

### VELUX INTEGRA® KLF 200



#### **Directions for use**





Two instructions are supplied with the interface (**A** and **B**).



## Set-up via a VELUX INTEGRA® control

These instructions will help you set up the interface with a VELUX INTEGRA® one-way or two-way control. The instructions contain the default settings and functions that can be seen in the table of contents on the next page.



## Set-up via tablet, computer or smartphone

This instruction leaflet will help you set up the interface via a tablet, computer or smartphone and enable more advanced interface settings.

#### Congratulations on your new VELUX INTEGRA® product!

Thank you for buying this VELUX INTEGRA® product.

The product can be used as an interface or as a repeater.

The interface function is used when io-homecontrol® products are to be controlled via external control devices that are not io-homecontrol® compatible.

The repeater function is used if you want to extend the operation range of controls in the system by transmitting received wireless commands.

| 6-    |
|-------|
|       |
| 8-10  |
| 1     |
| 12-10 |
| 17-1  |
| 2     |
| 2     |
| 22-2  |
| 26-2  |
|       |

# 0000 VELUX

# Product overview

#### **Product overview**

- 1 Light-emitting diode
- (2) ETHERNET/service (for internal use only)
- 3 Power supply
- 4 Key button
- **5** RESET
- **6** Outputs
- 7 Inputs



#### **Default settings**

#### Inputs (control)

An external control signal shorter than 1.5 second makes the VELUX product travel to end position.

- Even inputs (2, 4, 6, 8) are used for close/down: The product travels to end position
- Odd inputs (1, 3, 5, 7) are used for open/up: The product travels to end position

An external control signal longer than 1.5 second makes the VELUX product travel until the signal stops or until the product has reached end position.

Default speed is used for all window operators including those supporting silent mode.

As default, io-homecontrol  $^{\tiny{(0)}}$  channel 3 is used for communication and no channels or signals are blocked.

#### **Outputs (signals)**

The output relay is activated for 2 seconds when an action has been successfully executed.

The default settings can be adjusted by using the web interface. See enclosed instruction leaflet (B).

#### Important information

#### Important information



Read instructions carefully before installation and operation. Please keep instructions for future reference and hand them over to any new user.

#### Safety

- Interface KLF 200 can be used by persons (aged 8 years and above) with sufficient experience and knowledge if they have been given instruction concerning their safe use and understand the hazards involved. Cleaning and user maintenance must not be made by unsupervised children.
- · Children must not play with the interface.
- The interface, adaptor plug and cable are for indoor use only.
- The interface must not be covered (maximum ambient temperature: 50°C).

#### Product

- The interface is based on two-way RF (radio frequency) communication and marked with the symbol This symbol can be found on the data label.
- · Cables from the interface input must not exceed 100 m.
- Radio frequency band: 868 MHz (io-homecontrol®), 2.4 GHz (WiFi 802.11 b/q/n).
- Radio frequency range: 300 m free field. Depending on building construction, the indoor range is approx. 30 m. However, constructions with reinforced concrete, metal ceilings and plaster walls with steel members may reduce the range.
- Electrical products must be disposed of in conformity with national regulations for electronic waste and not with household waste.
- · The packaging can be disposed of with usual household waste.

#### Maintenance

- If repair or adjustment work is needed, disconnect any power supply and ensure that it cannot be reconnected unintentionally.
- The interface requires a minimal amount of maintenance.
   The surface may be cleaned with a soft, damp cloth.
- If the adaptor plug and/or cable is/are damaged, it/they must be replaced.
- · Spare parts are available from your VELUX sales company.
- If you have any technical questions, please contact your VELUX sales company, see telephone list or www.velux.com.



io-homecontrol® provides advanced and secure radio technology that is easy to install. io-homecontrol® labelled products communicate with each other, improving comfort, security and energy savings.

www.io-homecontrol.com

# Declaration of Conformity In accordance with the European Parliament and Council Directive 2014/35/EU

We herewith declare that VELUX INTEGRA® interface KLF 200 (3LF D02 WW)

- is in conformity with the Low Voltage Directive 2014/35/EU, the EMC Directive 2014/30/EU and the Radio Equipment Directive 2014/53/EU and
- has been manufactured in accordance with the harmonised standards
   EN 60950, EN 55032(2014), EN 55024(2010), EN 301489-1, EN 301489-3,
   EN 300220-2, EN 300220-1, EN 300440-2, EN 300440-1 and EN 300328.

| ELUX A/S: | JAJ/mgn-                              |
|-----------|---------------------------------------|
|           | (Jens/Aksel Thomsen, Market Approval) |

Ådalsvej 99, DK-2970 Hørsholm ....01.05.2016

CE DoC 940409-00

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Functions of inputs

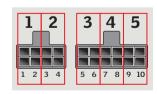
Function as interface is used when io-homecontrol® products are to be controlled by external control devices that are not io-homecontrol® compatible.

