

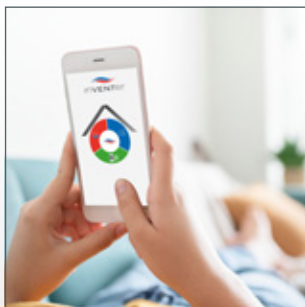


inVENTer



Quick Guide

inVENTer Connect Set-up



1505-0036
1505-0037



www.inventer.eu

1

User and safety instructions

Before commissioning the system, read this manual carefully and follow the instructions given to avoid personal injury and damage to property.

Use all components of the system only according to their intended use. Changes or modifications are not permitted.

Any kind of use other than the intended use will exclude all liability claims.

All system components comply with the applicable technical safety requirements and standards for electrical equipment. It may only be set up and operated in conjunction with this documentation.

Installation, electrical connection and commissioning of the controller may only be performed by qualified personnel. Qualified personnel within the meaning of the safety notices in this documentation are persons who are authorised to install, put into operation and identify equipment, systems and circuits in accordance with established safety procedures.

Symbols used in this documentaion



NOTICE:

Indicates a direct or possible risk of property damage due to an adverse event/state.



TIP:

A TIP symbol indicates practical and useful tips for handling the inVENTer Connect system.



Action required: This prompts the user to perform a specific action.



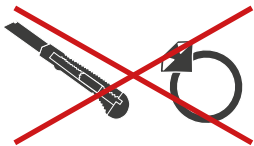
Check the results: requires the user to check the results of the action performed.



Before the action sequences, **tools and aids** for the activities to be carried out are listed.



Book: refers to another section in this documentation.



Installation:



230 V AC



OFF

~~230 V AC~~



Download
Manual



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System overview and function

The inVENTer Connect controller platform is an innovative control system for decentralised iV ventilation units with heat recovery from inVENTer. It allows the individual devices of a usage unit to be integrated into an 868 MHz wireless network, controlled and programmed wirelessly. The platform can be assembled with the following components, depending on structural and individual requirements:

The **Easy Connect e16** controller is the central node for the inVENTer Connect's wireless network. Within the usage unit, the controller is positioned at a central point and distributes the control commands to the ventilation units via the Connect inner covers while the sensor system sends the sensor data to the controller.



The wireless control unit has an information display and offers quick access. The controller also serves as the system interface for the „inVENTer Mobile“ app (Bluetooth interface, BLE).

The **Connect inner cover** is a wireless interior termination and replaces the standard inner covers of the iV-Smart+, iV14-Zero, iV-Compact and iV-Light ventilation units to enable integration into the wireless network. In addition to the wireless interface, the Connect inner covers have local control electronics, a power supply unit and an automatic closing flap.



Sensor technology (optional)

CS2-Connect CO₂ sensor

(incl. humidity/temperature sensor)

is a wireless sensor for monitoring carbon dioxide, temperature and humidity levels within a ventilation zone for demand-driven ventilation.



FTS19-Connect indoor humidity/temperature sensor (battery operated) is a wireless sensor for monitoring the temperature and humidity values within a ventilation zone for demand-driven ventilation.



FTS19-Connect outdoor humidity/temperature sensor (battery operated) is a wireless outdoor sensor for transmitting the outside temperature to the system.



SK19-Connect switching contact is a wireless interface for the integration of safety devices while simultaneously operating the ventilation system with fireplaces.



In addition to the fixed system components, the free app „inVENTer Mobile“ is required for complete control and programming. The system can also be put into operation without the app and can be controlled on a basic level via the wireless controller. However, for a more in-depth setup and full functionality access a mobile device (mobile phone or tablet) with the „inVENTer Mobile“ app installed is required.



