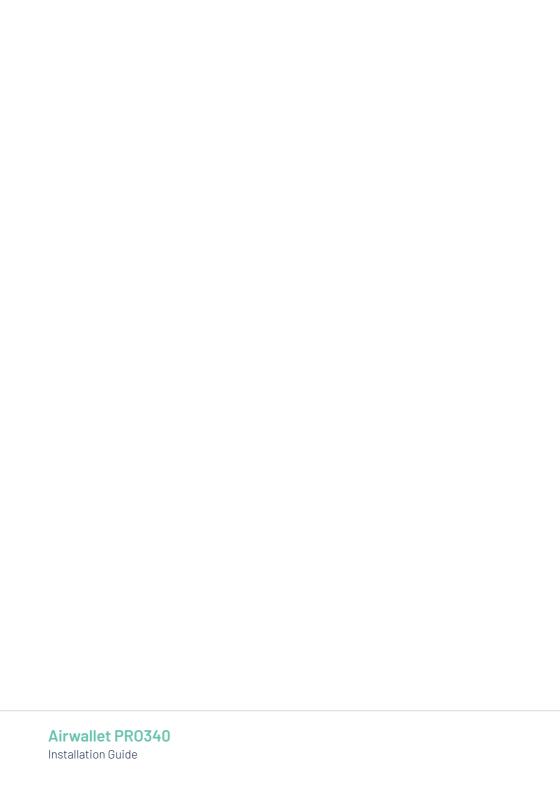
# Airwallet PR0340

# INSTALLATION GUIDE



#### **CONTACT US**

PHONE: (+45) 7870 9999
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# I. Getting Started

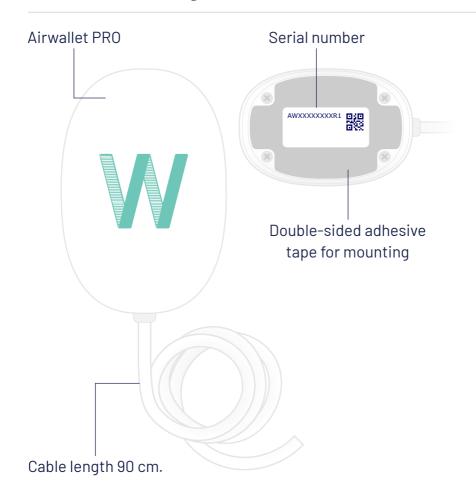
Airwallet PRO is the easiest product to upgrade your shared laundry or unmanned service to mobile payment. With Bluetooth® wireless technology 4.2 the Airwallet PRO is compatible with both iOS and Android smartphones and tablets. When you install your Airwallet PRO ensure that it has been set up on the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

At Airwallet we seek to create articles for installations on all machine types, with guidance both on device configuration on the dashboard, and on installation. The best place to start when setting up Airwallet is to find the installation article for your specific machine model on <a href="https://wiser.airwallet.net">https://wiser.airwallet.net</a>, by searching for the machine brand and model number in the search bar.

# Parts in the Package



## **Additional Parts**

## **Get Started Package**

Included only guaranteed when purchased directly from Airwallet



Get started - Flyers m65



Installers & Technicians - Flyer



Machine identifiers - Stickers



No theft - Door sticker



#### **Ports on Your Airwallet PRO**

Airwallet PRO has 12 internally ports where 8 of them has been wired out in the installation cable:

Wire Number	Internal Port Number	Name
No. 1	11	ACL- Power supply
No. 2	12	ACN - Power supply
No. 3	2	Input start signal - COM
No. 4	3	Output start signal - NO
No. 5	10	(Optional) AC input machine busy signal
No. 6	6	(Optional) DC input machine busysignal
No. 7	1	Output start signal - NC
No.8	7	24V Out - 24 Volt Out

Detailed installation steps can be found on page 10. The schematic of the Airwallet PRO can be found on page 17.

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 busy signal type, go to the Airwallet Dashboard and find the device 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 cable inlet.

Light	Status/Description
Off	Airwallet PRO is unpowered
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 know when the machine is busy 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.



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 all standard industrial and commercial laundry machines or other products controlled by low current signals. For domestic type machines Airwallet offers additional components to enable installation on those too. 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 <a href="mailto:contact@airwallet.net">contact@airwallet.net</a>

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.
- Find the installation guide for the specific type of machine on our knowledge base <u>Wiser</u> by searching for the machine brand and model number in the search bar. Finding the appropriate installation guide on Wiser will be the easiest way to install the Airwallet PRO.
- Alternatively you might find the wiring diagram of the machine inside the machine. The diagram is often placed in the top section inside of commercial laundry machines. If you cannot locate the wiring diagram, find it online by searching for the model number.
- If an installation article on wiser does not exist for your specific

machine type, do not hesitate to contact us at <u>contact@airwallet.net</u> or <u>+45 78709999</u> or get in contact with your Airwallet reseller.

