# **Connectivity solutions:**



**Duco Installation Kit Duco Connectivity Board Duco Installation App** 

## Service instructions: FAQ / Troubleshooting







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#### Translation of the original instructions

See www.duco.eu for information regarding warranty, maintenance, technical data, etc.
Installation, connection, maintenance and repairs are to be carried out by an accredited installer. The electronic components of this product may be live. Avoid contact with water.









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## 01 General FAQs

### 01.A Where can I download/find the app?

Download the Duco Installation App for free in the App store or on Google Play:





This application supports - and unburdens - installers to complete an installation in an extremely user-friendly way.

#### 01.B Can the app be downloaded for free?

To use the Duco Installation App, a Duco Installation Kit is required (a tool that the installer purchases once) or a Duco Connectivity Board (this remains permanently connected to the DucoBox).

The Duco Installation Kit or Duco Connectivity Board is not free, but you can download the application to use it for free.



## Do not you have a Duco Installation Kit yet?

Then request one via our website: b2b-shop.duco.eu

#### 01.C What minimum phone requirements do I need to use the application?

- Android: OS required: 14 or higher
- iPhone/iPod Touch: iOS required: 17.0 or later

More info on the App store or on Google Play.



#### 01.D Which applications does DUCO already have on the market?

#### **Duco Installation App**

The Duco Installation App is DUCO's current installation application.

#### **DUCO Ventilation App:**

The Ventilation application is DUCO's older installation and user application. This continues to work, but is no longer supported by DUCO. This application is also no longer available in the App store or on Google Play. Contact DUCO for more info in case of problems.

## 01.E Which languages does the Duco Installation App support?

The Duco Installation App follows your phone's language setting. The supported languages are Dutch, French and English. If a different language setting is set, the application always reverts to English.

## 01.F What is the difference between the Duco Connectivity Board and the Communication Print?

The optional Duco Connectivity Board can be applied within the DucoBox Silent Connect, DucoBox Focus and DucoBox Energy. This PCB enables interfacing towards home automation and building management systems via REST API (locally or via the cloud) or Modbus TCP (locally). Both are possible via Ethernet or Wi-Fi. The Duco Connectivity Board also allows the Duco Installation App to be used via a local Wi-Fi connection. Consult the technical data sheet for more information.

The Communication Print is the predecessor of the Duco Connectivity Board (no longer commercialised!) and can also be applied within the DucoBox Silent Connect, DucoBox Focus and DucoBox Energy. The Communication Print cannot be used for the Duco Installation App. Consult the <u>technical data sheet</u> for more information.

#### 01.G What is the difference between Modbus TCP and Modbus RTU?

Modbus is a communication protocol widely used to exchange data between different devices. There are two main variants of the Modbus protocol: Modbus TCP and Modbus RTU. The main differences between these two variants have to do with their underlying communication methods and network architecture:

- Modbus TCP: Works over Ethernet, uses standard Ethernet cables and can achieve higher speeds. Devices are identified by IP addresses.
- Modbus RTU: Works via serial connections (RS-232/RS-485), uses special serial cables and is slower. Devices have unique unit addresses.

#### 01.H How do I create an account in the application?

Download the Duco Installation App for free in the App store or on Google Play. When you first start the application, you can create a new account on the home page. Do not forget to activate your account in your mailbox.

From then on, you can use the application, except for software updates and requesting ventilation reports. You will still be in verification mode.

Upon the 1st activation of your company, DUCO will perform this verification and an administrator will be designated for the company. After that, the administrator will decide on further verifications.

#### 01.1 How do you delete an account or change a password in the application?

If you are logged into the Duco Installation App, you will find an icon (:) at the top right for settings.

Under Settings, you can choose Edit profile, My measuring devices or Log off. Under Edit profile, you remove or change your account password.

#### 01.J I forgot my password for my account. Now what?

On the application home page, choose Login and then Forgot password. Fill out your details in the application and an automatic email will be sent to your email address to change your password. Then log in again with your newly chosen password.