The inputs on the interface must be connected to control devices with potential free contacts. When the potential free contact is activated, the interface sends a wireless command to the io-homecontrol® products to be operated. It is possible to operate a single product or a group of products (up to 200 products in total).

The window can also be operated with the wireless control, if preferred.



Individual control of a product or a product group requires a double input per product or product group, ie input 1 and 2 belong together, input 3 and 4, input 5 and 6 etc. This means that up to five products or product groups can be configured.



#### Function as interface

Functions of inputs

Standard setting of inputs:

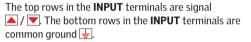
**OPEN/UP/ON** is controlled by connecting **1** ▲ and ↓



**CLOSE/DOWN/OFF** is controlled by connecting 2 ▼ and ►



**STOP** is controlled by connecting both  $1 \triangle$  and  $2 \bigcirc$  and  $\frac{1}{2}$ 



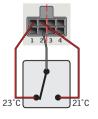


# Thermostatic control of a VELUX roof window by a non io-homecontrol® compatible thermostat

A thermostat can be used for controlling automatic opening and closing of windows depending on the temperature. A typical thermostat works by means of a potential free change-over contact that switches between two positions depending on the ambient temperature.

A thermostat set to 22°C will typically change positions (ie open the window(s)) when the temperature rises above 23°C, and switch back (ie close the window(s)) when the temperature has again fallen below 21°C.

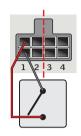
The window can also be operated with the wireless control, if preferred.



#### Functions of inputs

A single contact can be used for running products either up or down, for instance for a blind.

Short press (under 1 second): The product will run to end position. Long press: The product will run until the key is released.



A set of two contacts can be used for running products both up and down with variable stops by pressing both contacts simultaneously.



A change-over contact can also be used for running products both up and down but stops are not possible, for instance for a thermostat.



#### Function as interface

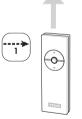
#### Registration of products

io-homecontrol® products must be registered in the interface to be operational. You can register and operate up to 200 products.

If you have a VELUX INTEGRA® two-way control pad KLR 200 (labelled with the symbol (2)), you can copy the registered products from the control pad to the interface. See how on pages 12-16.



If you **only** have a VELUX INTEGRA® one-way remote control (labelled with the symbol ), you can copy the products operated by this control to the interface. See how on pages 17-19.



**Note:** If you have both a one-way and a two-way control, you can copy the registered products from both controls using VELUX INTEGRA® two-way control pad KLR 200.

Registration with VELUX INTEGRA® two-way control pad KLR 200

The illustrations below show how to copy the contents from control pad KLR 200 to interface KLF 200.









Connect the interface to the mains supply. When the light-emitting diode flashes yellow, the interface is ready for configuration.



Tap ⊕ on KLR 200.

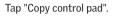


Tap "New product".

#### Function as interface

Registration with VELUX INTEGRA® two-way control pad KLR 200

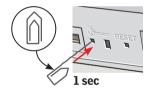






Tap  $\Rightarrow$  and continue to step 6.







Press the button on the back of the interface briefly (1 second) with a pointed object. The light-emitting diode flashes white.





Await green flash on the light-emitting diode and then continue to the next step.

**Note:** In case of red flash, repeat steps 2-6.

Registration with VELUX INTEGRA® two-way control pad KLR 200

#### Function as interface

Registration with VELUX INTEGRA® two-way control pad KLR 200

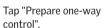




Tap  $\oplus$  on KLR 200.

Tap "New product".







Tap "Add products".



Scroll down the display and choose the product(s) to be assigned to an input ①. The products **must** be of the same type.

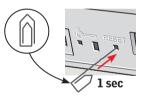
**Note:** By tapping the icon, you can see whether you have chosen the intended products.

Tap **⇒ 2**.



Tick the chosen product(s) 1. Tap  $\Leftrightarrow$  2.







Connect the supplied wire bundle to the input terminal. Press the RESET button on the back of the interface briefly (1 second) with a pointed object. The light-emitting diode flashes white rapidly. Step 15 must now be carried out within 2 minutes.

**Note:** Take care that the red and black wire ends do not touch each other at this point, as they may short-circuit. A short-circuit will result in an unintended registration of products.

Registration with VELUX INTEGRA® two-way control pad KLR 200

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Short-circuit wires (1 second) in the double input which is to control the chosen product(s). It can take up to 1 minute before the light-emitting diode flashes green and the product(s) is/are assigned to the input terminal on the interface.

