Airfob Patch
User Manual

Version **1.00** （English）

Index

Safety Precaution

Before using Airfob Patch, review the User Guide included in this caution book and **support.mocainc.com**. Retain documentation for future reference. Please use Airfob Patch correctly and be cautious of the following warnings to prevent danger or property damage.

⚠ Warning

Violating the instructions could result in serious injury or death.

Installation

Do not install where there is direct sunlight, moisture, dust, or soot.

- It may cause fire or electric shock.

Do not install in places where heat is generated by such as electric heaters.

- It may cause fire or electric shock.

Install in places where there is not much moisture or water.

- It may cause product damage or electric shock due to moisture.

Install in places where there is no electromagnetic interference.

- It may cause fire or electric shock.

Do not self-repair Airfob Patch at user's discretion.

- It may cause fire, electric shock, or injury.
- If the product is damaged due to installation or repair carried out on his or her discretion, repair service is not available free of charge.

⚠ Caution

Violation of the instructions may cause minor injury or product damage.

Installation

Do not install near strong magnetic objects such as TVs, (especially CRT) monitors, speakers, and magnets.

- It may cause malfunction of the product.

Apply with sufficient force so that the double-sided tape on the back of the product adheres to the surface of the access control card reader.

- It may cause the product to fall.

Do not attach the product if there is a trace of use on the double-sided tape or trace of removal of its protective film.

- It may cause the product to fall.

Utilization

Do not drop or apply shock on Airfob Patch.

- It may cause malfunction of the product.

When cleaning Airfob Patch, wipe it with a soft dry cloth and DO NOT use water, benzene, or alcohol.

- It may cause malfunction of the product.

Do not reuse double-sided tape.

- If recycled, double-sided tape may lose adhesiveness and may be detached from the reader due to the impurities on its surface.

Do not detach Airfob Patch from the surface of the access control card reader with strong force.

- It may cause malfunction of the product.

Product Size

32

5.7

33.5

LED

Front   **Side**
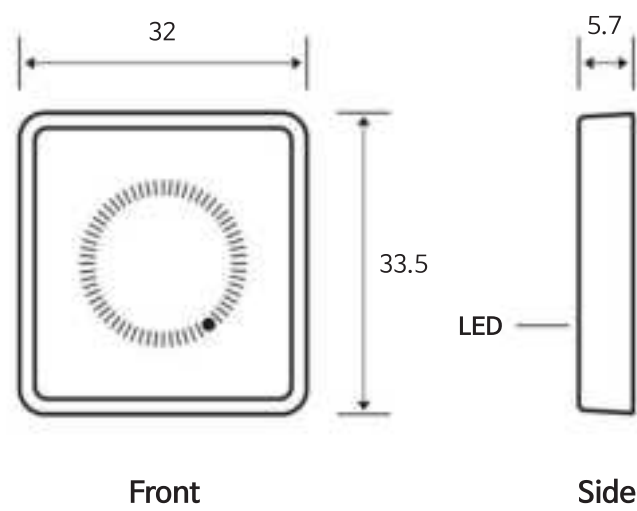
⚠ Note   To reboot, detach Airfob Patch first from the access control card reader. See reboot Airfob Patch below.
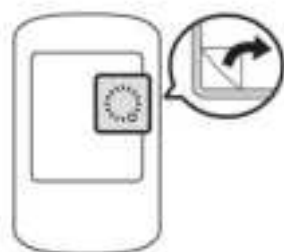
Installation Scenario

1. Perform the RF Device Output Test and Power Test of Airfob Patch.
2. Attach Airfob Patch on the access control card reader with double-sided adhesive tape.
3. If Registering Device is successful after installing the app, setup process is complete.

* After attaching, Airfob Patch operates without additional power supply.

**1. RF Device Output Test
    and Power Test**

**3. Installing App and
    Registering Device**
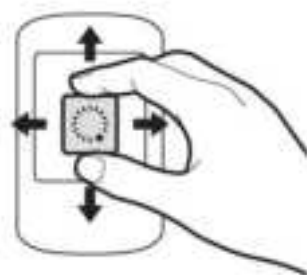
(airfob Patch)   (Airpop Patch. Attaching to Reader)   (Mobile App)

Check Attaching Position

RF Device Output Test and Power Test

1. Position Airfob Patch on the access control card reader so that they touch each other.

2. Check if Airfob Patch LED is blinking green fast.

3. Check if the card access signal generated by Airfob Patch is recognized by the access control card reader and the operational sound is heard 5 consecutive times.

4. When Airfob Patch is powered on, it generates the same access card signal as physical proximity card 5 consecutive times.

5. Attach the double-sided adhesive tape on the back of Airfob Patch, making transparent film face outward, and then remove the transparent protective film.

6. Attach Airfob Patch on the access control card reader.

7. Move onto the Registering Device step.

- **If you have not heard five consecutive access operational sound on the access control card reader, Reboot Airfob Patch**

  ① Detach Airfob Patch from the access control card reader.

