

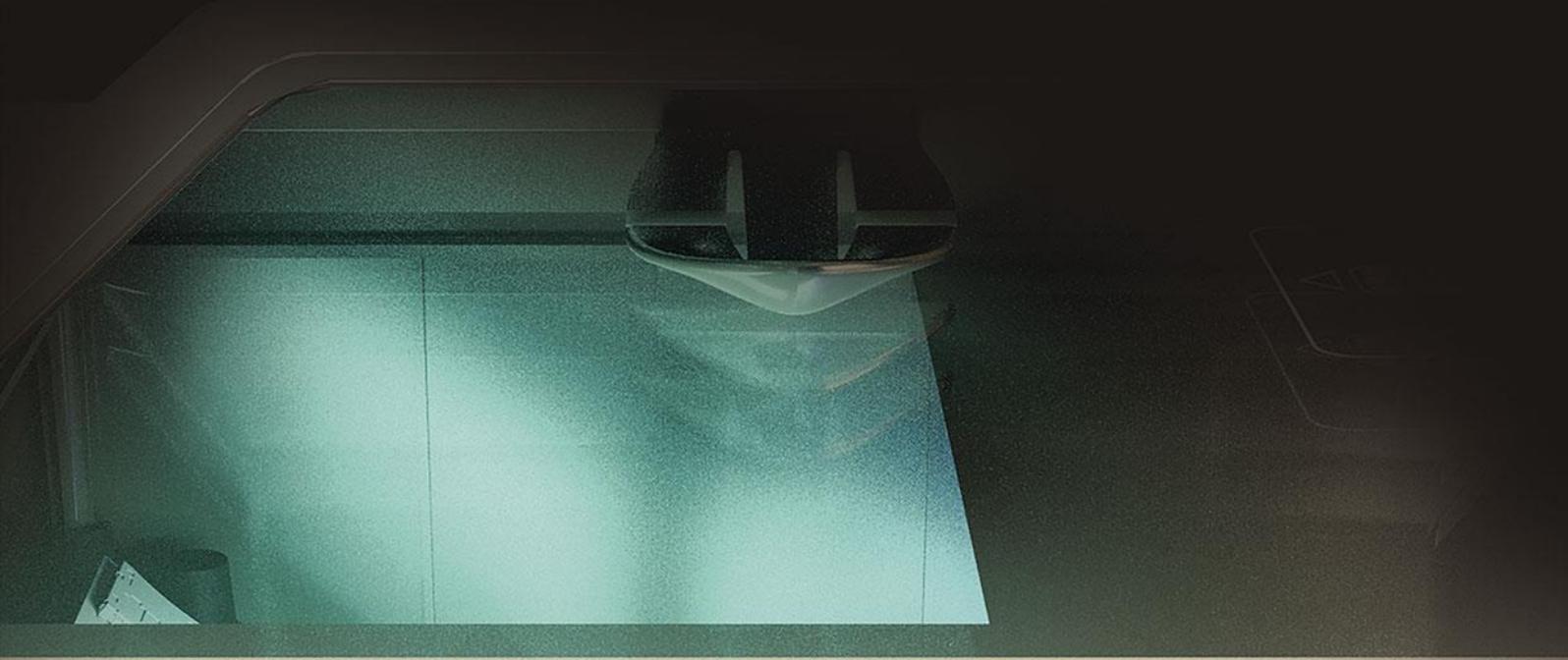


PASSPORT READERS AND ID SCANNERS WITH OCR & AUTHENTICATION SOFTWARE

User's Manual

Osmond L, R

Installation process and instructions
for use of the Osmond USB devices



OSMOND L, R

USER MANUAL

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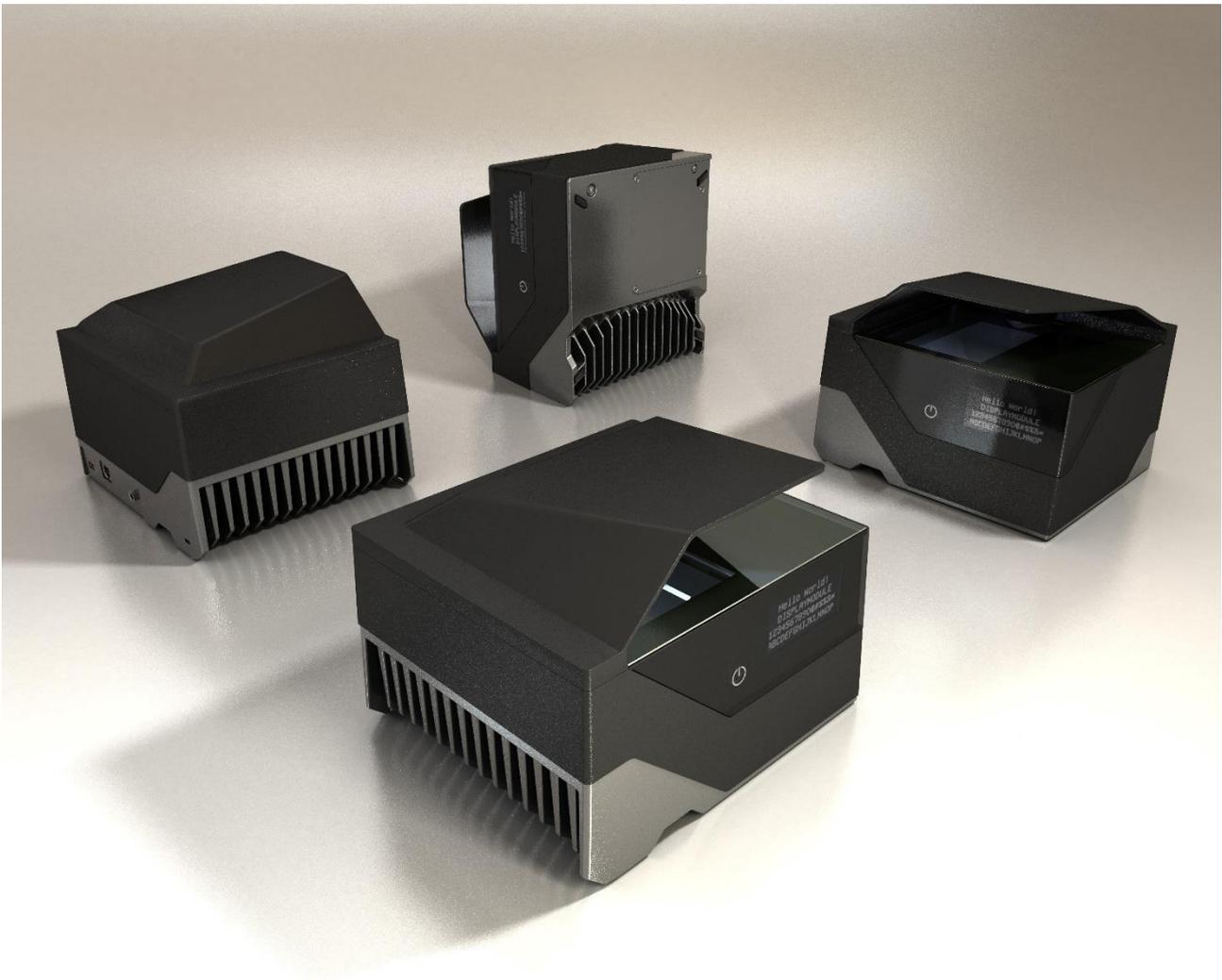
Equipment modifications:

This equipment must be installed and used in accordance with the instructions given in its documentation. This equipment contains no serviceable components. Unauthorized equipment changes or modifications cause warranty to void.



