

# **DUCO L2001962-H.2 User Controller Sensor Instruction** Manual

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**DUCO L2001962-H.2 User Controller Sensor** 



#### **Product Information**

• Product: User Controller / Sensor

• Model: L2001962-H.2

• Date: 24.07.2023

• **Application:** The user controller can be used as a local control, optionally fitted with CO2 or moisture measurement.

#### **Buttons & LED:**

- RF / BATTERY
- RF / WIRED
- Push button LED
- AUTO
- Touch button / LED
- AUTO
- LED INDICATION:
  - Not in network
  - Logging on
  - In network
  - In the network, waiting for associated components
  - Transitional phase (please wait)
  - Indicates the component selected while changing settings
  - Initializing (system configuration in progress)

## **Product Usage Instructions**

## 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).
- Maintain 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 the component range.

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

## **Linking to Ventilation System**

- 1. Activate 'Installer mode' by tapping 'INST' on the master unit (DucoBox or IQ-unit). The LED will flash green rapidly.
- 2. **For zonal systems only:** Tap the button on a control valve once so the LED starts to flash green rapidly. Underlying components can now be added to this zone.
- 3. Add the User controller / Sensor by tapping once on any random button on this component (On a CO2 Sensor without a controller, 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.
- 6. For zonal systems only: Repeat steps 2 to 5 inclusive for the remaining zones.
- 7. 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 return to their normal indication.

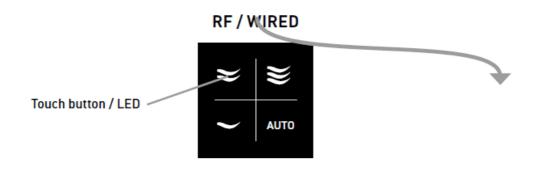
Please refer to the user manual at www.duco.eu for more detailed instructions.

## **Application**

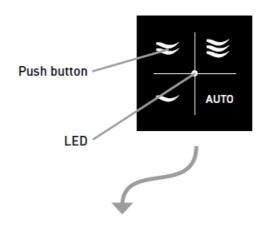
The user controller can be used as a local control, optionally fitted with CO2 or moisture measurement. Depending on the type, a room operating unit / room sensor will control the ventilation system based on:

- · manually selected setting
- CO2 concentration
- relative humidity (RH)

#### **Buttons & LED**



#### **RF / BATTERY**



## **LED INDICATION**

LED INDICATION	WIRED / 24 VDC RF / 2 30 VAC	RF / BATTERY	
Not in network	RED blinking slowly		
Logging on	RED blinking rapidly		
In network	GREEN blinking slowly		
In the network, waiting for associated components	GREEN blinking rapidly		
Transitional phase (please wait)	YELLOW blinking slowl	ORANGE blinking slowly	
Indicates the component selected while changing settings	BLUE	no color indication	
Initializing (system configuration in progress)	YELLOW no color indication		

- INSTALLER MODE'
- VIEWING MODE
- CONFIGURATION MODE

For user instructions please refer to the user manual at  $\underline{www.duco.eu}.$ 

## **Fitting**

## **FIXING**

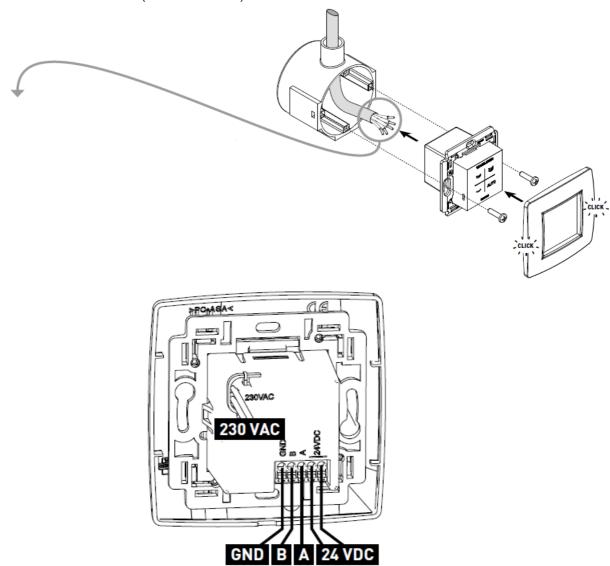
Not for 'RF / Battery' components: Provide a socket box preferably with a minimum depth of 47 mm and 2 screw

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 the component range.

#### 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.



#### WIRED / 24 VDC

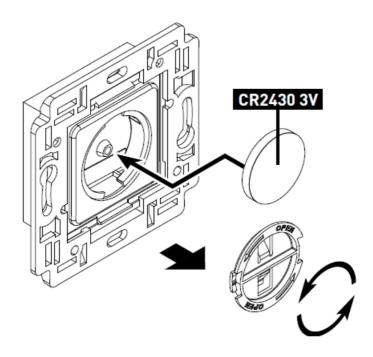
Use an EN60335-certified power source. Connect the  $5 \times 0.8$  mm solid core cable using the screw connectors. Please refer to the 'Duco Wired' manual as well at <a href="https://www.duco.eu">www.duco.eu</a>.

