

# User Controller 'Ventilative Cooling' and 'Sun Control'

ENGLISH **en**

User manual



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### Translation from Dutch of the original instructions

For information regarding warranty, maintenance, technical data, etc., see [www.duco.eu](http://www.duco.eu).

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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**DUCO**

# 01 Introduction

## 01.A Operation of the system

With DUCO's control system, we aim for energy efficiency. To this end, it focuses primarily on the health and comfort of the residents. The system automatically ensures a comfortable indoor temperature.

By measuring via sensors, components are operated only when needed. Depending on the components installed, your system ensures an optimal living environment through:

- **'Ventilative Cooling'**  
Ventilative cooling uses outside air to naturally cool the home. The smart DUCO control ensures maximum cooling with minimal user intervention. The shutters close automatically in rain and wind and open automatically based on the indoor and outdoor temperature.
- **'Sun Control' (solar shading)**  
Solar shading plays a crucial role in controlling indoor temperatures by reducing direct sunlight irradiation. This keeps indoor spaces cool and comfortable, even in the hottest months. By blocking direct sunlight, these systems reduce the need for air conditioning. This in turn results in lower energy consumption and lower electricity bills.
- **Or a combination of both.**

## 01.B What system do I have?

The capabilities of your system will depend on the configuration of the system. Contact your DUCO installer if you do not know which system you have. A smart system from DUCO consists of:

- **DucoBox with Duco ExtensionHub**  
The DucoBox is the brain of the DUCO control system. The Duco ExtensionHub enables communication with the DucoBox.
- **Duco IntelliHub**  
The Duco IntelliHub is the brain of the DUCO control system. The Duco IntelliHub contains software and controls the shutters, skylights and solar shading.
- **Ventilative Cooling**  
The DucoGrille Close 105 with DucoGrille Solid grille provides the supply and extraction of air. Extraction can also be done through a skylight (not a DUCO product).
- **Sun Control**  
Can consist of solar screens (DucoScreen Front or DucoTwin) or architectural solar shading (DucoSlide)
- **One or more user controllers**  
For manual operation of the system.
- **One or more sensors**  
The Duco Outdoor Temperature Sensor or the Duco Weather Station measures the outdoor temperature. In addition, the Duco Weather Station also measures light, rain and wind speed. The user controllers contain room sensors.

## 02 Regulations and safety instructions

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

The User Controllers 'Ventilative Cooling' and 'Sun Control' can only be used in combination with a DucoBox or a Duco IntelliHub.

The User Controller 'Ventilative Cooling' can only be used to operate a DucoGrille Close 105 or a skylight with motor control.

The User Controller 'Sun Control' can only be used to operate a DucoScreen Front, DucoTwin or DucoSlide.

The unit is only suitable for residential construction and not for industrial use, such as swimming pools and saunas. 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 stated in the manual. Use for other purposes and/or adjustments to the user controller are not allowed.

Modifications to the unit or to specifications stated in this document 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 meets the legal requirements for electrical appliances.

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!)

When handling electronics, always take ESD<sup>1</sup> inhibiting measures, such as wearing a grounded wristband.

Ensure that the electrical power supply corresponds to a 24 VDC power source according to EN 60335.

Use suitable / appropriate tools to work on the unit.

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

Keep the manual close to the unit.

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.

In the event of a fault, contact a professional installer and only have repairs carried out by expert personnel.

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.

<sup>1</sup> ESD = electrostatic discharge

# 03 Operation

## 03.A Modes

Your system has manual modes in addition to an automatic mode. The next chapter describes the possibilities for activating these modes.

**OPEN****Open**

Temporary manual mode to open the components.

**CLOSE****Close**

Temporary manual mode to close the components.

**FIX****Stop**

Permanent manual mode to leave the components in the selected position.

**AUTO****Automatic mode (= recommended)**

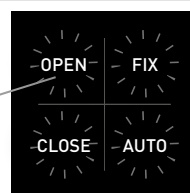
The system automatically aims for a comfortable indoor temperature based on temperature measurement.