INTRODUCTION

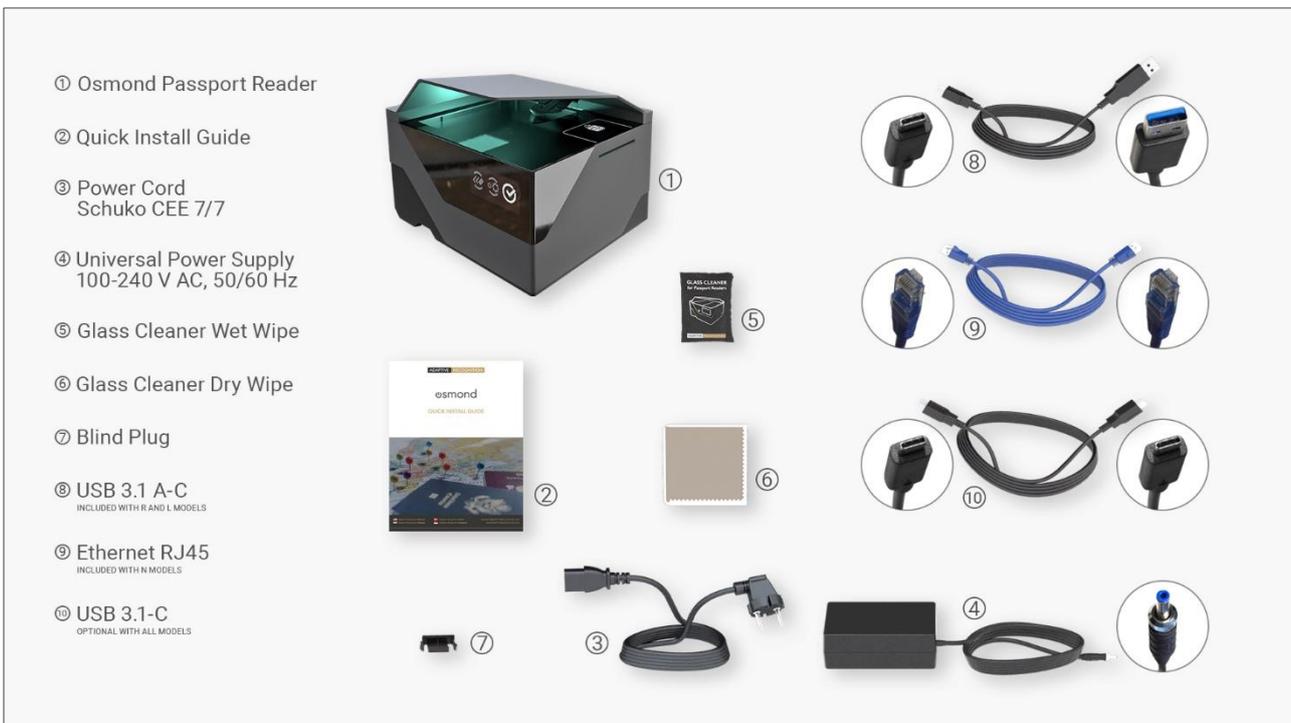
The Osmond is a full-page, multi-purpose passport and ID reader that provides automatic, accurate data extraction and verification with the ability to read multiple types of identity documents: **passports, e-passports, ID cards, visas and driver licenses**. The printed data is extracted from the entire page (MRZ, VIZ and 1D & 2D bar codes) while digital data is obtained from contactless (RFID) and contact smart chip (optional). The available multiple illumination sources are visible white, IR, UV, OVD and edge light.



DEVICE OVERVIEW

1. PACKAGE CONTENTS

| | Passport Reader device | 5V output power supply | Power cord (EU) | USB cable (USB3.0) | Ethernet cable | 1 pc of glass cleaning wipe | Blind plug |
|----------|------------------------|------------------------|-----------------|--------------------|----------------|-----------------------------|------------|
| Osmond L | ✓ | ✓ | ✓ | ✓ | - | ✓ | ✓ |
| Osmond R | ✓ | ✓ | ✓ | ✓ | - | ✓ | ✓ |