**Note:** When short-circuiting the same input again, previous configurations will be replaced. This means that if a product is to be added to a group which has already been configured, all the products in the group have to be added again.





When the white light-emitting diode is on, interface KLF 200 has been configured as an interface. The configuration may take up to several minutes.

**Note:** If you want to add more products to the interface, repeat steps 9-15.

#### Function as interface

Registration with VELUX INTEGRA® one-way remote control

The illustrations below show how to copy the contents from a one-way remote control to interface KLF 200.









Connect the interface to the mains supply and connect the supplied wire bundle to input terminal. When the light-emitting diode flashes yellow, the interface is ready for configuration.



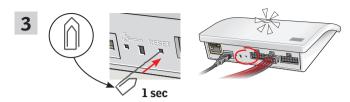






Press the RESET button on the back of the one-way remote control for 10 seconds with a pointed object.

Registration with VELUX INTEGRA® one-way remote control



Press the RESET button on the back of the interface briefly (1 second) with a pointed object. The light-emitting diode flashes white. Step 4 must now be carried out within 2 minutes.







Short-circuit wires (1 second) in the double input which is to control the chosen product(s). The light-emitting diode flashes green.

**Note:** When short-circuiting the same input again, previous configurations will be replaced. This means that if a product is to be added to a group which has already been configured, all the products in the group have to be added again.

#### Function as interface

Registration with VELUX INTEGRA® one-way remote control

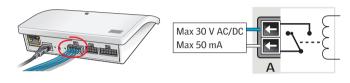


When the white light-emitting diode is on, interface KLF 200 has been configured as an interface.

**Note:** If you want to add more products to the interface, repeat steps 1-4.

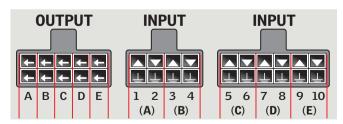
#### **Function of outputs**

The output function is used together with an intelligent building installation (IBI) to get feedback from KLF 200. The output function gives the user feedback as to whether an action has been executed, eg if the window has been closed. As feedback, the built-in output relay is activated for 2 seconds.



#### Intelligent building installations

io-homecontrol® products can be combined with most intelligent building installations (IBI). The IBI system must include an output module with one or more programmable outputs. When the outputs from the IBI have been connected to the input terminals on the interface, the relevant io-homecontrol® products can be controlled via the interface. With two outputs it is possible to control both of the functions ▲ and ▼ in an io-homecontrol® product or a group of io-homecontrol® products.

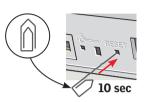


**OUTPUT A** connects to **INPUT 1** and **2. OUTPUT B** connects to **INPUT 3** and **4** etc.

#### Function as interface

#### Resetting

When resetting, **all** settings will be deleted and the interface reset to factory settings.





Press the RESET button on the back of the interface for 10 seconds with a pointed object until the red light-emitting diode is on. After this, the light-emitting diode will turn yellow followed by a red flash.



When the light-emitting diode flashes yellow, the interface has been reset. This may take up to 1 minute.

#### Function as repeater

The repeater function extends the operation range of controls in the system by transmitting received wireless commands. When used as a repeater, the interface is therefore to be placed approximately halfway between the controls and the io-homecontrol® products to be operated.

The repeater function must be registered in two-way controls as if it were a product in the same way as other io-homecontrol® products.

**Note:** The repeater function cannot be used with one-way controls.

The example shows how the repeater function is activated in the interface and registered in a two-way control pad KLR 200.

**Note:** Up to three interfaces in a system can be set to repeater function.

The operation range of controls cannot be extended further in the same direction by placing more repeaters after each other as commands can be sent only via one repeater.













Tap "New product".



Tap "Add new products".





Connect the interface to the mains supply. When the light-emitting diode flashes yellow, the interface is ready to be configured.

#### **Function** as repeater



Now, one of the two images below ( $\bf A$  or  $\bf B$ ) will appear on the display:





If this image appears, tap  $\Rightarrow$  when the control pad has found the products.

You can now operate the products.





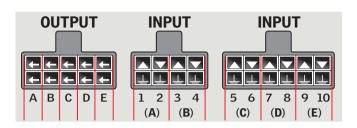
If this image appears, turn off the control pad.

You can now operate the products.



When the blue light-emitting diode is on, the interface is configured as a repeater.

#### Own notes



|   |    | Product |
|---|----|---------|
| Α |    |         |
| В |    |         |
| С |    |         |
| D |    |         |
| Ε |    |         |
| 1 | 2  |         |
| 3 | 4  |         |
| 5 | 6  |         |
| 7 | 8  |         |
| 9 | 10 |         |



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