  ② When powered off, Airfob Patch LED will blink red for about 6 seconds and eventually turn off.

  ③ Check if Airfob Patch has been powered off and start the process again from step 1.

- **If Airfob Patch blinks in red LED, Reposition Airfob Patch**

  ① Reposition Airfob Patch on the access control card reader to a different position where the LED flashes green.

  ② If the power strength is strong, LED will flash every 0.5 second or 1 second.

 ③ If you have repositioned Airfob Patch to another location, reboot Airfob Patch.

1

2

3

4

5

6
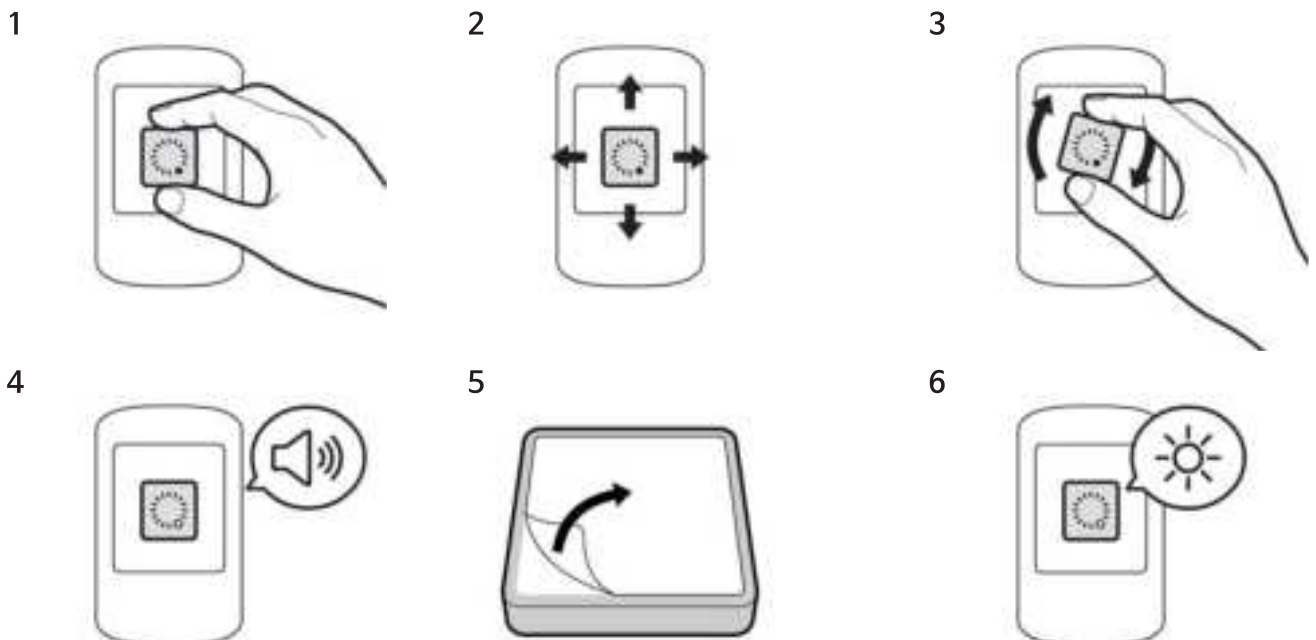
❗ Note   Airfob Patch does not require an additional power supply. Attaching it on access control card reader will power on the device. If the access control card reader does not recognize access card signal from Airfob Patch, see If Access Control Card Reader Does Not Recognize Airfob Patch. Be careful when attaching Airfob Patch with double-sided adhesive tape. Reusing the double-sided tape can be difficult. See Safety Precautions above when installing.
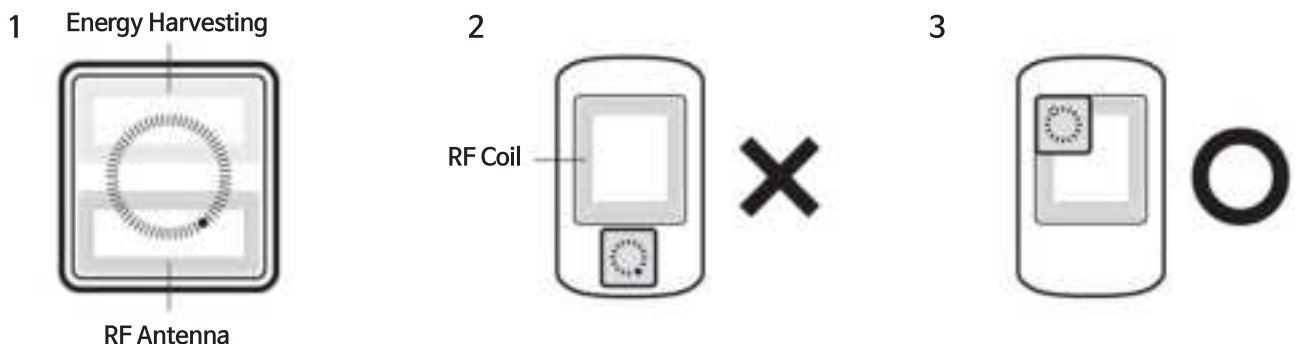
Registering Device

