xperix

RealScan-D

Portable Enough for Mobile Enrollment Kit

User Manual



INTRODUCTION

1. RealScan-D

RealScan-D is the FBI Appendix F certified, FAP45, single/dual fingerprint live scanner. Its proven fingerprint algorithm, RealScan-D captures the flat and roll fingerprint at an extremely fast frame rate. All the leading technology resides in a sleek and ergonomic design and a user-friendly interface that makes it credibly simple to use with minimum training and maintenance.

2. Features

Hardware Features

- Extra-wide active image area(1.8” x 1.8”) for easy capture of two fingerprints
- Strong performance for wet fingers by advanced optical technology
- FBI certification for civil ID and AFIS application
- FIPS 201 certification
- High quality image capturing for wet and dry fingers
- Built-in buttons for on-device operation
- USB 2.0 interface for data transfer and power supply
- Easy-to-mount footprint design for desks and kiosks
- No external moving part

Software Features

- Auto capture by sensing finger placement
- Slippage detection for rolls
- Halo effect and ghost image elimination
- Image quality check
- Automatically segments two finger slaps.
- Sequence check in rolls and slap acquisition
- International standard image compression, format and interfaces

FEATURES AND SPECIFICATIONS

1.1. Specifications

Fingerprint Types	single rolls / single flats / dual-finger flats
Resolution/Gray scale	500 dpi / 256 gray levels
Dimension (W x L x H)	84mm x 171mm x 63mm
Platen Size (W x L)	48mm x 48mm
Capture Size (W x L)	46mm x 46mm
Image Size (W x L)	Flat Single: 800 x 750 Flat Two: 900 x 900 Rolls: 800 x 750
Image Quality Standards	FBI IAFIS Appendix F spec
Ingress Protection	IP53
Operating Temperature	-10℃ ~ + 50℃
Operating Humidity	From 10 to 90%, non-condensing
Power Supply	USB Host
Weight	540g
Interface	USB 2.0 High Speed
Operating Systems	Windows: 7, 8, 8.1, 10 32 / 64bit Linux: Ubuntu, Debian, Fedora, Cent OS 32 / 64bit Android 5.0+ (Custom 4.0)
Certificate	FBI, FIPS 201, WHQL, CE, FCC, UL, KCC
Sound Interface	Buzzer

