

AirID - User Manual

Trademarks

AirID

The information contained in this document is subject to change without prior notice.

1. Device Layout

1.1. Overview

AirID is a wireless smart card reader that you can carry with you at all times. The AirID reader communicates via a secure Bluetooth Low Energy (BLE) connection with your device and makes the inserted smart card available for cryptographical operations such as data encryption or authentication.

AirID is powered by a rechargeable Li-Po battery. The battery is charged by plugging the AirID into either a computer or external USB wall adapter using the USB cable provided. The LCD display shows all setting information and status of the reader. The user-friendly jog-dial control element helps you to navigate through the settings of the device.

Bluetooth Connected Mode Usage

With the AirID it is possible to protect Apps with smart card based-security via Bluetooth Low Energy (BLE).

Note: Because of the sandbox architecture of iOS and Android, the AirID driver needs to be integrated into an app to use AirID with this specific app.

Examples of apps with AirID integration:

- cgPhone
- SecurePIM
- your company specific apps*

*contact your company administrator!

If you would like to integrate AirID into your app, contact our support at support@certgate.com.

1.2. Package Contents

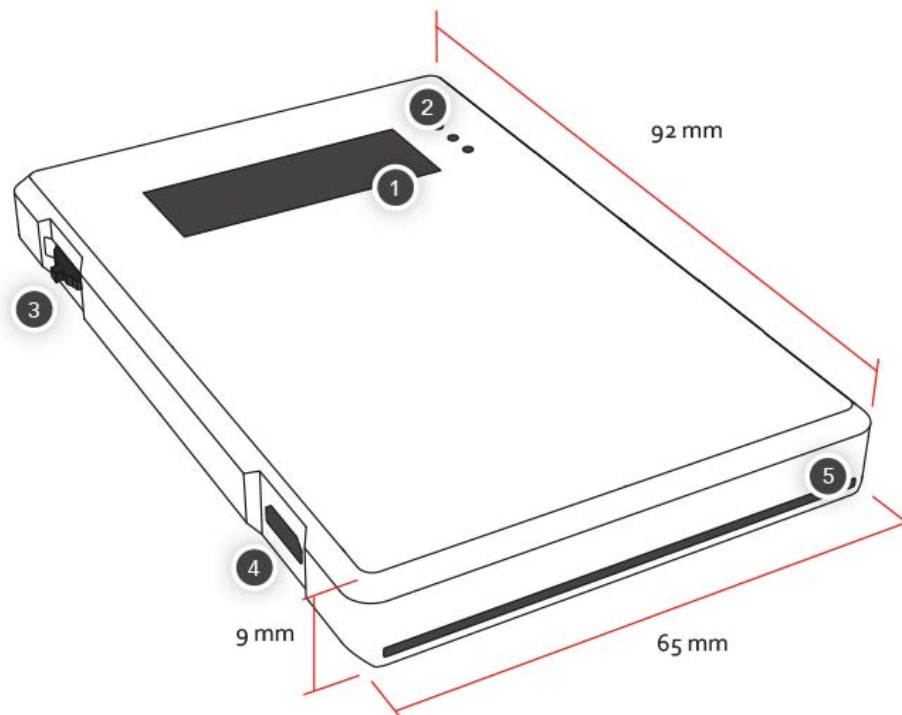
Check the product box for the following items:

- AirID smart card reader
- Bumper (landscape and portrait variant)
- USB cable
- transparent plastic strap for use AirID as ID badges