#### 01.K Is API integration possible?

Yes, the Duco Connectivity Board enables connection towards home automation and building management systems via REST API (locally or via the cloud). More info at: <a href="https://connectivity.duco.eu">https://connectivity.duco.eu</a>

## 01. Last there a dashboard available to get and/or read out all information from calibrated installations?

Yes, you can access the information of adjusted installations via the Duco Installer Portal (<a href="https://installer.duco.eu">https://installer.duco.eu</a>). Through the portal, you can also detect error messages from permanently connected systems.

Use the login details of the Duco Installation App to log in.

#### 01.M Can I ask DUCO to send installation reports that have already been saved?

You can only generate and save reports as a verified installer. You can find the saved installation reports via the Duco Installer Portal (https://installer.duco.eu). Use the login details of the Duco Installation App to log in.

#### 01.N Does the DucoBox also remember data?

No, the box itself does not memorise data. When connected to a Wi-Fi network, Ethernet or local point-to-point Wi-Fi, data is transmitted and temporarily stored in the Duco Cloud for analytical and diagnostic purposes.

Only adjustment parameters are permanently stored in the Duco Cloud. When the DucoBox installation is reconnected, scanning the QR code will allow you to retrieve the info from the Duco Cloud. Please note that this requires your account to be verified by DUCO (or your company's administrator) and that you have access to the internet.

# 01.0 How far does the Duco Connectivity Board or Duco Installation Kit reach from (local point to point) Wi-Fi?

The range of Wi-Fi (point 2 point) is difficult to estimate.

Standard Wi-Fi range is on average 8 meters. As the distance from the Duco Connectivity Board increases, the Wi-Fi signal decreases. Within newer homes, the Wi-Fi signal sometimes does not reach 8 metres. This could be due to the material used in the floors and walls.

So the range in metres of a Wi-Fi depends a lot on the environment. Is there nothing between you (and your phone) and the Duco Connectivity Board or Duco Installation Kit? Then you can easily have good Wi-Fi connection at a distance of 30 metres.



## 01.P Will the DucoBox update automatically with the Duco Installation Kit or Duco Connectivity Board?

No, a software update never happens automatically.

If a software update is required for correct operation of the overall installation, the user will have to perform a software update. If a software update is not necessary, the installer can choose to update the software or not.

The Duco Connectivity Board does receive automatic updates, if the Connectivity Board is connected to the internet and to the Duco Cloud (if the 2 green LEDs are on). These updates happen at night and provide improved stability, increased security and new features. After the update, the Connectivity Board restarts automatically. These updates do not affect the DucoBox itself or the connected components. The entire installation will continue to function normally during this update.

A manual update of the Duco Connectivity Board can only be performed by a verified installer via the Duco Installation App.

## 01.Q How many DucoBoxes can I connect to a Duco Installation Kit or Duco Connectivity Board?

Only one DucoBox at a time can be linked to a Duco Installation Kit or Duco Connectivity Board.

#### 01.R Can the Duco Installation App work with the Communication Print?

No, the Duco Installation App cannot work with the Communication Print. In order to use the Duco Installation App, you need a Duco Connectivity Board.

# **02** Application and building management systems

## 02.A Which DucoBoxes can be connected with the Duco Connectivity Board or Duco Installation Kit?

- DucoBox Silent Connect (UK / IE)
- DucoBox Focus¹
- DucoBox Hygro Plus
- DucoBox Energy Comfort (Plus)
- DucoBox Energy Sky
- DucoBox Energy Premium

## 02.B Does the Duco Connectivity Board or Duco Installation Kit work with DUCO collective systems? (E.g. IQ unit

No, the Duco Connectivity Board or Duco Installation Kit cannot currently be linked to collective systems.

#### 02.C Is integration with KNX or PRIVA systems possible with the Duco Connectivity Board?

KNX Systems are not supported by the Duco Connectivity Board.

PRIVA Systems can, however, be supported via the Modbus TCP protocol.

#### 02.D Is integration with Q-Bus possible with the Duco Connectivity Board?

No, this is not compatible.

#### 02.E Is integration with Niko Home Control possible with the Duco Connectivity Board?

Yes, the Duco Connectivity Board can be connected to Niko Home Control, provided the ventilation unit is connected to the same network as the Niko Home Control.

More information can be found via the QR code.



#### 02.F Can Modbus TCP be read by default on a DucoBox?

Yes, a Modbus converter is no longer needed as with Modbus RTU.