Exterior

1. Picture – Design Details

Dimension

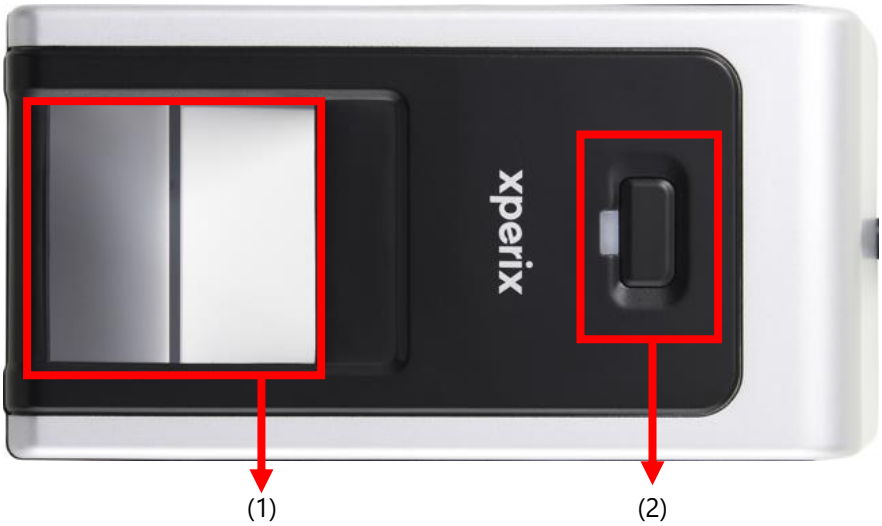




- Device Dimension: 171mm(L) * 84mm(W) * 63mm(H)
- Device Weight: 0.54Kg

2. Top & Rear View

Top View



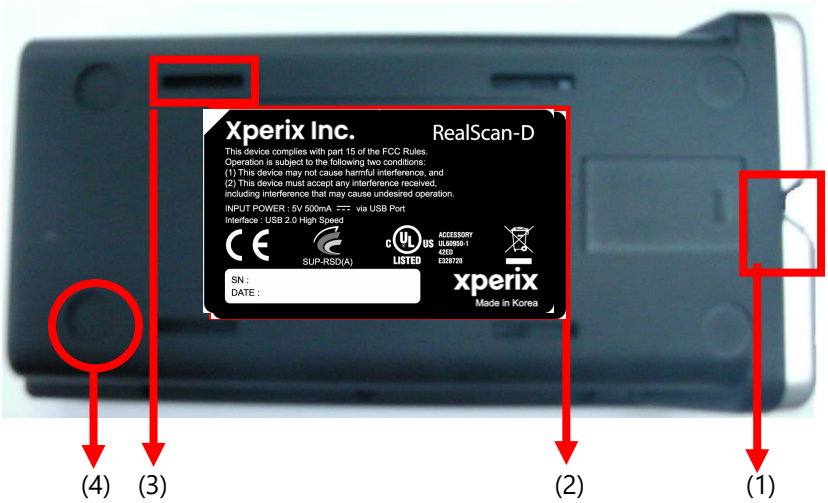
(1) Scanning Window

- Area for user's fingerprints scanning

(2) LED Light and Scan Button

- LED light to indicate scannig progress

Rear View



(1) USB cable holder

(2) Device label includes basic information and serial number of the device.

(3) 4 slots for mounting bracket

(4) Rubber pads for anti-slippage

3. Label

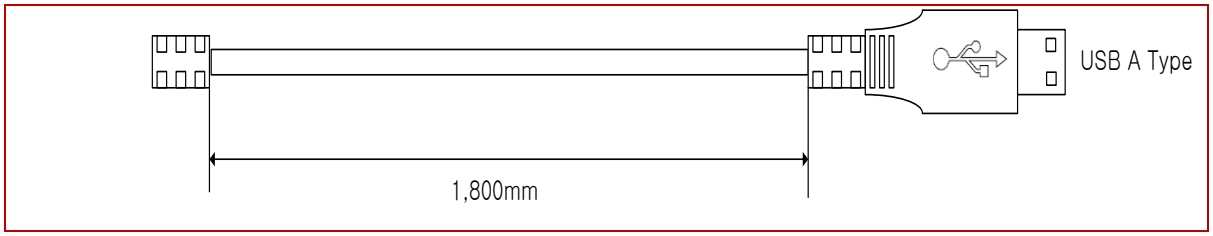


Device Label

- Includes interface, power specifications, certification markings, and device serial number.