1.3. Hardware Features

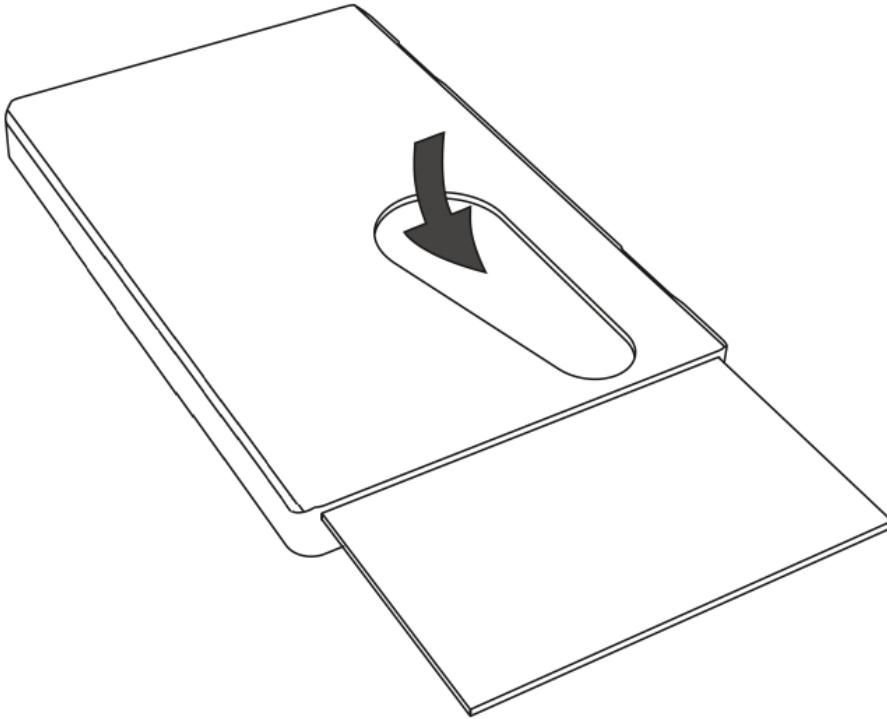
Device Features

Front View



- 1 Low Power LCD Display
- 2 LED indicator
- 3 Jog dial control element
- 4 USB interface
- 5 Smart card internal slot

Back View



Insert and remove a smart card

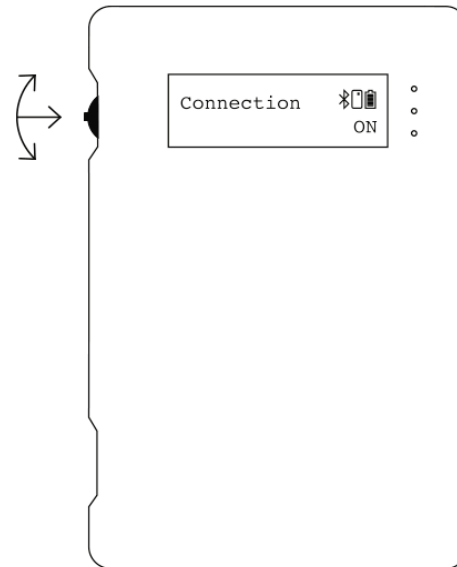
Insert the card chip first. The double header of the AirID reader can read the chip regardless of which side the chip is on.

To remove the card, simply slide it with the finger through the cut-out.

Control Element

AirID is designed for easy menu navigation using a 3-way version of jog dial control element.

Action	Function
up and down scrolling	navigation
press	select



Status Indicator

Following status indicators exists on AirID

Status	Status Indicator	Meaning
Smart card status		card inserted, card unreadable
		card inserted and card supported
		card access blocked (coverage)
Connection status		Bluetooth and advertising activated
		Bluetooth activated and connected
Battery status		remaining battery capacity
LED	red	on while battery charging, off when battery charging is done
	blue	on while smart card activities

2. Technical Specification

This chapter provides the specification for the AirID model.

Enclosure	
Shape	rectangular plus Bumper
Dimension	90 x 60 x 9 mm (plus Bumper)
Bumper	utilizable
Weight	ca. 50 g
Orientation of hanger with bumper	4
Human interface	
Display type	LCD, 132x32
Display size	ca. 9 x 30 mm
Control element	Jog Dial (up/down/select)
USB port	USB-2.0-Micro-B
LED visible	2 (red: on while charging, blue: on while smart card powered on)
Acoustic feedback	Buzzer
Bluetooth	
Bluetooth Version	4.2
BLE chip	BGM13P, SiLabs
Battery	
Battery type	NEXcell NEX422339PA
Battery size and weight	4.5 x 24.0 x 41.5 mm, 8g
Capacity	340mAh
Battery charging	via USB
Smart card interface	
smart card size	ID1, contact interface (ISO7816)

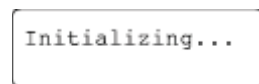
3. Menu Layout

In the AirID device menu you can make various settings. You can access the different setting menus by navigating with the jog dial.

