# Installation manual User Controller / Room Sensor

L2001962-J 09.04.2025



Keep this manual and packaging carefully as long as the product is in use!

# 01 Application

The user controller can be used as a local control, optionally fitted with CO<sub>2</sub> or moisture measurement.

Depending on the type, a user controller / room sensor will command the ventilation system based on:

- manually selected setting
- CO<sub>2</sub> concentration
- relative humidity (RH)

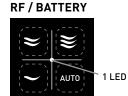
# **02** Buttons & LED



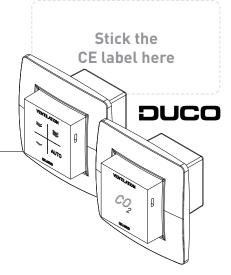


LED

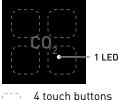
4 touch buttons +



4 push buttons



SENSOR ONLY



4 touch buttons (not visible)

(!)

LED INDICATION	WIRED / 24 VDC RF / 230 VAC	RF / BATTERY	
Not in network	RED blinking slowly		]
Currently pairing	RED blinking rapidly		l
In network	GREEN blinking slowly		'INSTALLER MODE'
In network, waiting for associated components	GREEN blinking rapidly		ſ
Transitional phase (please wait)	YELLOW blinking slowly	ORANGE blinking slowly	
Indicates the component selected while changing settings	BLUE	no colour indication	VIEWING MODE
Initialising (system calibration in progress)	YELLOW no colour indication		CONFIGURATION MODE

For user instructions please refer to the user manual at www.duco.eu.

# 03 Mounting

#### FIXING

Not for 'RF / Battery' components: Provide a socket box preferably with a minimum depth of 47 mm and 2 screw holes. Connect the cables as shown in the table below.

Ensure none of the cables are live before connecting them.

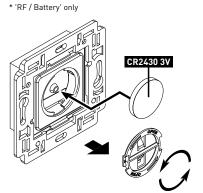
For RF components observe a **maximum distance of 350 m** (line of sight) between the various components (obstacles can reduce this distance substantially), and a **minimum distance of 30 cm** between the component and material causing RF interference such as metal. Other RF equipment operating at 868 MHz can also have a detrimental effect on component range.

CLICK

#### CONNECTION

To connect the room operating unit / room sensor, a choice can be made between wireless communication (RF / 230 VAC) or wired communication (Wired / 24 VDC) to do this.

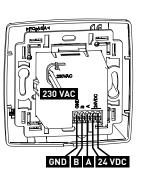
### **REPLACE BATTERY**



The battery is already installed on delivery. Battery life in normal use: 3 to 5 years

Room Sensor with the ventilation system.

Perform the following steps to pair a User Controller /



#### WIRED / 24 VDC

Use an EN60335-certified power source. Connect the 5 x 0.8 mm solid-core cable using the screw connectors.

#### RF / 230 VAC

Fit the user controller in an interference-free environment so RF signals can be transmitted/received properly. Connect the mains supply cables to the existing power supply cables on the component using lever connectors (not included)

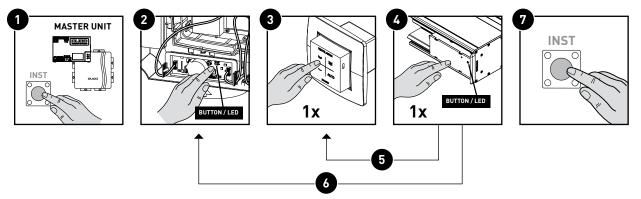
## **04** Linking to ventilation system

### PAIRING



- To pair a user controller / sensor to an iAV Control Valve, follow the steps in the iAV Control Valve manual.
- To pair a user controller / sensor to a DucoBox Energy, use the stepby-step guidance via the display; follow the relevant manual.
- Activate 'Installer mode' by tapping 'INST' on the master unit (DucoBox or IQ unit). The LED will flash green rapidly.
- **Only for zonal system:** Tap the button of a Control Valve once so that the LED starts flashing green quickly.Underlying components can now be added in this zone.
- Add the User Controller / Room Sensor by tapping 1x on any button of this component (For a CO<sub>2</sub> Room Sensor without control, the LED opening can be pressed). The LED will start to flash green rapidly.
- 4 Add any window ventilators by tapping once on the component to be paired. The LED will flash green slowly.
- 5 Repeat steps 3 and 4 until all remaining components in the current zone are paired.
- **5** For zonal systems only: Repeat steps **2** up to **5** for the remaining zones.

Once all components have been paired, 'Installer mode' can be deactivated by tapping 'INST' on the 'master unit'. The LEDs on all components will stop flashing and the system will revert to 'User mode'.