4. Accessory

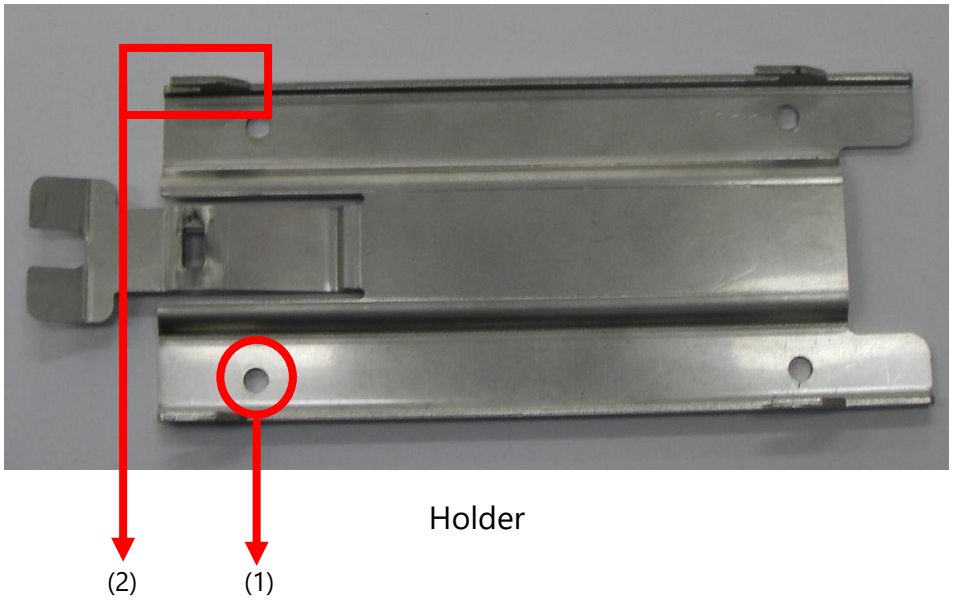
USB Cable



USB Cable

- “A type” USB cable connected to the device by stopper with 1,800mm cable.

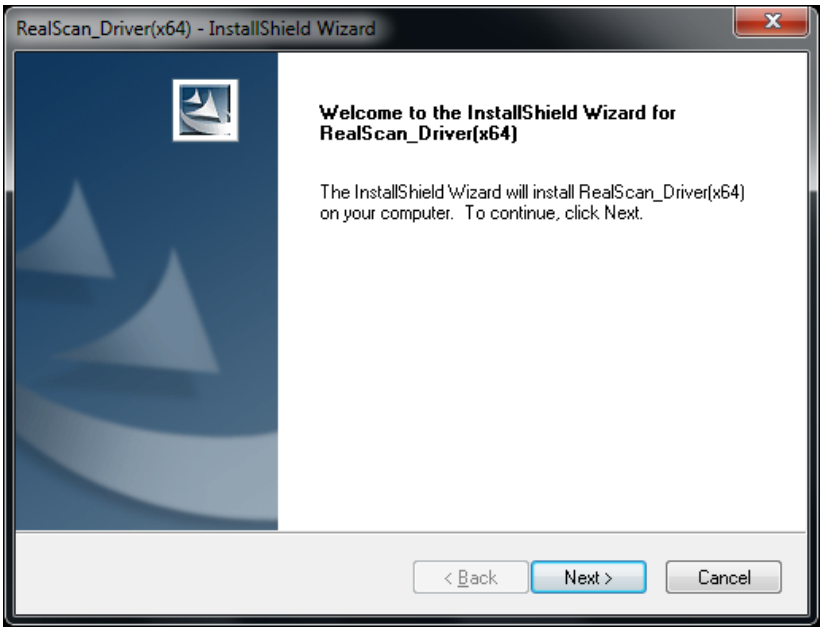
5. Mounting Bracket Installation



(1) Attachment holes: Drill holes to the surface on which you wish to install the device, and bolts on the mounting bracket. The mounting surface is variable depending on user environment (Concrete, metal, wood and so on). Mounting bolts can be M4 machine screws or tapping screws and their length is variable depending on user environment.

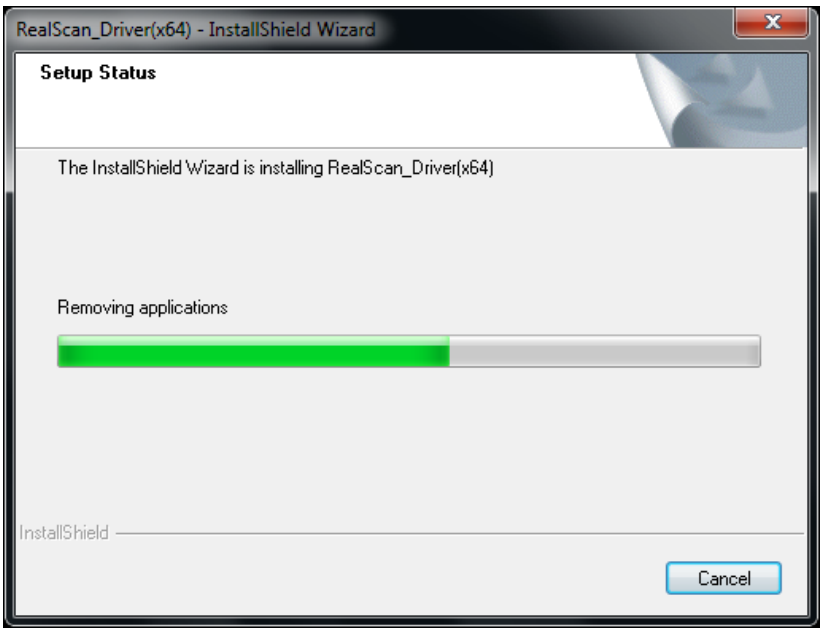
(2) Fixing Slots: Slots to attach the device to keep it in place.

