

Airwallet **PRO200**

INSTALLATION GUIDE



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Airwallet PRO200

Installation Guide

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I. Getting Started

Airwallet PRO is the easiest product to upgrade your shared laundry or unmanned service to mobile payment. With Bluetooth 4.2 the Airwallet PRO is compatible with both iOS and Android smartphones and tablets. When you install your Airwallet PRO ensure that it has been set up on the Airwallet Dashboard.

If you have not set up the device beforehand you will not be able to test the installation when you are done. To set up your Airwallet PRO locate the serial number on the back of the product. The serial number can be entered under 'My locations' in the Airwallet Dashboard.

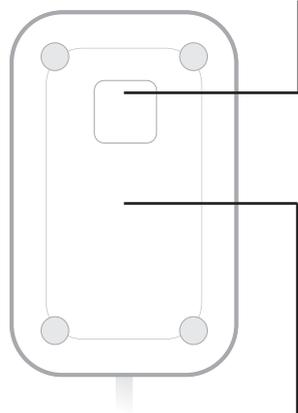
The Airwallet PRO relies on the user's smartphone connection to either Wi-Fi or the mobile network, to receive the settings from the Airwallet Dashboard. Make sure your users have a stable connection at the location you want to install your Airwallet PRO.

Parts in the Package

Airwallet PRO



Serial number



Back of the box

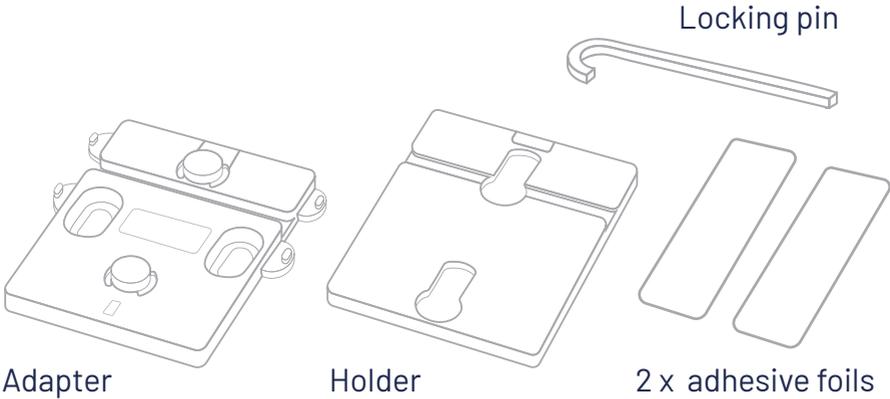


Cable length 90 cm.
230V AC power supply

Additional Parts

Wall Attachment

Purchased separately



Can be mounted with screws or adhesive foil (screws not included)

Get Started Package

Only included when bought directly from Airwallet

News poster

5 step guide

Sticker



Ports on Your Airwallet PRO

Airwallet PRO has 10 internally ports where six of them has been wired out in the installation cable:

Wire Number	Internal Port Number	Name
No. 1 Black	9	AC 1 - Power supply
No. 2 Black	10	AC 2 - Power supply
No. 3 Black	2	Input start signal - COM
No. 4 Black	3	Output start signal - NO
No. 5 Black	6	(Optional) AC input machine feedback
No. 6 Black	5	(Optional) DC input machine feedback

Detailed installation steps can be found on page 12. The schematic of the Airwallet PRO can be found on page 15.

- As standard, the Airwallet PRO is wired out with a no-voltage relay normally open (NO), to send start signals to the machine. If the installation requires a normally closed (NC) relay the Airwallet PRO can be opened and the wire can be moved from the NO terminal to the NC terminal.
- To reset the Airwallet PRO disconnect the power source for 15 seconds. If you want to change or delete information about the device, such as name, price, start signal or feedback type go to the Airwallet Dashboard and find the product under "Your Locations".