3.1. AirID

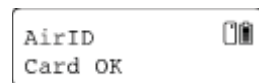
The **AirID** menu is displayed in the main window and shows the smart card status.

Initialize

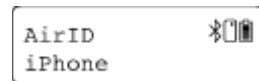


AirID initialized the smart card. This message appears only very shortly.

Card OK

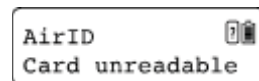


The smart card is inserted and it is recognized.



When AirID is paired with a device, the device name is displayed here.

Card unreadable

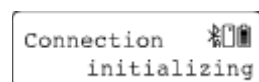


The inserted smart card is not readable. Please ensure that the card is properly inserted and the smart card is supported

3.2. Connection

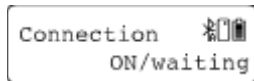
The **Connection** menu is the second setting when you scroll down. This is used to activate the Bluetooth connection or to terminate the connection.

Initialize



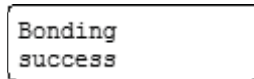
AirID initializes Bluetooth and activates the advertising mode. This message appears only very shortly.

ON/ waiting



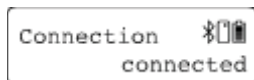
AirID has activated Bluetooth and the advertising mode and is waiting for the connection to be established. When the jog dial is pressed, Bluetooth and the advertising mode are disabled.

Bonding



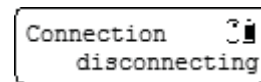
AirID has successfully connected to a device. This message appears only very shortly.

Connected



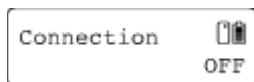
AirID is connected to a device.

Disconnecting



When the jog dial is pressed, the connection is terminated.

OFF



Bluetooth and the advertising mode are disabled. Pressing the jog dial activates Bluetooth and the advertising mode.

In the advertising mode, the AirID sends a Bluetooth signal making it detectable by devices. Requests must be checked and confirmed.

3.3. Pairing Code



This menu is only shown the first time a connection is established with a device and is used to display the connection key.

Pairing success

Pairing
success

Connection successful

Pairing fail 23

Connection failed. The following errors may occur:

- **Pairing fail 1:** Pairing canceled
- **Pairing fail 4:** Pairing code wrong
- **Pairing fail 23:** Time out

Pairing defines the successful Bluetooth connection between a device and the AirID. Since the pairing information is retained, the same devices may only be paired once. The device will ask you to compare the pairing code displayed on the AirID and confirm.

3.4. Settings

Settings

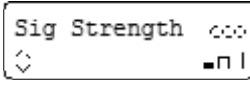
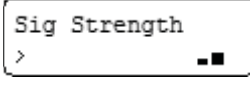


>

Under the menu **Settings**, you can configure settings for your AirID . Use the jog dial to select and confirm the settings.

Sig Strenght

Following settings are possible:

-  low (~3-5m, EcoModus, 1 bar)
-  middle (~5-7 m, 2 bars)
- high (~7,5-10 m, 3 bars)

Advertising

Use the jog dial to set the advertising mode (Connection via Bluetooth) to

Advertising

>



permanent or

Advertising

eco

⏮





EcoMode

If during the active advertising mode (EcoMode) no connection to a device is established, the advertising mode switches off automatically to save battery power. Therefore, a manual reconnection is necessary afterwards.

To save energy, a work schedule can be created via AirID Central App. If the working hours are exceeded, the advertising mode remains deactivated.


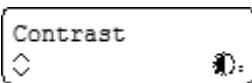
Display

 permanent or  eco mode so that the display switches off after a certain period of time.

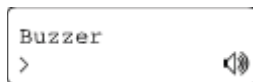
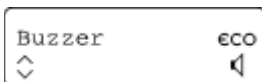
Backlight

Select whether the backlight is  activated or  deactivated.