1. Install Airfob Pass app on the smartphone.

2. Enable Bluetooth on your smartphone OS settings.

3. Tap Device Registration, on Settings to register a device on the Airfob Pass app.

4. Sign-in Airfob Portal using the app.

5. Hold the smartphone near Airfob Patch as close as 10cm and tap Device Registration on the app.

6. Complete registration by selecting Airfob Patch. You can find the device on the registered device list.

7. Tap the Sign Out icon on the top right corner to sign out.

8. Download the mobile access card on the app by requesting Airfob Portal administrator to issue a card from the site where the device is registered.

9. Tap the smartphone on the access control card reader and check if valid access has been granted.

1　　　　　　　　　　**2**　　　　　　　　　　**3**
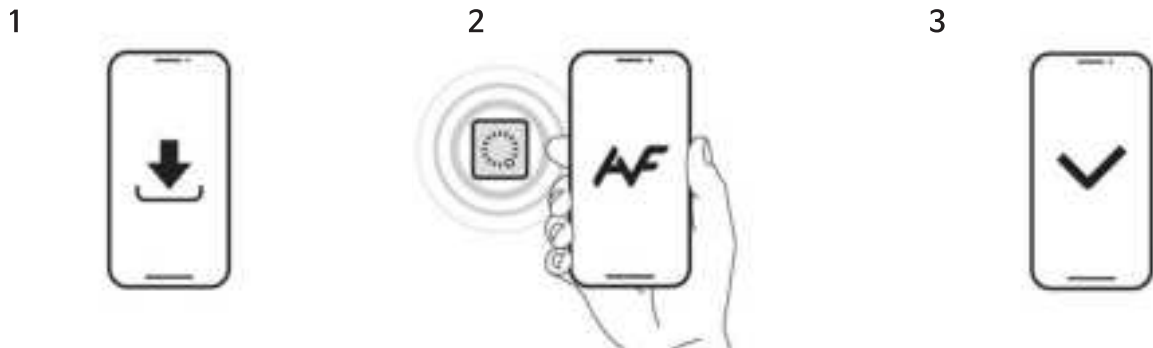
❗ Note　　　If Airfob Patch is registered, the mobile access card must be downloaded on the Airfob Pass app and the smartphone must be tapped on the access control card reader to hear the access operational sound. Device registration can fail due to Bluetooth instability or wireless interference. If fails to register, please try again.

If Access Control Card Reader Does Not Recognize Airfob Patch

• Airfob Patch and access control card reader operate when the location of the RF coil of the access control card reader and RF antenna match.

• If valid access is not granted by access control card reader when tapping the device with the smartphone, reposition or rotate Airfob Patch to find the position that works well.

• The location and direction of Airfob Patch may vary depends on the access control card reader.

• The operational scope of Airfob Patch may be small or large depends on the RF signal strength of the access control card reader and the position and size of its RF coil.

1　Energy Harvesting　　　**2**　　　　　　　　**3**

RF Coil

RF Antenna

Specification

Category	Specification
LED	1 LED (3 colors)
Product Size (Width x Length x Height)	32(W) X 33.5(L) X 5.7(H) (Unit: mm)
Weight	apprx. 13g
Wireless Communication	Bluetooth Low Energy 4.0
Card Emulation	Mifare CSN (NFC Smart Card) (* NFC Smart Card requires customization)
Power	• Energy Harvesting • Requires minimum power output of 2 mW from RF reader. (* it may not work depending on RF readers)

Appendix

Disclaimer

- The information on this manual is provided pertaining to the MOCA System product, Airfob Patch.

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compliance information

Copyright notice

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Warning & Safety Information

Safety Symbols

⚠ **Warning**

- When encountering this symbol in the manual, you must follow these recommendations to avoid imparable damage to your car, system or connected devices or to avoid accidents with injuries or death.

IC Information

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions:
(1) this device may not cause interference, and
(2) this device must accept any interference, including interference

Le present appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisee aux deux conditions suivantes :
(1) l'appareil ne doit pas produire de brouillage, et
(2) l'utilisateur de l'appareil doit accepter tout brouillage radioelectrique subi, meme si le brouillage est susceptible d'en compromettre le fonctionnement.

The antenna(s) used for this device must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

Cet équipement doit être installé et utilisé avec un minimum de 20 cm de distance entre la source de rayonnement et votre corps.

FCC 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, and
2. This device must accept any interference received, including interference that may cause undesired operation.

FCC notification to users

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 when the equipment is operated in a commercial environment. 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, the user is encouraged to try to correct the interference by consulting with a dealer or an experienced technician for technical assistance.

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

Appendix

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