#### **REMOVING AND REPLACING**

Removing paired components from the network or replacing is **only possible within 30 minutes after the component is paired or restarted**. Restarting can be done by disconnecting the power for a moment. After a time-span of 30 minutes, remove and replace operations are ignored. This is valid for **all components from date of manufacture 170323**.

#### Removing a user controller / room sensor

D Activate 'Installer mode' by longpressing 2 diagonal buttons on the control to be removed. The LED will flash green rapidly.

- Press 1x long on a button of the component to remove it from the network (For a CO<sub>2</sub> Room sensor without control, the LED opening can be pressed). The LED will flash red.
- 3 Deactivate 'Installer mode' via 'INST' on the master unit. The LED will turn white.

#### Replacing an RF control / Room sensor

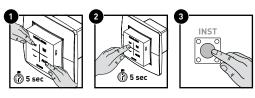
1 Activate 'Installer mode' by tapping 'INST' on the master unit. The LED will flash green rapidly.

2 Tap 2x briefly on any button of the control / room sensor to be replaced (For a CO<sub>2</sub> room sensor without control, the LED opening can be pressed). The LED will flash red.

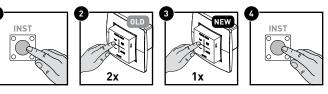


- Tap **once briefly** on any button on the new control / room sensor. The latter will take on all settings / connections in the network. The LED will flash green.
- Deactivate 'Installer mode' using the 'INST' button on the master unit or via the "palm-of-the-hand" method (see TIPS). The LED will turn white.

REMOVE



### REPLACE (RF ONLY)



#### TIP

'Installer mode' can also be activated/ deactivated via a **paired control.** Activate: long-press 2 diagonal buttons simultaneously. **Deactivate:** press all 4 buttons simultaneously (this can be done with the palm of the hand on a control featuring touch buttons).



ACTIVATE Installer Mode





### **05** Scope of supply

Before starting to install the unit, check to ensure it is complete and undamaged. The scope of supply of the room sensor / user controller comprises the following components:

- Room Sensor / User Controller
- Installation manual
- EC Declaration of Conformity

Keep the user manual safely and pass it on it to anyone using the unit after you.

All manuals for all products can be found on the DUCO website. www.duco.eu

# **06** Transport and packaging



The necessary care must be exercised when transporting and unpacking the product. Avoid violent shocks during transport and handling. When unpacking the unit, check any loose parts and accessories for transport damage. Take care to ensure after unpacking that the packaging material is disposed of in an environmentally-friendly manner. Returning the packaging to the recycling loop saves raw materials and reduces the waste mountain.

# **07** End of service life



Disposing of the unit. Old electric and electronic equipment often contains valuable materials. However, it also contains harmful substances which are necessary for the operation and safety of the unit. Accordingly, never dispose of waste equipment with ordinary waste. Choose to have it disposed of in an environmentally-friendly manner.

# 08 Dimensions

See technical data sheet at www.duco.eu.

## 09 Legislation

#### Simplified EU declaration of conformity



Hereby DUCO Ventilation & Sun Control declares that the radio equipment type User Controller / Room Sensor is in compliance with Directive 2014/53/EU.

The full text of the EU declarations of conformity is available at the following internet addresses:

- en.duco.eu/user-controller-room-sensor
- en.duco.eu/user-controller-room-sensor-battery

Frequency band	868,3 MHz
Maximum radio frequency power	0,4 dBm

### **10** Versions

The room sensor/ user controller is available in a number of variants. This manual is valid for the following types:

Туре	Power supply	Sensor	Manual control	ltem number	
				Black	White
User Controller	Battery	None	Yes	0000-4175	0000-4600
User Controller	24 VDC / 230 VAC	Temperature	Yes	0000-4601	0000-4602
CO <sub>2</sub> Sensor	24 VDC / 230 VAC	CO <sub>2</sub> + Temperature	Yes	0000-4603	0000-4604
Humidity Room sensor	24 VDC / 230 VAC	RH + Temperature	Yes	0000-4605	0000-4606
CO <sub>2</sub> Room sensor without control	24 VDC / 230 VAC	CO <sub>2</sub> + Temperature	No	0000-4636	0000-4637

# **11** Regulations and safety instructions

### a) <u>The installer is responsible for installing and</u> <u>commissioning the unit.</u>

#### b) <u>Do not install this product in areas where the following are</u> present or could occur:

#### Excessively fatty atmosphere.

Corrosive or flammable gases, liquids or fumes. Room air temperature above 40 °C or below -5 °C. Relative humidity higher than 90% or outdoors. Obstacles that prevent access to or the removal of the fan unit. Bends in the ducts immediately upstream of the fan unit.

#### c) General and specific safety instructions

Take care to ensure that the electrical supply is a 230 V, single-phase earthed, 50/60 Hz, AC system or a 24 VDC power source to EN60335.

The unit must not be used in locations where it could be subjected to direct water spraying.