Airwallet PRO Status Lights

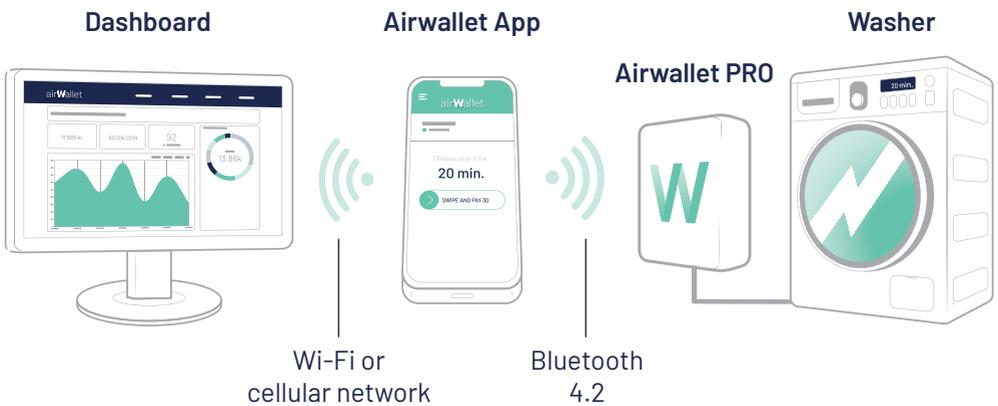
The following table describes the Airwallet PRO status light sequences and what they indicate. The status lights are located inside the Airwallet PRO, and should only be used when troubleshooting the installation. The status lights are mounted on the printed circuit board at the opposite end of the Airwallet logo.

Light	Status/Description
Off	Airwallet PRO is unplugged
One solid green, one off	Airwallet PRO is on and working properly
Two solid green	Airwallet PRO is starting up. This process will take 15 seconds.
One solid green, one shortly flashing (<1 sec.)	Airwallet PRO is receiving data from the Airwallet App

The Airwallet PRO Network

The following illustration shows an Airwallet PRO connected to a commercial laundry machine. The machine supplies the Airwallet PRO with power and the Airwallet PRO can send start signals and measure feedback when the user has paid.

The Airwallet PRO is connected to the Airwallet Dashboard that stores information about all devices in the Airwallet network. The Airwallet PRO receives information from the Airwallet Dashboard through the user's Internet connection via Wi-Fi or mobile communication. The Airwallet PRO connects to the user's phone with Bluetooth 4.2. All phones with iOS or Android compatible with the Bluetooth 4.2 technology can be used on the Airwallet network.



See the next chapter, "Installing the Airwallet PRO" to find out how to set up the Airwallet PRO on your machine.

II. Installing the Airwallet PRO

System Requirements

The Airwallet PRO can be installed on standard industrial and commercial laundry machines or other products controlled by low current signals. If you have a special machine type and are in doubt whether the Airwallet PRO will fit your needs do not hesitate to contact us at kontakt@airwallet.dk.

- To install the Airwallet PRO you need tools to gain access to the position on the machine where payment systems are installed according to the product manual.

Step One

Disconnect the power to the machine and locate the wiring diagram of the product, in which you are installing Airwallet.

- The diagram is often placed in the top section inside of commercial laundry machine
- If you cannot locate the wiring diagram, find it online by searching for the model number

Step Two

Locate the payment wiring terminals on the product

- Carefully read the specifications of the available payment wiring terminals
- Check if the product is compatible with the Airwallet PRO (The Airwallet terminal specification table can be found on page 12)
- If the product is compatible with the Airwallet PRO the installation can be continued. Do not install the Airwallet PRO on your product, if the devices are not compatible. This can lead to short-circuiting the Airwallet PRO or the product.

Step Three

Installing the Airwallet PRO

See the table below for wire specifications. The schematic for the product can be found on page 17.

Wire Number	Internal Port Number	Name	Description
No. 1 Black	9	AC 1 - Power supply	100-240VAC - NB: If the machine is installed with feedback, this port has to be same polarity as the AC machine feedback. Eg. if the AC machine feedback input is line, the line has to be installed on AC 1.
No. 2 Black	10	AC 2 - Power supply	100-240VAC
No. 3 Black	2	Input start signal - COM	Supply start signal. Max. 220 VDC; Max. 250 VAC; Max. 60W
No. 4 Black	3	Output start signal - NO	For high start signal.
No. 5 Black	6	(Optional) AC input machine feedback*	The AC input has to be within the 100-240VAC range.
No. 6 Black	5	(Optional) DC input machine feedback*	The DC input has to be within the 24VDC +- 2.4V
Not wired out	7	Output 24V DC supply	For 24V DC circuit.
Not wired out	4	Input GND	For 24V DC circuit as GND reference.
Not wired out	1	Output start signal - NC	For low start signal.

*Feedback options: High in use, low in use, end of cycle signal. Options are chosen on the Airwallet Dashboard.

1. First, connect the appropriate wires you want to use:
 - a. Connect AC 1 and AC 2 from the Airwallet PRO to the neutral and line of the machine. These ports are often located near the payment ports or can be found at the machine's power supply.