#### **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)

#### **REPLACE BATTERY**

'RF / Battery' only

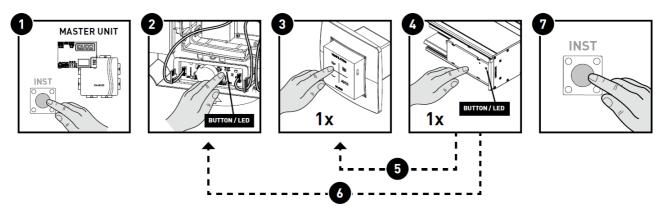


The battery is already installed on delivery. Battery life in normal use: 3 to 5 years

# Linking to the ventilation system PAIRING

Perform the following steps to pair a User controller / Sensor with the ventilation system. **NOTE:** to pair a control with an iAV Control valve, follow the steps in the iAV Control valve manual.

- 1. Activate 'Installer mode' by tapping 'INST' on the master unit (DucoBox or IQ-unit). The LED will flash green rapidly.
- 2. For zonal systems only: Tap the button on a control valve once so the LED starts to flash green rapidly. Underlying components can now be added to this zone.
- 3. Add the User Controller / Sensor by tapping once on any random button on this component (On a CO2 Sensor without a controller, 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.
- 6. For zonal systems only: Repeat steps 2 to 5 inclusive for the remaining zones.
- 7. 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 paired components from the network or replacing is only possible within 30 minutes after the component is paired in or is 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

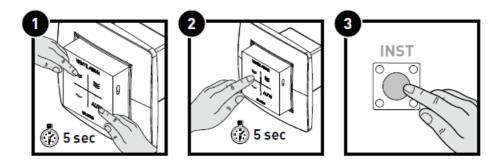
#### Removing a user controller / sensor

- 1. Activate 'Installer mode' by longpressing 2 diagonal buttons on the control to be removed. The LED will flash green rapidly. The LED will flash green rapidly.
- 2. Press once and hold the button for the component in order to remove it from the network (With a CO2 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.

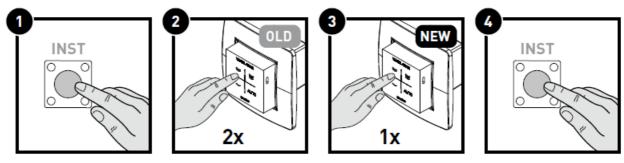
#### Replacing an RF control / Room sensor

- 1. Activate 'Installer mode' by tapping 'INST' on the master unit. The LED will flash green rapidly.
- 2. Tap twice briefly on any random button on the control/Room sensor to be replaced (With a CO2 Sensor without control, the LED opening can be pressed). The LED will flash red.
- 3. Tap once briefly on any random button on the new controller / sensor. The latter will take on all settings/connections in the network. The LED will flash green.
- 4. 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**



## **REPLACING (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**



#### **DEACTIVATE INSTALLER MODE**



## 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 / room operating unit comprises the following components:

- Room sensor / room operating unit
- · Installation guide
- 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.

## 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 components and accessories for any 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.

#### 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.

#### **Versions**

The room sensor/room operating unit is available in several variants. This manual is valid for the following types:

Туре	Power supply	Sensor	Manual co ntrol	Item number	
				Black	White
User controller	Battery	None	Yes	0000-4175	0000-4600
User controller	24 VDC / 230 V AC	Temperature	Yes	0000-4601	0000-4602
CO <sub>2</sub> Sensor	24 VDC / 230 V AC	CO <sub>2</sub> + Temperat ure	Yes	0000-4603	0000-4604
Humidity Sensor	24 VDC / 230 V AC	RH + Temperatur e	Yes	0000-4605	0000-4606
CO <sub>2</sub> Room sensor without control	24 VDC / 230 V AC	CO <sub>2</sub> + Temperat ure	No	0000-4636	0000-4637

#### **Dimensions**

See the technical data sheet at www.duco.eu.

## Regulations and safety instructions

- a) The installer is responsible for installing and commissioning the unit.
- b) Do not install this product in areas where the following are 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, singlephase 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 touch-safe 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: Taking off

the cover. The room operating unit/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. System C) 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, after-sales 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) Fitting 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 room operating unit/room sensor can only be used in combination with a DucoBox (Silent, Silent Connect, Focus, Energy Comfort, Energy Premium, ECO, 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.

## **Maintenance**

#### User

See Maintenance instructions for Duco Ventilation systems (L8000013)

## Installer

See Maintenance instructions for Duco Ventilation systems (L8000013)

#### 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 Duco products seller. Keep the serial number of the product nearby. The serial number is on the sticker on the back of the control unit.

#### Warranty

All warranty conditions concerning the DucoBox and Duco's ventilation systems can be found on the Duco website. All complaints are to be reported to Duco by the Duco distributor with a clear description and the order/invoice number under which the products were delivered. In order to register the complaint, please use the complaint registration form found on the Duco website and the product's serial number in your message to service@duco.eu.

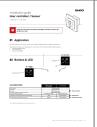
**Translation of the original instructions** See <u>www.duco.eu</u>. for information regarding warranty, maintenance, technical data, etc. Installation, connection, maintenance, and repairs should be done by a recognized installer. The electronic components of this product may be live. Avoid contact with water.

## **CONTACT**

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

L2001962 Installation Guide User Controller / Sensor (Revision H.2 | 24.07.2023) Keep this instruction and these packaging carefully as long as the product is in use!

#### **Documents / Resources**



<u>DUCO L2001962-H.2 User Controller Sensor</u> [pdf] Instruction Manual L2001962-H.2 User Controller Sensor, L2001962-H.2, User Controller Sensor, Controller Sensor, Sensor

## References

- O Duco.tv
- DUCO Ventilation & Sun Control

Manuals+,