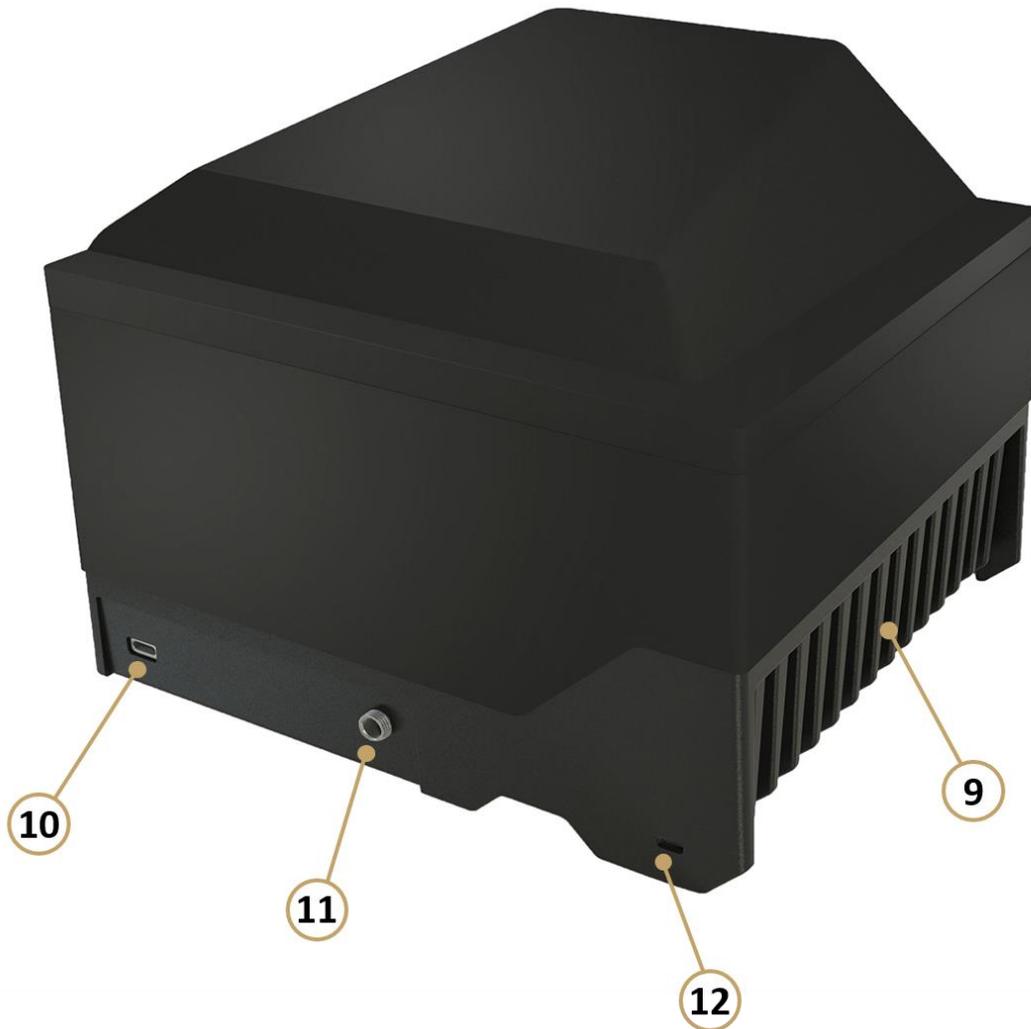


2. PARTS AND COMPONENTS

The device is produced in a **plastic (ABS) housing (1)** and an **aluminum base plate (2)**. The **object-plate (3)** is protected from the external light-striking by the **plastic (ABS) shield/cover (4)**. The shield has a **document holder (5)** in order to facilitate the placing of the document. The **OLED display (6)**, indicating the various phases of the device, and the **On/Off touch button (7)** are installed on the front of the body. Optionally, the device is equipped with a **smart card reader (8)**, located on the side of the device.



The scanner is designed with an **aluminum heatsink (9)**. The **USB socket (10)**, the **power supply socket (11)** and the **Kensington® security slot (12)** are located on the back of the device.



Note

The Osmond device is designed with a removable document holder built in the shield. This feature can be vital in special cases e.g., scanning extremely thick documents which cannot fit to the device due to their size being incompatible with the document holder. In that case, this holder can be removed and replaced with the so called '**blind plug**'. For more information on how to perform the replacement, see [Removing the Osmond Document Holder](#).

3. MAINTENANCE

The device has no moving parts – except for the motorized, auto-focus module – which ensures maximum reliability and low maintenance. However, in order to ensure that the device remains in a satisfactory operating condition, the following actions should be performed regularly.