Check that the unit is complete and undamaged when you take it out of the packaging. If you have any doubt about this, please contact DUCO / your DUCO sales outlet.

Electrical equipment should be handled with care

Never touch the unit with wet hands.

Never touch the device when barefoot.

Do not use the unit in the presence of flammable or volatile substances such as alcohol, insecticides, petrol etc.

Make sure that the electrical system to which the unit is connected complies with the stipulated conditions.

Do not expose the unit to the elements.

Do not place any objects on the unit.

Do not use the unit as an extractor for water heaters, heating systems, etc. Ensure that the unit discharges into a single exhaust duct that is suitable and installed for the purpose and exhausts outdoors.

Ensure that the electrical circuit is not damaged.

Always adhere to the safety instructions in the manual when installing the device. Failure to comply with these safety instructions, warnings, notes and guidelines could result in damage to the product or in personal injury for which DUCO NV cannot be held liable.

The installation of the product also requires to be in accordance with the general and locally applicable construction, safety and installation regulations of the local authority and other agencies.

Only an accredited installer is permitted to install, connect and commission the product, as set out in this manual.

Keep the manual close to your unit.

Maintenance instructions must be followed closely in order to avoid damage and/or wear.

It is recommended that a maintenance contract be taken out to ensure the unit is regularly inspected and cleaned. The device must be fitted in a touchsafe manner. This means, among other things, that under normal operating conditions no-one can reach moving or electrically live parts of the fan without intending to do so for operations such as:

### **12** Maintenance

### <u>User</u>

See maintenance instructions DUC0 Ventilation Systems (L8000011)

### **Installer**

See maintenance instructions DUCO Ventilation Systems (L8000011)

# **13** Service

Please refer to the maintenance instructions at www.duco.eu and view the videos on duco.tv for more information. For service problems as a user: Please contact your installer. Keep the serial number of the product nearby.

For service problems as an installer: Please contact your DUC0 products seller. Keep the serial number of the product nearby. The serial number is on the sticker on the back of the control unit.

Taking off the lid.

The user controller / room sensor meets legal requirements imposed on electrical equipment.

Always ensure that before work begins, the device is isolated from the power supply by switching off the fuse. (Use a measuring instrument to check that this is actually the case!)

Use suitable / appropriate tools to work on the unit.

Use the unit only for applications for which it has been designed as stated in this manual.

The ventilation unit is required to operate continuously, i.e. the DucoBox must never be switched off. (legal requirement under NBN D50-001 Section 4.2. MEV System

The electronic components may be live. In the event of a fault, contact a professional installer and only have repairs carried out by expert personnel. This unit is not intended for use by people (including children) with reduced physical, sensory or mental capabilities, or who lack experience or know-how, unless they are supervised or have been given instructions on the use of the unit by a person who is responsible for their safety. Children must be supervised to ensure that they do not play with the unit.

If the power cord is damaged, it must be replaced by the manufacturer, aftersales support or individuals with comparable qualifications in order to prevent any hazard.

The user is responsible for safely removing the product at the end of its useful life, in accordance with locally applicable laws or regulations. You can also take the unit to a collection point for used electrical equipment.

The unit is only suitable for housing construction and not for industrial use, such as swimming pools and saunas.

When handling electronics, always take measures to inhibit ESD, such as wearing an earthed wristband.

Modifications to the unit or to specifications stated in this document are not permitted.

. Do not pull on the cord to remove the plug from the socket.

Always refer to the installer of your combustion appliance to establish whether there is a risk of flue gas ingress into the dwelling.

Check that the voltage shown on the nameplates matches the local mains voltage before connecting the device.

#### d) Mounting

This product has been developed for indoor use, in a domestic environment. Use the unit only for applications for which it has been designed, as described in the manual. Use for other purposes and/or modifications to the room operating unit or room sensor are not permitted. Vero DUCO NV is not liable for any loss or damage caused by improper operation or use other than stated here.

The user controller / room sensor can only be used in combination with a DucoBox (Silent, Silent Connect, Focus, Energy Comfort, Energy Premium, iAV and IQ unit).

Fit the room sensor preferably on an internal wall at eye level. Do not expose the user controller to direct sunlight so the sensors cannot be affected.

#### e) Unpacking instructions

Open the box and take the user controller out, remove the packaging material and always keep the manual to hand.

# 14 Warranty

All warranty conditions concerning the DucoBox and DUCO's ventilation systems can be found on the DUCO website. Complaints must be made in writing to DUCO by the installer or the DUCO distribution point, clearly stating the complaint and the order/ invoice number with which the products were delivered. To do so, please fill out the complaint registration form, available on the DUCO - website, and the serial number and send it to service@ duco.eu.



Vero DUCO - Handelsstraat 19 - 8630 Veurne - Belgium tel +32 58 33 00 33 - info@duco.eu - www.duco.eu

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.