Contrast

Increase display contrast (adjustable in 4 levels)  , .

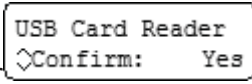
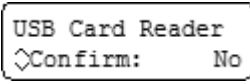
Buzzer

 Activate or  deactivate the acoustic feedback of the AirID.

Force 256bit

Select if you want to encrypt the connection between AirID and the work device with AES-256.

USB Card Reader

If the AirID is connected via USB to the work device, you can select whether the AirID should be used as a USB card reader.  or not . If the AirID is not used as USB reader, the AirID is supplied with power via USB and thus charged.

Reset Keys

```
Reset Keys  
>
```

This setting deletes all pairing keys. This is recommended if you pass on AirID to others. After a reset, a new key exchange is necessary to re-established a connection.

Factory Reset

```
Factory Reset  
>
```

This setting reset the AirID to factory settings. All pairing keys are also deleted.

Update Firmware

The AirID firmware can be updated with this setting.

Coverage

The AirID reader can log you out automatically, if a (preset) distance between your computer and your AirID has been exceeded. The "Distance Log-Out" is managed in AirID settings using "**Coverage**".

This setting is optional and can only be configured if there is an active Bluetooth connection to the a device.

You need to configure the distance manually.

Back

```
Back  
<
```

Select **Back** to return to the main menu.

3.5. AirID Info

Under AirID Info you will find further information about the AirID.

```
Serial Number  
5640002000
```

.Serial number of the AirID

```
IEEE Address  
0x20CD399F945E
```

Bluetooth address of the AirID

```
Received
RSSI -dB: 53
```

The received signal strength

```
Battery
90%
```

Battery percentage indicator

```
Time
Thu 14:08
```

.Current time and day

```
Board
Ver 5.6 rev 9
```

.Version of the AirID board

```
Bootloader
Ver 201610
```

.Version of the AirID bootloader

```
Firmware
1.2.0
```

.Version of the AirID firmware version

```
Back
<
```

Select **Back** to return to the main menu

3.6. Card Info

Displays information about the inserted smart card. These information is only displayed if the smart card is correctly inserted and recognized/ supported.

3.7. Preferred Device

Under "Prefer Device" the pairing information of the AirID with the before connected devices are stored. From these information you can select to which device the AirID should preferably be connected in the future. All other devices will be ignored.

Select the option **New** to connect AirID to a new device if the already connected devices are nearby. All other devices connected to AirID will be ignored.

The pairing information with up to 10 different devices can be stored at the same time.

4. Using AirID

AirID supports various operating systems like Windows, MacOS, Linux, iOS and Android. The basic requirement is the Bluetooth Low Energy functionality of the device.

The AirID software consists of two components:

1. **AirID Central App** - a management software for your AirID forming the basis for usage of the device. The tool provides you with information and setting options for your AirID when your reader is connected to your device.
2. **AirID drivers**, which ensures the communication between the AirID and the operating system, must be installed additionally depending on the platform or is already integrated in the Apps and solutions of third party vendors.

AirID can be used with different terminals and platforms is possible, but not in parallel operation.

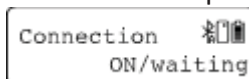
4.1. Windows

The use of AirID under windows is only possible as of Windows 8.1 due to the Bluetooth Low Energy functionality required. For use under Windows 7, an ONEKEY BRIDGE is additionally required.

4.1.1. Installation

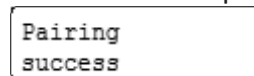
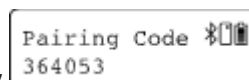
1. Download the latest installer (zipped .msi file) for Windows at [AirID - Software, Driver & SDK](#).
2. Unzip and double click on the .msi installer file.
3. Follow the instructions in the installation wizard.
4. The AirID Windows driver and the AirID Central App are now installed.
5. Insert your smart card to power on the AirID reader and activate Bluetooth at the AirID reader by navigating to the connection menu and pressing the jog dial control

element. The AirID should display:



6. Open Windows "Settings→ Devices→ Bluetooth". Your AirID should be listed with its serial number. Press "Pair"

7. Enter 6 digit pairing key shown on AirID display
8. After successful pairing "Pairing successful" will be displayed on AirID



9. After successful connection establishment, the AirID should display the name of your device

The AirID can now be used.