To clean the device, do the following:

1. Turn the power touch button off. For more information see [Shutdown Process](#) chapter.
2. Clean the document window with a clean cloth. For stains that cannot be wiped off with a cloth, use a mild glass cleaner or a lightly dampened cloth (alcohol).

 **Important!**

Do not use abrasive cleaners or solvents. These may scratch the glass or damage the plastic.

 **Important!**

The device should not be operated with its object-plate exposed to direct sunlight.

3. Verify that there are no streaks or smudge spots remaining on the document window.
4. Clean the body of the reader with a lightly dampened cloth (water).

ACCESSING THE DEVICE

Osmond R and L models are USB devices that operate as any other ADAPTIVE RECOGNITION passport reader. They can be used with the Full Page Reader or Authentication Checker applications as well as our SDK.

Note

For more information on the Full Page Reader or Authentication Checker applications, please read the "Full Page Reader User Manual.pdf" or the "Authentication Checker User Manual.pdf".



1. INSTALLATION

1.1. HARDWARE INSTALLATION

Please follow the next steps for connecting the device to the PC:

- Connect the device to one of the **USB 2.0 or 3.0 ports** of the PC with the supplied USB cable.

Note

It is strongly recommended to use the USB ports of the motherboard. When connecting the USB cable to the front panel USB port, use shielded cable between the motherboard and the USB panels.

- Connect the power supply to the unit and turn the device on by **touching the red power button** for a few seconds on the front side.

Note

If the given PC has an adequate PCI card with PowerDelivery functionality and USB type-C slot, then the device can be powered via USB.

Important!

Connect the power supply to the device by completely screwing on to the right the round, dotted part of the power supply closest to the housing.



- After the button led turns **from red to green**, the device starts booting. Please note that the boot sequence may take a few minutes.

1.2. SOFTWARE INSTALLATION

Due to the fact that USB Osmond devices operate similar to any other ADAPTIVE RECOGNITION passport reader in order to use it the ADAPTIVE RECOGNITION driver package is necessary. For Osmond devices, the Passport Reader software package **2.1.9.5 or higher version** is required.

The Passport Reader software package is available in the following ways:

- Check the automatic notification email which was sent on the day of the dispatch and use the link to download the latest passport reader software.
- Alternatively, check our portal (<https://adaptiverecognition.com/doc/id-scanners-readers/passport-reader-software/#software/>) to access our software modules.

The Passport Reader Software Package includes the following components:

- Drivers for Passport Reader devices
- Software Development Kit for C/C++, Visual Basic, Delphi, C#, VB.NET and Java programming languages
- Interface files
- Sample programs
- Manual in HTML and CHM format
- Full Page Reader Application
- Authentication Checker Application
- Passport Reader utility programs (License Manager, PRDTool)

Note

For more information regarding the installation process, please read the "**Passport Reader Install Guide.pdf**" which can be found in the software package.

OLED DISPLAY STATUS ICONS

Unlike previous document scanner models, the Osmond device is equipped with OLED display. This screen is able to display the following status icons.

| DISPLAY ICON | STATUS NAME | STATUS DESCRIPTION |
|--------------|--------------------|---|
| | USB disconnected | The device is ready but USB disconnected |
| | USB connected | The device connected via USB |
| | Ready | The device is ready to scan |
| | Moving | The document is moving on the glass |
| | Moving ready | The document has stopped, and ready to scan |
| | RFID reading | RFID reading is in progress |
| | Working | Document reading is in progress |
| | File transfer | Firmware file is transferring |
| | Update in progress | Firmware update is in progress |
| | Update OK | Firmware update finished successfully |
| | Update error | Firmware update failed |
| | Power off | The device is turning off |

 Note

If you see the "Update error" icon during the update process, this indicates that the update has failed for some reason. In this case, the device automatically rollbacks to the original firmware version.



OLED STANDBY MODE

In order to protect the lifetime of the OLED display, the OLED screen enters idle mode. By using the `ctrl/screen_standby` property a time interval can be specified, after which the OLED screen of the device enters idle mode (sleep mode). This function can be activated by:

1. specifying **Screen standby** function in the PRDTool utility tool,
2. specifying it on the **OPTIONS / MANUAL SETTINGS** tab in the Full Page Reader application,
3. modifying the `gxsd.dat` file.