#### 02.G Where can I find the read and write parameters of Modbus TCP?

More info on the Modbus TCP info sheet.

# 03 Problems during installation

### 03.A Can the Duco Installation App be downloaded or updated?

Make sure your phone has the right system requirements. More info at "What minimum phone requirements do I need to use the application?" on page 3.

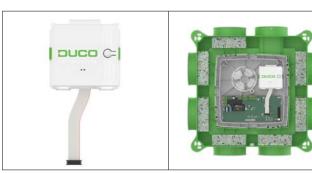
If you have problems updating or downloading apps from the App Store or Play Store, you can find more info at: <a href="mailto:support.apple.com">support.apple.com</a> or <a href="mailto:support.apple.com">support.apple.com</a>/android

## 03.B My DucoBox display no longer responds after installing the Duco Installation Kit or the Duco Connectivity Board. Now what?

Make sure that the Duco Installation Kit or Duco Connectivity Board is correctly connected according to the procedure in the manual (de-energised)!

Live and incorrectly mounted, there is a risk of burning both the DucoBox's circuit board and the Duco Connectivity Board. For more info: contact Duco Service.

#### Version 1.0 (until January 2025)



Duco Installation Kit (1.0)

DucoBox Silent Connect / Focus / Hygro (Plus) / Silent FR



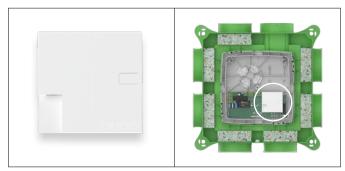
DucoBox Energy Comfort (Plus)

DucoBox Energy Premium



Always position the Duco Installation Kit on the RIGHT-HAND side of the PCB, as shown here; otherwise it will not work.

#### Version 2.0 (from January 2025)



Duco Installation Kit 2.0

DucoBox Silent Connect / Focus / Hygro (Plus) / Silent FR



DucoBox Energy Comfort (Plus)



DucoBox Energy Premium



DucoBox Energy Sky

## 03.C Can several DucoBoxes be calibrated simultaneously using the Duco Installation Kit or Duco Connectivity Board?

Yes, on a job site, several people can use their Duco Installation App simultaneously. It is therefore important to always remain attentive when connecting the application to the DucoBox. Make sure you are connected to the correct device.

#### 03.D Is my Duco Connectivity Board correctly connected to a LAN Network or via Wi-Fi?

Check the LED indication on the Duco Connectivity Board. Both LEDs flash green together to show that the Duco Connectivity Board is on Ethernet and connected to the Duco Cloud.

#### 03.E How can I read an IP address?

In the display menu of a DucoBox Energy, you can read out the obtained IP address as follows.

- For the DucoBox Energy: in the Display menu: Settings LAN Settings.
- For DucoBox Focus/Hygro: CONFIG TcpIP
- For the Silent Connect: via the Duco Network Tool Tree view tab Additional device info

#### 03.F Can a Duco Installation Kit or Duco Connectivity Board be connected to a 5 GHz network?

No, this is not possible and will not become possible.

The network specifications are: 802.11 b/g/n @ 2.4 GHz

#### 03.G Can I set a static IP address?

Yes, you can set a static IP address.

For a DucoBox Energy, this can be set via the DucoBox display menu (Settings - Lan settings)

For a DucoBox Focus/Hygro, go to the Config/TcpIP display menu.

An alternative method: see "How can I read an IP address?" on page 9.

#### 03.H My Duco Installation App works slowly. What can I do?

Check whether the application needs to be updated in the App store or on Google Play.

Over time, the cache memory becomes increasingly full, resulting in less free storage space on your phone. This is annoying, especially when you have limited storage capacity. Fortunately, it is quite simple to clear your device's cache memory in your system settings.

More info at: support.apple.com or support.google.com/android

#### 03.1 My connection drops out while using the app. Now what?

There will always be a pop-up notification in the application when the connection is broken.

If controls are too far away, causing you to lose connection, you can first pair all controls / user controllers centrally and then drag them to the correct room.

#### 03.J I cannot connect to the DucoBox. Now what?

Check the following:

• Activate your Wi-Fi on your phone.