## **Step Two**

- Locate the payment wiring terminals on the product.
- Carefully read the specifications of the available payment wiring terminals
- Airwallet can be installed on all machine brands but please confirm that the payment terminal specifications meet airwallet requirements (The Airwallet terminal specification table can be found on page 12).
- When you have located the appropriate terminals for installation you can continue. If you are in doubt, please go ahead and measure and test the terminals prior to installation. Do not try to install the Airwallet PRO on your product, if you cannot find the appropriate terminals. This can lead to short-circuiting the Airwallet PRO or the machine. You can contact Airwallet at <a href="mailto:contact@airwallet.net">contact@airwallet.net</a> or <a href="mailto:+4578709999">+4578709999</a> or get in contact with your Airwallet reseller.

# **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	11	ACL - Power supply	100-240VAC
No. 2	12	ACN - Power supply	100-240VAC
No. 3	2	Input start signal - CO	Supply start signal. Max. 220 VDC; Max. 250 VAC; Max. 60W
No. 4	3	Output start signal - NO	For high start signal.
No. 5	10	(Optional) AC input machine feedback*	AC input 100-240VAC - Line NB: Is the feedback neutral and can't be modified to line, then switch line/neutral power supply to the Airwallet PRO.
No. 6	6	(Optional) DC input machine feedback*	The DC input has to be within the 24VDC +- 2.4V
No. 7	1	Output start signal - NC	For low start signal.
No. 8	7	Output 24V DC supply	For 24V DC busy signal circuit
Not wired out	5	Input GND	For 24V DC circuit as GND reference.
Not wired out	8	Input 24V DC	24V power supply input

<sup>\*</sup>Feedback options: page 13

#### The types of feedback signal

Feedback type	
High in use	Voltage when the machine is running - no voltage when the machine is finished.
Low in use	No voltage when the machine is running - voltage when the machine is finished.
End of cycle	Voltage sent as a min. 1500 ms. pulse sent when the machine is finished.
None	No busy signal is selected. The machine will be occupied for 5 min. and then become available again.

- 1. Connect the appropriate wires you want to use:
  - a. Connect ACL and ACN 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. The Airwallet PRO can also be supplied with 24VDC. To do this move wire no. 1 & 2 to terminals 5 and 8 inside the Airwallet PRO.
    - i. If the machine is installed with AC busy signal (wire 5 being line), wire 1 must also be line.
  - b. Check the Wiser guide or wiring diagram and decide which start signal the machine needs. Supply the specified power to wire no. 3. When the Airwallet PRO receives the start instruction, the device will output a start signal for the machine on wire no. 4 (NO) or wire no. 7 (NC) depending on machine specification. Connect the 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 busy signal from the Airwallet PRO to the busy signal port if you want to make the machine unavailable for purchases in the period the machine is in use. The busy signal 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.

## **Step Four**

#### **Testing the Airwallet PRO**

- Open the Airwallet App and log in. If you do not have an account yet, you can create a new user by pressing 'New user'.
- When you have filled out your personal information you can go to the front page of the Airwallet App.
- If you are not already a registered Airwallet test user you must contact the owner of the installation to become one. As a test user you can test without transactions being processed on your card. All transactions will still be registered on the dashboard, but will not get processed by the card acquirer.
- When the transaction is completed the Airwallet App will generate receipts 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 sound 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 busy
  signal to make the machine available again, or the time surpasses
  three hours.

# **III. Circuit Schematic**

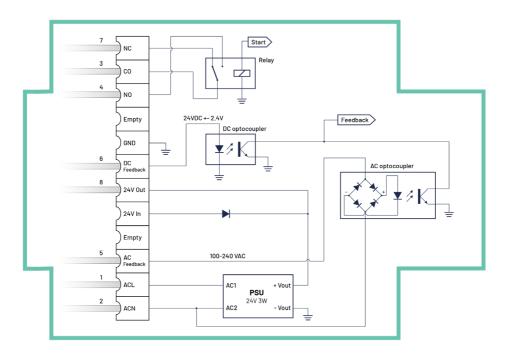
The circuit schematic is illustrating the no-voltage relay ports on terminal NC, CO, and NO. Terminal GND is grounded to the printed circuit board. The DC busy signal terminal is wired to an optocoupler and can register when the machine is in use. The AC busy signal terminal (line) is wired to a rectifier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

The 24V Out terminal can be used to supply the busy signal on a DC installation. The terminal can also be used to supply a small relay or similar if necessary.