## 03.B Operation with DUCO User Controller

The user controller of the system has 4 touch buttons + LEDs.

In manual modes, the measured indoor temperature is ignored and the user can determine the position of the components.

Touch button / LED



**Weather protection and emergency control take priority over all manual modes. No new manual actions are performed in these situations.**

**The components are automatically controlled by the system (solar shading is opened and grilles are closed) when:**

- the weather station or the sensors register, for example, rainfall, excessive wind speed or too low temperatures.
- the emergency switch is pressed.

**If the component was permanently set to the open or closed position, the component will move back to the selected position afterwards:**

- when weather protection is no longer active.
- 5 minutes after pressing the emergency switch.

### Temporary manual mode

The temporary mode lasts 1 hour by default. Then the system goes back into automatic mode.

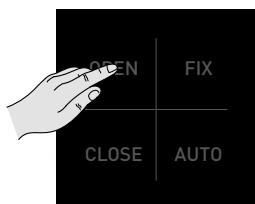
#### Ventilative Cooling

Press 1 time briefly:

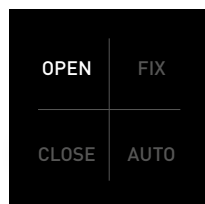
- OPEN to fully open the components.
- CLOSE to completely close the components.

The LED of the selected mode lights up white as long as the component is moving.

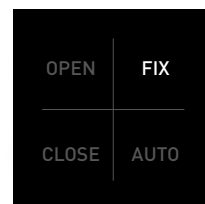
When the selected position is reached, FIX lights up white.



1 x briefly



Component moves to the selected position.



The selected position has been reached.

## Sun Control

Besides fully open or fully closed, the solar shading also has 4 intermediate positions and can be operated in steps (by 20%).

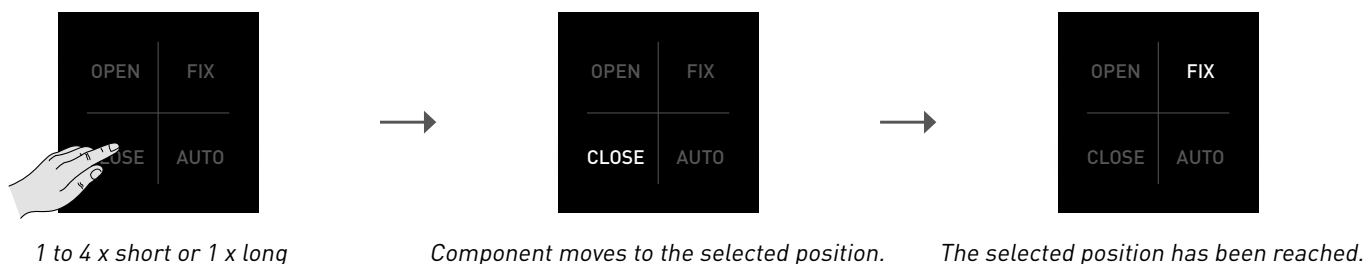
Press 1 x long (5 seconds):

- OPEN to fully open the solar shading (the window is not covered).
- CLOSE to completely close the solar shading (the window is covered).

According to the desired position, press briefly 1 to 4 times:

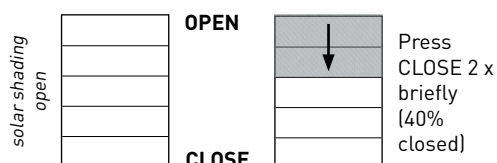
- OPEN to open the solar shading 1 to 4 steps (the window is not covered).
- CLOSE to close the solar shading 1 to 4 steps (the window is covered).

The LED of the selected mode lights up white as long as the component is moving. When the selected position is reached, FIX lights up white.