Note that smartphones automatically search for networks with internet access.

The Access Point of the Duco Installation App itself is not comparable to an ordinary Wi-Fi network and does not contain internet. Therefore, smartphone devices will always prioritise searching for devices over 4G. Also check what Wi-Fi networks you find on your phone and search for DUCO or DUCO Pxxxxxx-xxxxx. If you are an iOS user, you may need to give permission to search on the local network. To check this on your device, go to 'settings', then 'privacy policy' and click on 'local network'.



- Make sure you have scanned in the correct QR Code. If necessary, manually enter the serial number and Wi-Fi key in the application.
- Activate the local point to point Wi-Fi. If 1 LED lights yellow, the local point-to-point Wi-Fi is active. If both LEDs light yellow, someone is already connected to the point-to-point Wi-Fi. Only 1 phone can be connected per Duco Connectivity Board or Duco Installation Kit.
- Connectivity overrule (available from February 2025):

Please note: this functionality only works with a Duco Installation Kit with firmware v5 or newer and not with a Duco Connectivity Board that is permanently connected to the DucoBox.

If the connection to the DucoBox via the Duco Installation App fails, you can press the button on the Duco Installation Kit for 10 seconds. The LED on the Duco Installation Kit changes from yellow to blue. You can now temporarily connect directly to the DucoBox via the Duco Installation App. The app first reports that the Pxxxxxx-xxxx network was not found and then connects to the generic DUCO Wi-Fi network. If the connection is successful, 2 blue LEDs light up on the Duco Installation Kit. Close the temporary connection by pressing the button on the Duco Installation Kit. The LEDs on the Duco Installation Kit change back to yellow. After this, you will need the password again to connect to the Duco Installation App via Wi-Fi.

Was the DucoBox de-energised when the Duco Connectivity Board or Duco Installation Kit was installed? If not, damage may have occurred on the Duco Connectivity Board or Duco Installation Kit and the main circuit board of the DucoBox. It is best to check on the DucoBox whether the Duco Connectivity Board or Duco Installation Kit is still visible.

#### How do you check that the communication between the DucoBox and the Duco 03.K Installation Kit or Duco Connectivity Board is not damaged?

Connect the Duco Installation Kit or Duco Connectivity Board correctly according to the manual. If the display and the Duco Connectivity Board do not work, the Duco Installation Kit or Duco Connectivity Board is incorrectly installed but not broken.

Follow the installation manual: activate Wi-Fi point-to-point access (1 yellow LED lights up)

Is the problem still not solved?

#### **DucoBox Energy**

Using the DucoBox's display menu, check whether an IP address becomes visible under Setting - Lan setting. If not, the communication module is damaged.

#### **DucoBox Focus/ Hygro**

Check via the display menu: Config - TcpIP whether the menu is expanded with a Dynamic IP address. If only DHCP is visible, the communication module is damaged.

#### **DucoBox Silent**

Use the Duco Network Tool to read the IP address. If no IP address is visible, the communication module is damaged.

If in doubt or problems, replace the communication module or contact DUCO Service.

#### 03.L How do I report an issue to DUCO about the Duco Installation Kit or Duco Connectivity Board?

Use the Feedback button in the Duco Installation App under Settings and share your comment with DUCO Service.

Important information to provide when reporting to DUCO:

- Phone information: go to phone settings (e.g. Samsung A52 Android version 12.0)
- Application software: more info available on the App store or on Google Play.
- Take a screenshot or print screen of your issue.
- Can your issue be simulated or did it occur just once?
- Description of the problem.

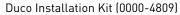
## **04** More info

#### Where can I find the serial number (SN) of the Duco Installation Kit or Duco Connectivity 04.A Board?

The serial number is also on the DUCO part itself.

#### Version 1.0 (until January 2025)







Duco Connectivity Board (0000-4810)

#### Version 2.0 (from January 2025)



Duco Installation Kit 2.0 (0000-4946)



Duco Connectivity Board 2.0 (0000-4945)

#### 04.B How long is the warranty on the Duco Connectivity Board or Duco Installation Kit?

See general warranty conditions at www.duco.eu.

#### 04.C Where can I find a return policy?

Please contact your point of sale where you purchased the DUCO Component to check the correct return policy.