If the machine is installed with AC feedback the AC 1 (Wire no. 1) must be of the same polarity as the AC feedback. Eg. if the machine is sending a line signal when in use, AC 1 will have to be a line as well.
 - b. Check the wiring diagram and decide which start signal the machine need. Supply this start signal to wire no. 3, when the Airwallet PRO receives the start signal, the device will output this signal on wire no. 4, which is the start signal. Connect the black start signal wire from the Airwallet PRO to the payment port in your machine this port is often called: 0.5 START, Coin 1, Price red, Start Permitted, Start Pulse, SigProg, Coin Checker, Coin Detector or similar.
 - c. Connect the feedback signal from the Airwallet PRO to the feedback port if you want to make the machine unavailable for purchases in the period the machine is in use. The feedback port or circuit is often called: Program run, Ende, Program End Signal, Available Output or similar.

2. When you have connected the Airwallet PRO to the appropriate terminals you can power up the installation. If the device does not appear in the Airwallet App check if the device has been created on the Airwallet Dashboard.

3. 'Get Started' Package setup:



News poster and 5 step guide poster

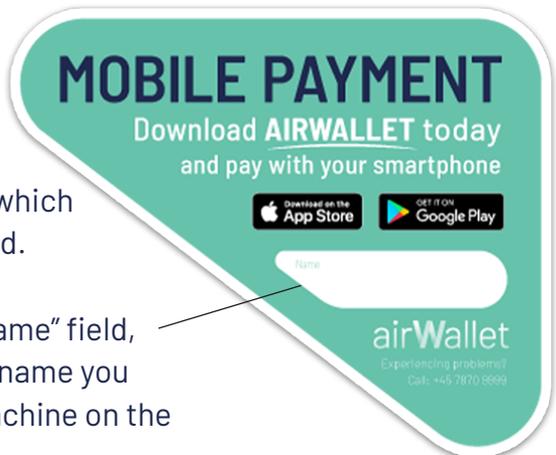
Double-sided adhesive tape is attached to the back of both posters. The tape is intended for smooth surfaces.

For rough surfaces, it is recommended to use screws or nails.

Mobile payment sticker

The "MOBILE PAYMENT" sticker is intended to be pasted on the machine on which the Airwallet PRO is installed.

In the white "name" field, handwrite the name you have called machine on the dashboard