4.1.2. Deleting the Connection

The pairing information are stored on both the Windows system and AirID. To terminate the connection completely, the information on both sides must be deleted.

On Windows

1. Open the Bluetooth settings on Windows (Settings- Devices - Bluetooth)
2. Select the corresponding AirID using the displayed serial number and click on "Remove Device"
3. Click "Yes" to confirm the removal of the device.

On AirID

Delete All Pairing Information

To delete all stored pairing information from AirID a "**Reset Keys**" can be performed in the **Settings** menu.

Delete Specific Pairing Information

To delete specific pairing information from AirID a "**Reset Keys**" of the Windows workstation can be performed in the **Settings** menu.

The pairing information can also be deleted via AirID Central App. To do this, go to the paired devices view, select the corresponding device from the list and click **Delete**.

4.1.3. AirID Central App

AirID Central provides information and setting options for your AirID once your AirID is connected to your Windows device. If there is no connection, "**No device**" is displayed in the AirID Central.

AirID Central as an AirID management software, provides an overview of:

- **Serial Number** - Displays the Serial Number of the connected AirID
- **Card Status** - Displays the status of the inserted smart card. This can be **readable**, **unreadable** or **no card inserted**
- **Coverage Feature** - Displays if the coverage feature is activated or not

- **Encryption** - Displays if the AES encryption is set to 128 or 256-bit
- **Refresh** - Checks if there is an older firmware and offers a firmware update if necessary.
- **AirID Change** - Displays the list of the connected AirID readers from which you can select one.
- **Battery Status** - Displays the battery charge in percent. The green flash symbol indicates an active charging process.

In the AirID Central, the following settings can also be made on the AirID:

- **Signal Strength** - Select the signal strength of the AirID:
 - low (~3-5m)
 - middle (~5-7 m)
 - high (~7,5-10 m)
- **Backlight** - Select if a display backlight is required
- **Buzzer** - Select if an acoustic feedback is required
- **Display** - Select if the display should always be on or only for a certain time.
- **Advertising** - Select if the Bluetooth signal for the connection to a device should always be on or only for a certain time. An individual work schedule to save energy can also be created with AirID Central. The advertising mode remains deactivated after the defined working hours.

If during the active advertising mode (EcoMode) no connection to a device is established, the advertising mode switches off automatically to save battery power. Therefore, a manual reconnection is necessary afterwards.

The following information is displayed when clicking on the AirID device displayed in the AirID Central App:

- **Serial Number**
- **MAC Address**
- **Hardware** - Board Version of the AirID
- **Bootloader** Version
- **Firmware** Version
- **Card OS** of the inserted smart card
- **Build** version of the firmware
- **Connected devices** - shows a list of devices for which AirID stores connection information. The connection information can be deleted by deleting the device from the list.

A right click on the AirID Central icon in the Windows notification area opens a menu with the following application functions:

- **Reestablish** - opens the AirID Central App window in the foreground.
- **Settings** -
- **System Log** - displays a log of the system log entries that you can use to track activities and processes.
- **Bridge** - Displays the ONEKEY Bridge and the settings you can do.
- **Change PIN** - PIN change function for the inserted smart card
- **About** - Shows the AirID Central version and the developer informationen
- **Close** - Closes the AirID Central App

4.2. iOS

Under iOS system-wide support of smart cards and card readers is not possible. Therefore, the AirID driver needs to be integrated into an app to use AirID with this specific app. These apps usually interact with the available AirID Central App via extension or keychain.

The AirID Central App is available in the App Store.

The connection to the the iOS device is only active when the app in foreground is open. As soon as the app goes into the background, the Bluetooth connection to the AirID is released again.

FCC Warning

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.

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

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 into an outlet on a circuit different from that to which the receiver is connected.
- ▶ -Consult the dealer or an experienced radio/TV technician for help.

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.