The '24V In' can be used to supply the device with 24V if AC isn't available. The last two terminals in use are ACL and ACN.

The schematic of the Airwallet PRO can be found on page 17.

#### Circuit schematic of the Airwallet PRO:



# 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.
- If possible we recommend placing the Airwallet Pro inside the machine cabinet.
- 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 PRO340.

#### A. Machine is not appearing in the App or I cannot connect to the machine:

- Is the device created on the Airwallet Dashboard?: https://admin.airwallet.net/
- 2. Is the power turned on, on the installation?
- 3. Does the phone have a weak internet connection?
  - a. The faster the internet connection, the faster the device load time is.
- 4. Are the devices within a 5-10 meters range?

#### B. The available/occupied busy signal is not working properly:

- Has the correct busy signal mode been selected on the Airwallet Dashboard?: <a href="https://admin.airwallet.net/">https://admin.airwallet.net/</a>
- 2. If the installation is AC is line then used for busy signal? If the busy signal is neutral and can't be modified to line, then switch line/neutral power supply to the Airwallet PRO.
- 3. If a wrong feedback mode has been selected the Airwallet PRO will become available after 5 min. if 'high in use' is chosen. 3 hours if 'end of cycle' is chosen, and never if 'low in use' is chosen.
- 4. Is the machine set up to match the busy signal type chosen on the Airwallet Dashboard?

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

- 1. Has the correct installation guide been found on Wiser?
- 2. Has wire no. 3 been supplied with the desired voltage?
- 3. Has the correct start signal been selected on the Airwallet Dashboard?: <a href="https://admin.airwallet.net/">https://admin.airwallet.net/</a>
- 4. Does the machine receive the correct start signal?
  - a. The Airwallet start signal is operated by a relay with "normally open" (NO) and "normally closed" (NC) functions. NO is on wire no. 4 and NC is on wire no. 7.

#### D. The App will not process my transaction

1. Double check that you are a test-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.

3. Contact Airwallet on <a href="mailto:contact@airwallet.net">contact@airwallet.net</a> or <a href="mailto:+45.78709999">+45.78709999</a> .

# 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 the version of this manual go to <a href="https://wiser.airwallet.net/en/category/">https://wiser.airwallet.net/en/category/</a> installations-xbgh2z/

#### **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 <a href="https://airwallet.net">https://airwallet.net</a>. If your Airwallet PRO still does not function properly, contact support at contact@airwallet.net\_or call +45 7870 9999

## 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 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 busy signal: 100-240 VAC
- DC busy signal: 24VDC +- 2.4V
- Busy signal mode can be set up on the Airwallet Dashboard

#### **Environmental Specifications**

- Operation Temperature: -20° C to 35° C (-4° 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, noncondensing
- Operating Altitude: 0 to 2000 m (0 to 6.562 feet)
- · Protections classification: IP40

#### Size

- Length: 107 mm (4,2 inches)
- Width: 73 mm (2,9 inches)
- Height: 28 mm (1,1 inches)

#### **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 21.
- 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 21.

#### **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 move wires according to instruction e.g. to enable 24V power supply.

#### **Installation Safety**

- An easily accessible disconnect device must be installed externally to the product, as the Airwallet PRO cannot disconnect the product from the power supply network on its own.
- The product should also be protected against short circuits using external protection within the building's electrical installation.
   While the Airwallet PRO includes overload protection, it does not provide backup protection against short circuits. Therefore, external protection in the building's electrical installation is required.

# **VII.Declaration of Conformity**

#### **Declaration of Conformity**

#### Manufacturer

Name: Airwallet

Registered trade name: Airwallet ApS

Address: Pakhusgården 28, 5000 Odense C, Denmark

#### **Product details**

For the following

Product: Controller for washing machines and dryers

Model(s): AWPRO340 + AWPRO400

#### **Declaration & Applicable standards**

We hereby declare under our sole responsibility, that the product above is in compliance with the relevant harmonization legislations:

RED (2014/53/EU + 2015/863)

RoHS (2011/65/EU)

#### In conformity with the following standards:

RoHS: EN 63000:2018

RED: Safety IEC/EN/UL 62368

EMC ETSI EN 301 489-1 V2.2.3 (11-2019) ETSI EN 301 489-17 V3.2.4 (02-2019)

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

#### Signed for and on behalf of : Airwallet ApS

Airwallet ApS Pakhusgården 28 5000 Odense C Denmark

 Thomas Salmonsen

Thomas Salmonsen

Hardware Specialist & SC Manager

(Name and signature of authorized person)

# **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.



## **CONTACT US**

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