Step Four

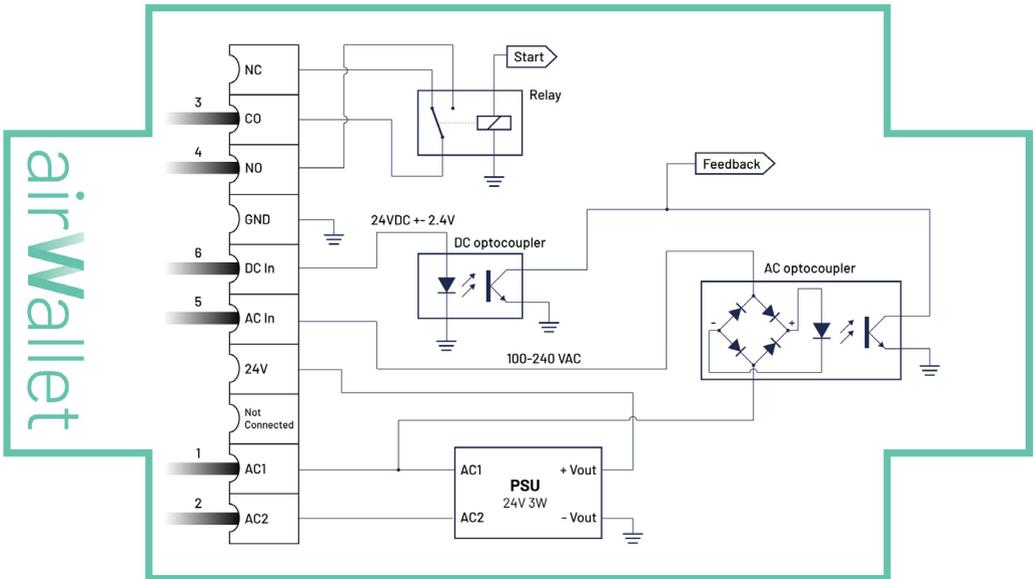
Testing the Airwallet PRO

- Open the Airwallet App and login. If you do not have an account yet, you can create a new user by pressing 'Create new user'.
- When you have filled out your personal information and credit card details you can go to the front page of the Airwallet App. Choose the device you want to test and swipe to purchase it. The transaction can be refunded on the Airwallet Dashboard.
- If you are a registered Airwallet test user you can test without transactions being processed on your card. To register as a test user, contact the owner of the installation or Airwallet. All transactions will still be logged but will not get processed at the payment provider.
- When the transaction is completed the Airwallet App will generate a receipt for the user. This receipt can later be found under activities.
- When the receipt is shown, the phone will send an encrypted signal to the Airwallet PRO that will process and forward the start signal to the machine. You will be able to hear a small click from the relay sending the start signal to the machine.
- When the receipt is closed the front page is shown again and the device is now occupied until the Airwallet PRO receives a feedback signal to make the machine available again, or the time surpasses three hours. If the machines are installed without feedback, the device will always be available for purchases in the Airwallet App.

III. Circuit Schematic

The circuit schematic is illustrating the no-voltage relay ports on terminal NC, CO and NO. Terminal GND is grounded to the printed circuit board. The DC In terminal is wired to an optocoupler and can register when the machine is in use. The AC In terminal is wired to a rectifier and then an optocoupler registering when the machine is in use if the feedback signal is AC.

The 24V terminal can be used to supply the feedback signal on a DC installation. The terminal can also be used to supply a small relay or similar if necessary. The last two terminals in use are AC1 and AC2. They supply the power to the Airwallet PRO. The AC1 must be of the same polarity as the AC In, if the Airwallet PRO is installed with feedback. The AC2 must be of opposite polarity of AC1 and AC In.



IV. Tips and Troubleshooting

The best location for the Airwallet PRO

The following recommendations can help your Airwallet PRO achieve the best wireless range and network coverage.

- Place your Airwallet PRO in an open area where there are few obstructions, such as walls.
- Avoid placing your Airwallet PRO inside the machine cabinet or close to any metallic surfaces.
- Don't lay your Airwallet PRO down or on its side. The Airwallet PRO should be mounted vertically with the cable downwards.
- Place your Airwallet PRO at least 8 meters (25 feet) from any microwave oven, 2.4 GHz cordless phone, or other sources of interference.

Problems and Solutions

First, assure you have the right manual for the correct product.
This is the manual for the Airwallet PRO200

A. The device is not appearing in the Airwallet App:

1. Is the device created on the Airwallet Dashboard?:
<https://admin.airwallet.dk>
2. Is the power turned on, on the installation?
3. Has someone connected via Bluetooth to the device outside the Airwallet App?
4. Does the phone have a weak internet connection?
 - a. The faster the internet connection, the faster the device load time is.
5. Are the devices within a 5-10 meters range?
6. Is the location services allowed? (Android only)
7. Is Bluetooth allowed? (iOS only)

B. The available/occupied feedback is not working properly:

1. Has the correct feedback mode been selected on the Airwallet Dashboard?: <https://admin.airwallet.dk>
2. If the installation is AC is the line and neutral installed correctly in AC1 and AC2? The Airwallet PRO will not register the feedback signal if the AC wires have been switched. AC1 (Wire no. 1) must be the same polarity as the AC In feedback signal.
3. If a wrong feedback mode has been selected the Airwallet PRO will reset the feedback mode after three hours. The Airwallet PRO can also be reset by disconnecting the power supply and waiting 15 seconds.

4. Is the machine set up to match the feedback type chosen on the Airwallet Dashboard?

C. The machine does not start when I have paid:

1. Has wire no. 3 been supplied with the desired start signal?
2. Has the correct start signal been selected on the Airwallet Dashboard?: <https://admin.airwallet.dk>
3. Did the transaction go through? Check the activity menu page
4. Does the machine receive the correct start signal?
 - a. The Airwallet start signal is operated by a “normally open” (NO) relay. Some systems need a “normally closed” (NC) start signal.

D. The App will not process my transaction

1. Check if your credit card is valid, if not attach another card.
2. Check if your user information is valid by pressing the profile icon in the menu.
3. Delete your user and create a new one. Press the profile icon in the menu and delete your user.

E. Nothing of the above have worked yet:

1. Guarantee you have the latest version of the Airwallet App.
2. Reset the Airwallet PRO by disconnecting it from the power source in 15 seconds, and the product will restart.

V. Learning More, Service and Support

You can find more information about using your Airwallet PRO online.

Online Resources

- For the latest information about Airwallet PRO and version of this manual go to <https://airwallet.net/support>

Obtaining Warranty Service

- If your Airwallet PRO appears to be damaged or does not function properly, check the sections “Tips and Troubleshooting” for help and the online resources at <https://airwallet.net>. If your Airwallet PRO still does not function properly, contact support at <https://airwallet.net/support>.