Note

In the device firmware a fixed 3600 sec timer is set. Following this the OLED brightness is reduced to 20%, but it is not turned off.

In the case of modifying the `gxsd.dat` file (see below), the customized value will be valid in the given environment and the OLED display operates as explained in the following section.

1. In the PRDTool utility tool:

In the PRDTool click on the cogwheel icon in the **Settings** column to open the additional features menu. Enable the **Screen standby** option and specify a time period. In order to save the changes, click on the **[Apply]** button.

Note

In the case of setting the standby mode in the PRDTool, the OLED screen does not turn off, but remains in idle mode.

Note

For more information on setting the standby mode in PRDTool, please read the **PRDTool User Manual**.

2. In the Full Page Reader application:

In the Full Page Reader application navigate to the **OPTIONS / MANUAL SETTINGS** tab, and type "ctrl/screen_standby" (without apostrophes) into the "PROPERTY NAME" field and specify any decimal value as "PROPERTY VALUE".

The decimal value is in seconds (example: if you specify the decimal value as "5", the OLED screen fades after 5 seconds of the device being idle). The OLED screen fades after the specified time has passed. After the fade out and an additional 10 seconds the OLED screen turns off.

Note

By default, a 10-second period is between the fade out and the off state.

Note

If you specify this setting in FullPageReader App exclusively, it is only active until closing the application and the property must be set again after startup.

3. In the gxsd.dat file:

In the gxsd.dat file, add the following:

```
<ctrl>  
    <screen_standby value="X"/>  
</ctrl>
```

This is to be pasted anywhere into the <pr> section. The value "X" has to be a decimal value in seconds. The OLED screen fades after the specified time has passed. After the fade out and an additional 10 seconds the OLED screen turns off.

Note

By default, a 10-second period is between the fade out and the off state.

However, if you modify the gxsd.dat file as mentioned, the setting will be default which will be reflected in the application as well. This only needs to set once in the gxsd.dat file.

Note

This setting only goes live after the scanner is connected in the application. If the scanner is turned on, but it is not connected in the application, the OLED display does not enter sleep mode. However, after connecting the scanner in the app, the setting goes live and the display enters sleep mode after the time specified.

SHUTDOWN PROCESS

To turn off the device, perform the following steps:

1. Press and hold the power touch button until the shutdown process starts. Hold the power touch button for another 5 seconds. The progress bar on the OLED screen shows the remaining time.



2. Release the button.
3. Press and hold the power touch button again in order to approve the process.



Hold the power touch button for a few seconds. The progress bar on the OLED screen shows the remaining time.



4. The shutdown process is finished, the device turns off.

SYSTEM RECOVERY

With the system recovery the original manufacturer settings are restored, therefore all saved data is erased.

To perform system recovery on the Osmond device, do the following:

1. Turn the power touch button off and disconnect the connected cables (power supply, USB cables).



Disconnected device

2. Place the device on its side looking out for the aluminum heat sink and unscrew the 4 smaller screws in order to remove the cover plate.



Note

Use an 8 TX screwdriver.

Search for the button located on the printed circuit board (see the following image).



3. Reconnect the disconnected cables (power supply, USB cables).
4. Press the button located on the printed circuit board (PCB) simultaneously with the power touch button, until the OLED screen displays the following:



5. Afterwards, the factory settings are valid.

REMOVING THE OSMOND DOCUMENT HOLDER

The Osmond device is designed with a removable document holder built in the shield.