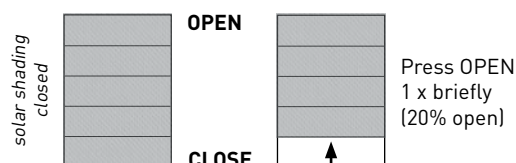


### Example

The solar shading is fully open (window not covered) and you want to lower the solar shading a little so that the sun no longer shines on your TV screen: press CLOSE 2 x briefly to close the solar shading 2 steps (40 %).



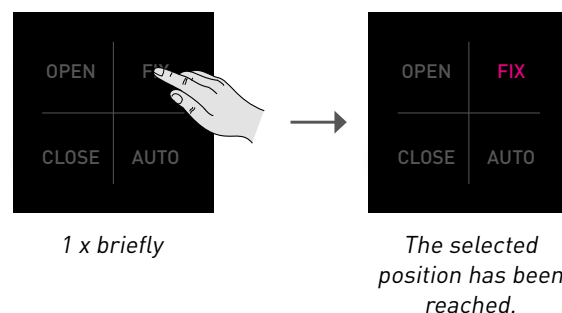
The solar shading is completely closed (window covered) and you want to open the solar shading a little to get some more light in the room: press OPEN 1 x briefly to open the solar shading 1 step (20 %).



## Permanent manual mode

Set the desired position according to the temporary position and then press FIX once briefly to lock the position. When the selected position is reached, FIX lights up magenta.

This mode remains active until the user defines a new position or activates automatic mode.



## Automatic mode

In automatic mode, the components are controlled by the control system.

Based on indoor and outdoor temperature measurement, the ideal position of the components is determined.

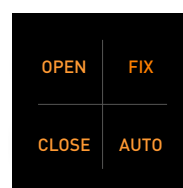
However, the automatic mode can be pressed during active weather protection or active emergency control. The component continues in automatic mode as soon as weather protection or emergency control is no longer active.

## 03.C Error warnings

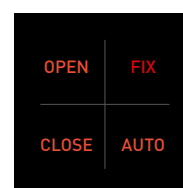
In case of a warning (orange) or error message (red), please contact your installer. Have the serial number ready (for where to find the serial number, see component manual).

The LED of the active touch button permanently lights up orange (warning) or red (error) (until the error has been corrected).

### Warning



### Error message



# 04 LED indications

## 04.A Meaning LED colours

The LEDs on the user controller indicate the active setting or status of the system.

<div>OPEN</div> <div>CLOSE</div>	<div>Manual mode</div> <div>The component is moving</div>	<div><div>OPEN</div><div>CLOSE</div></div> <div><div>FIX</div><div>AUTO</div></div>	<div>Warning</div> <div>Contact your installer</div>
<div>OPEN</div> <div>CLOSE</div>	<div>Weather protection activated</div> <div>The component is moving</div>		
<div>AUTO</div>	<div>Automatic mode</div>	<div><div>OPEN</div><div>CLOSE</div></div> <div><div>FIX</div><div>AUTO</div></div>	<div>Error message</div> <div>Contact your installer</div>
<div>AUTO</div>	<div>Weather protection active during automatic mode</div>		
<div>AUTO</div>	<div>Emergency control active during automatic mode</div>		

# 05 Maintenance

A system needs to be maintained to keep functioning properly. Please refer to the maintenance instructions of the various components at [www.duco.eu](http://www.duco.eu) for detailed instructions.

# 06 Service & warranty

The responsibility for warranty implementation lies in the first place with the installer or supplier where the User Controller 'Ventilative Cooling' or 'Sun Control' was bought. Always refer to the local installer or dealer if you have problems with installation and/or operation of the User controller 'Ventilative Cooling' or 'Sun Control'. Keep the serial number of your product to hand.

All warranty conditions regarding the User Controller 'Ventilative Cooling' or 'Sun Control' and DUCO's control system can be found at [www.duco.eu](http://www.duco.eu).

# 07 End of service life



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.

