service status: Running".
		Set the Windows app 'Services' -> 'Certificate Propagation' to "Startup type: Disabled / Service status: Stopped".
	This issue occurs due to a conflict between the PC's built-in smart card reader and the smart card reader of the passport scanner.	Disable the built-in smart card reader in Device Manager by setting it to Disabled.
The device powers on but does not scan documents	This issue may also occur if the installed .NET Framework is either not present or improperly registered in the system registry.	Download and install the appropriate .NET Framework from the official Microsoft website. - .NET Framework 4.8.1 Service Pack - .NET Framework 3.5 Service Pack
	This occurs when the device is not properly connected to the SDK.	Reinstall the device driver.

Specifications

Size (WxDxH, mm):	155 x 190 x 99.8
Reading Area Size (HxV, mm):	130 x 90
Weight (kg):	1.01
Image Resolution (DPI):	500, 5M Pixel Sensor
Image Color:	24 bits / pixels
Lighting:	White/Visible, IR, UV (UVA)
Contactless RFID Reading (Optional):	ISO 14443 A/B type (up to 848Kbps), including BAC, PA, AA, EAC, PACE, SAC, PC/SC support
Barcode Reading:	1D: Code 11, 39, 39 Extended, 93, 128 / UCC 128 / 2 of 5 Interleaved / EAN 8, 13 / UPC A, E / Add 2, 5 2D: PDF417, Data Matrix, QR Code, Micro QR Code Supports 1D/2D barcode decoding from both paper and digital screens (e.g., phone or monitor).
Image Formats:	BMP, JPG, PNG, JPEG2000, TIFF
Image Sensor:	5M Pixel
User Feedback Elements:	Navigation LED, Beep (Customizable)
Operating Temperature Range:	0°C ~ 50°C
Operating Humidity Range:	0 to 95%
IP Rating:	IP54 (surface), Scratch-resistant reinforced glass
Power Supply:	USB (5V, 700mA) or External Power (DC12V, 100~240V 50/60Hz, 300mA)
Interface:	USB 2.0 High-Speed, Integrated USB 3.0 Hub – 2 ports for external peripherals
Communication Protocol:	ISO 14443 Type A/B, ISO 7816, PCSC Interface
OS Compatibility:	Windows 10 or later (32/64-bit)
Certifications:	CB, CE, FCC, KC, RoHS, IEC 62471, WEEE, REACH, WHQL

Regulatory Information

FCC Compliance Information

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.

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 to an outlet on a circuit different from that to which the receiver is connected.
- Ask an operator or a skilled technician for assistance.

Unauthorized modifications or changes not expressly approved by the manufacturer could void the user's authority to operate the equipment under FCC regulations..

European Union CE Mark and Compliance Declaration

This product is CE marked in accordance with the R&TTE Directive (1999/5/EC). Xperix Inc. declares that this product complies with the essential requirements and other relevant provisions of Directive 1999/5/EC.

This device is a Class 1 radio equipment under the European Radio and Telecommunications Terminal Equipment (R&TTE) Directive (1999/5/EC)..



WEEE Mark and Compliance Information

This product must be disposed of and recycled in accordance with the WEEE Directive (2012/19/EU). Xperix Inc. declares that this product complies with the mandatory requirements of the WEEE Directive and other relevant regulations. Users must return this product to appropriate recycling facilities, separating it from general waste, in accordance with local and national regulations.





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