Document holder under the shield

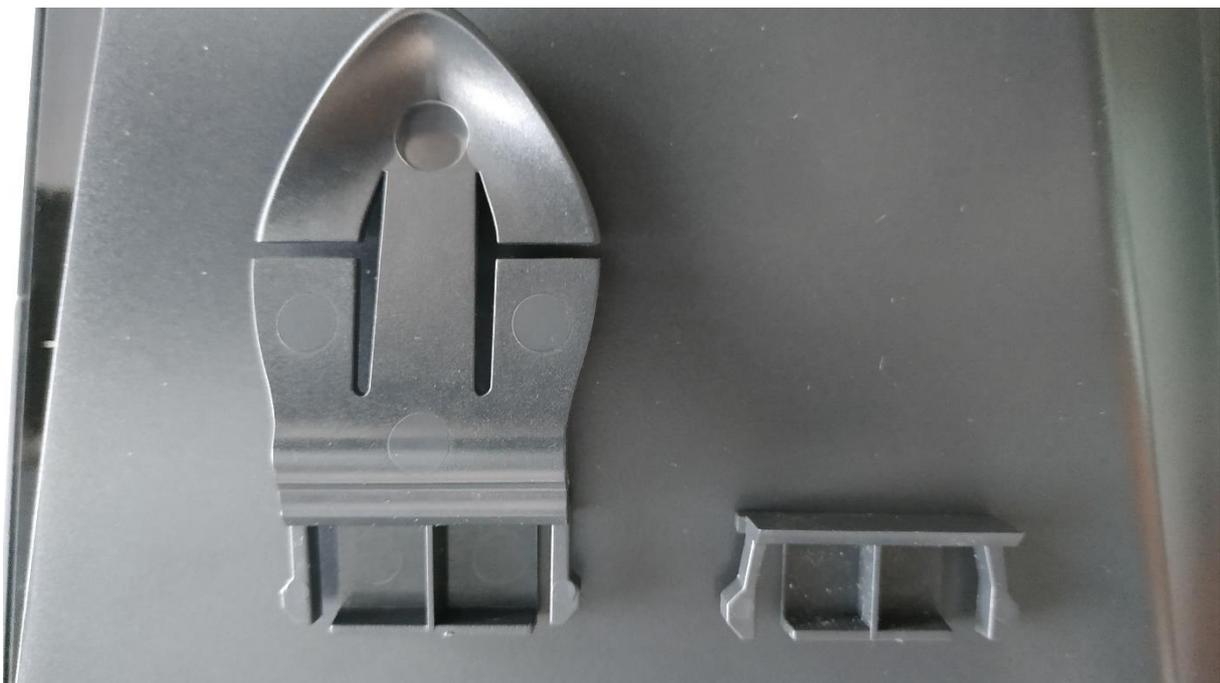
This feature can be vital in special cases e.g., scanning extremely thick documents which cannot fit to the device due to their size being incompatible with the document holder.

The process is simple and easy to perform in which the following steps will guide the user:

1. Hold firmly the document holder and carefully pull it towards the front side of the device (OLED display, ON/OFF touch button) to remove it.