Finding the Serial Number of Your Airwallet PRO

- The serial number is printed on the bottom of your Airwallet PRO.

VI. Specifications and Safety

Airwallet PRO Specifications

- Standards: Bluetooth Low Energy BLE 4.2
- Power Supply: 100-240VAC; 0.04A; 50-60Hz
- Alternative DC power supply: 0V & 24V DC.
- Start Signal: Max. 220 VDC; Max. 250 VAC; Max. 60W
- AC Feedback Signal: 100-240 VAC
- DC feedback Signal: 24VDC +- 2.4V
- Feedback mode can be set up on the Airwallet Dashboard

Environmental Specifications

- Operation Temperature: 0° C to 35° C (32° F to 95° F)
- Storage Temperature: -25° C to 60° C (-13° F to 140° F)
- Relative Humidity (Operational): 20% to 80% relative humidity
- Relative Humidity (Storage): 10% to 90% relative humidity, non-condensing
- Operating Altitude: 0 to 2000 m (0 to 6.562 feet)
- Protections classecification: IP40

Size

- Length: 100 mm (3,9 inches)
- Width: 62 mm (2,5 inches)
- Height: 26 mm (1 inch)

Airwallet PRO Safety Tips

- The only way to completely shut off power to your Airwallet PRO is to disconnect it from the power source.
- Your Airwallet PRO is a high-voltage product. Do not open it for any reason, while it is connected to the power source. If your Airwallet PRO needs service, see “Learning More, Service, and Support” on page 20.
- If you have to use the 24V DC system or the NC terminal on your Airwallet PRO, double-check your terminals on the Airwallet PRO, before connecting it to your power source.
- Avoid Wet Locations
 - » **WARNING:** To reduce the chance of shock or injury, do not use your Airwallet PRO in or near water or wet locations.
 - » Protect Airwallet PRO from rain, water or other moisture. If you do disconnect it from the power source, before cleaning and drying the product. In this case, you may need to send your product to Airwallet for service. See “Learning More, Service, and Support” on page 18.

Do Not Make Repair Yourself

- **WARNING:** Do not attempt to repair the Airwallet PRO. You will run the risk of electric shock.
- The Airwallet PRO may only be disassembled to enable the 24V DC wires or to switch the start signal to NC.

Installation Safety

- A readily accessible disconnect device shall be incorporated external to the product because the Airwallet PRO cannot be disconnect the product from the power supply network without it.

- The product should be protected against short circuit with and external protection on building installation. The Airwallet PRO is only protected against overload, but it does not provide short-circuit backup protection. External protection on building installation should be used.

VII. Regulatory Compliance Information

Declaration of Conformity

Manufacturer: Airwallet ApS

Address: Klostervej 27B 3. Floor left. 5000 Odense, Denmark

Product description: RF operated controller

Product name: Airwallet PRO

Declaration:

We declare under our sole responsibility that the products, to which this declaration relates, conform with the Council Directives on the approximation of the laws of the EU Member States relating to the following:

Directives:

Radio Equipment Directive 2014/53/EU

RoHS Directive 2011/65/EU

Safety 2001/95/EU

Standards:

RED-Directive 2014/53/EU

ETSI EN 301 489-1 V2.1.1 (2017-02)

ETSI EN 301 489-17 V3.1.1 (2017-02)

ETSI EN 300 328 V2.2.2 (2019-07)

RoHS Directive 2011/65/EU

EN 50581:2012: Technical documentation for the assessment of electrical and electronic products with respect to the restriction of hazardous substances.

Safety 2001/95/EU:

EN 60950-1:2006 + EN 60950-1:2006 / A12:2011 Information technology equipment - Safety - Part 1: General requirements

Place of issue: Airwallet, Cortex Park 26, Odense 5230, Denmark

Date of issue: 02.01.2020

Name of Authorized Person:

Christian Bonde Mortensen
Co-Founder

Signature of Authorized Person:

Christian B. Mortensen

Disposal and Recycling Information

This symbol indicates that your product must be disposed of properly according to local laws and regulations. When your product reaches its end of life, contact Airwallet or your local authorities to learn about recycling options.

European Union—Disposal Information

The symbol above means that according to local laws and regulations your product and/or its battery shall be disposed of separately from household waste. When this product reaches its end of life, take it to a collection point designated by local authorities. The separate collection and recycling of your product and/or its battery at the time of disposal will help conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment.



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