6. Device Driver Installation



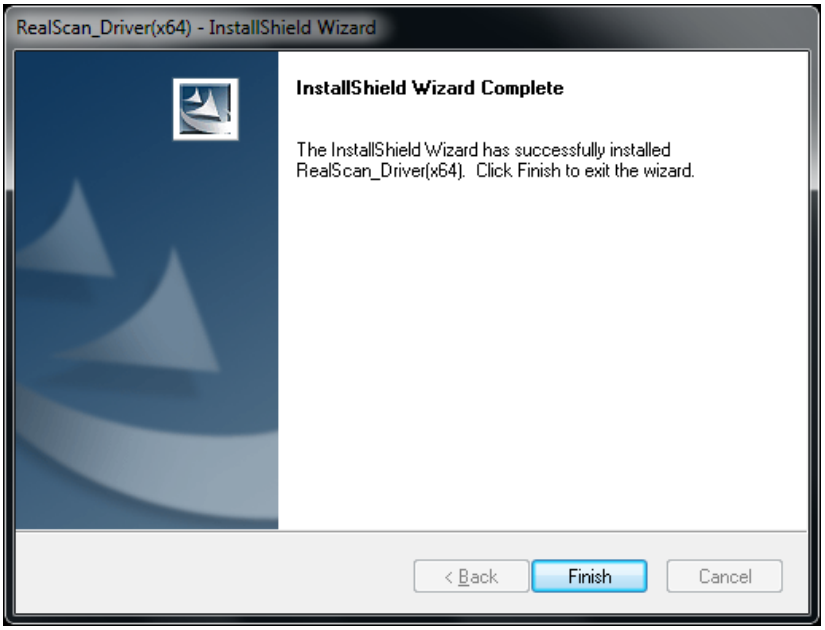
1st Step of Installation

① Disconnect USB cable to PC before starting the driver installation.
② Double-Click "RealScan_Driver(x86 / x64)-V1.2.0.0.exe" as administrator.



2nd Step of Installation

③ The driver installation is starting.



3rd Step of Installation

④ Click “Finish” to exit the driver installation program.

⑤ Connect USB cable to PC, and check status in Device Manager. (Refer to p. 15)

※ Please be advised following the troubleshooting guide to check whether the driver is installed properly or not.

Capture

1. Notes for Fingerprint Scanning



Top Scanning

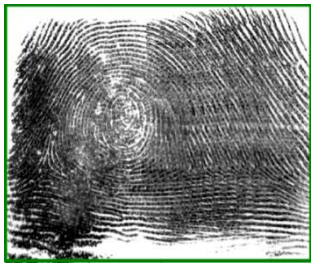


Side Scanning

- Top Scanning: If only the top of a finger is placed on the scanning area, only the top of the finger part will be scanned.
- Side Scanning: If only the side of a finger is placed on the scanning area, and if the center of the finger is not placed on the scanning area, only the side of the finger part will be scanned.



Distorted image



Slippage Image

- Distorted Image: When a finger is placed on the scanning area with too much pressure, the image may become distorted as the important data in the fingerprint disappear.
- Slippage Image: When a roll capture is scanning, if a finger slips are detected, the image may become extended.



Good Fingerprint Image



Good Roll Fingerprint

- To scan a fingerprint successfully, place the finger at the center of the scanning area with

reasonable pressure.

- If a fingerprint image is blurred, remove pressure from the finger and scan the fingerprint again when a fingerprint image is good.
- If a fingerprint image is slipped, roll the finger with normal speed, and scan the fingerprint again. If so, you can scan the fingerprint without slipping or blurring.