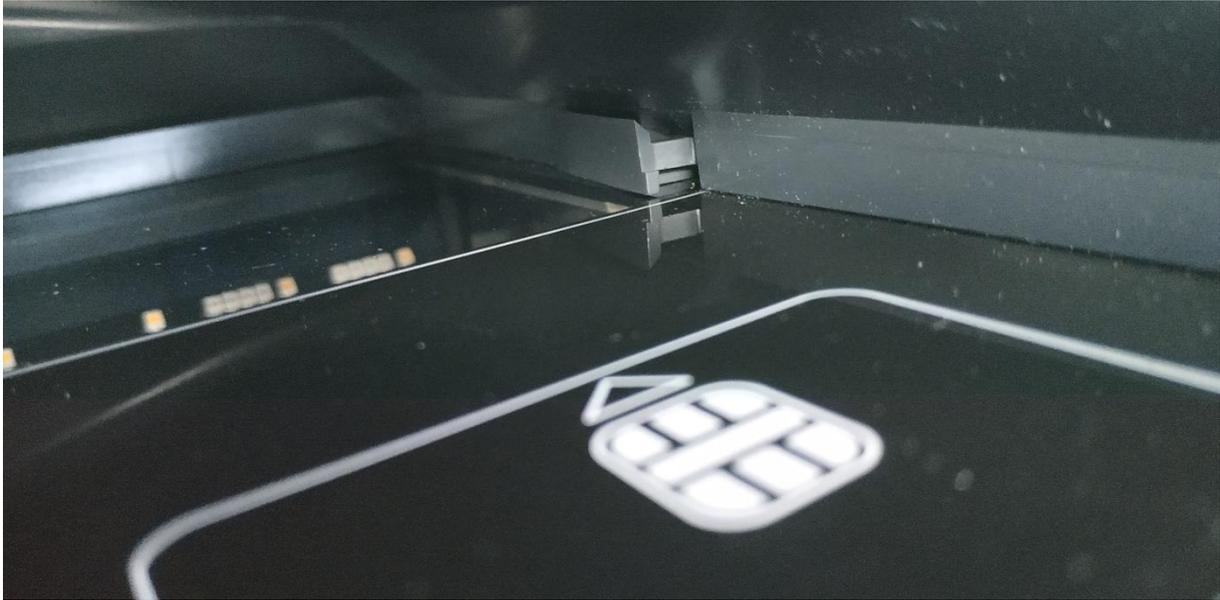


2. Look for the blind plug which is provided with the device in the box.

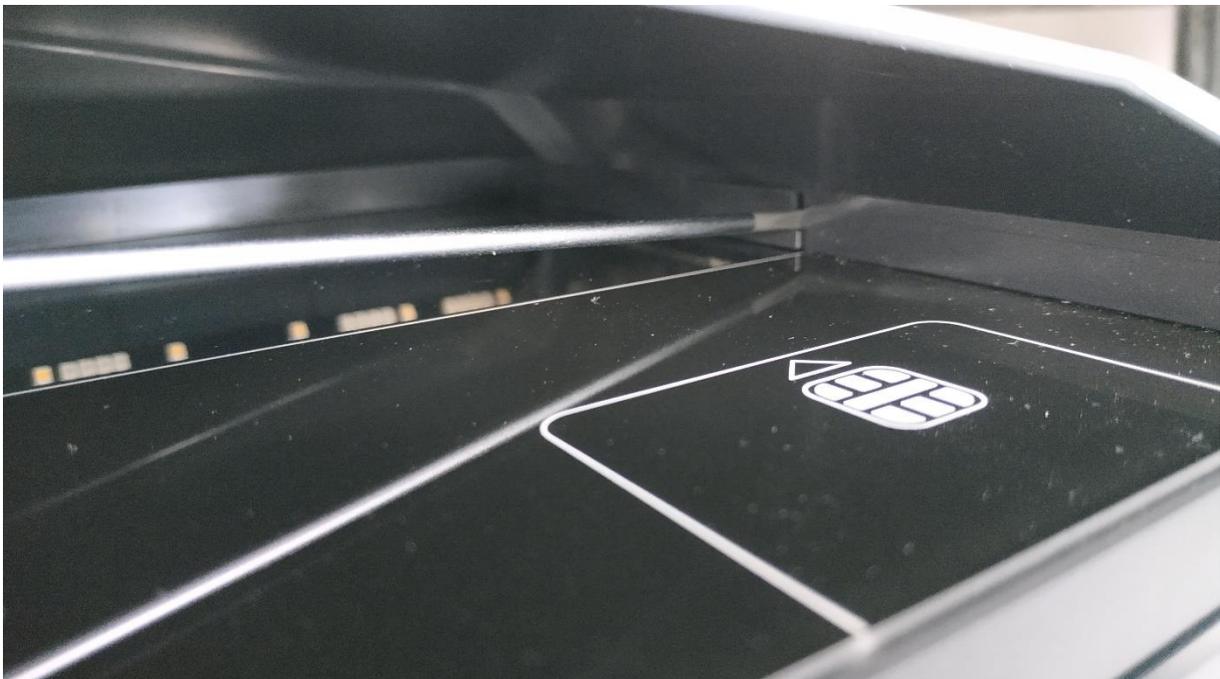


The document holder (left) and the blind plug (right)

3. Gently push the blind plug into the slot of the document holder.



4. If the document holder is to be put back to the device later on, then the blind plug can be removed by using a long and flat screwdriver.



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AR Technical Support System (ATSS) is designed to provide you the fastest and most proficient assistance, so you can quickly get back to business.

Information regarding hardware, software, manuals and FAQ are easily accessible for customers who previously registered to enter the dedicated ATSS site. Besides offering assistance, the site is also designed to provide maximum protection while managing your business information and technical solutions utilized.

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