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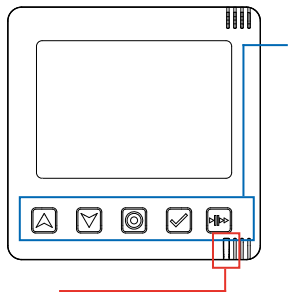
Installation

Install the components included in the scope of delivery according to the instructions provided:

- Easy Connect e16 5040-0032
- Connect inner cover V-240x240 UP/AP 5040-0030
- CS2-Connect CO₂ sensor 5040-0034
- FTS19-Connect indoor humidity/temperature sensor
- FTS19-Connect outdoor humidity/temperature sensor 5040-0033
- SK19-Connect switching contact 5040-0039

4

Initial set up



Sensor keys for quick operation of the ventilation unit



Navigation keys:

Navigate and change values, setting of time.



Mode key:

Change between user specific settings, complete settings.



Selection key:

Confirmation of settings.



Auto / Pause / Boost key:

Set ventilation units globally or by zone in ventilation mode / Pause/ Boost function.

Display LED

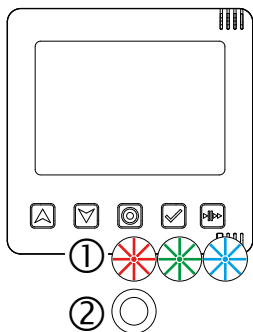


Solid light



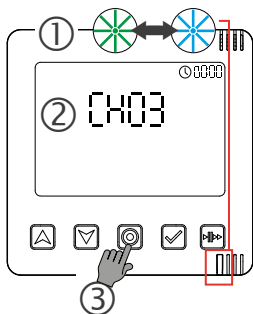
Flashing light

Step 1: Connecting to mains power





- ▶ Establish the power connection.
- ⇒ The controller performs firmware and hardware checks for the system, the LED flashes RED, GREEN and BLUE during this process. (1).
- ⇒ After a successful firmware and hardware check, the LED lights up WHITE (2).
- ⇒ The controller changes to the radio channel setting.

Step 2: Selecting the channel for the RF868-MHz radio connection




- ⇒ The controller searches for the best radio channel, the LED flashes alternately GREEN and TURQUOISE (1).
- ⇒ The best radio channel is indicated on the controller's display (2).



There are 5 channels available.
A different channel can be selected using the navigation keys   .

- ▶ Press the **mode key** (3) to confirm the selection.

⇒ The controller changes to the time and date setting.

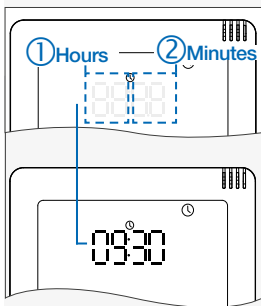
The time and date setting can be skipped by pressing the mode key  . If set-up is carried out via the app, the time and date are automatically taken from the app.

Optional: Step 3: Time and date setting



A flashing value/setting on the controller's display can be changed/set using the navigation keys.

Setting the time



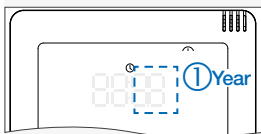
Initially the hour setting is flashing (1).

- ▶ Press the **navigation keys** to set the current hour.
- ▶ Press the **select key** .

Afterwards the minute setting is flashing (2).

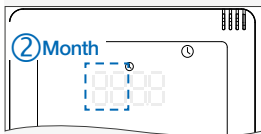
- ▶ Press the **navigation keys** to set the current minute.
- ▶ Press the **mode key** .

Setting the date



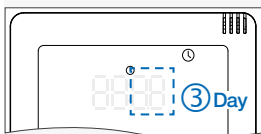
The year setting is flashing (1).

- ▶ Press the **navigation keys** to set the current year.
- ▶ Press the **mode key** .



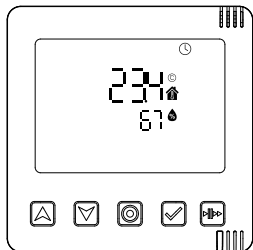
Afterwards the month setting is flashing (2).

- ▶ Press the **navigation keys** to set the current month.
- ▶ Press the **select key** .



Finally the day setting is flashing (3).

- ▶ Press the **navigation keys** to set the current day.
- ▶ Press the **mode key** .



⇒ The display screen shows the determined values for room temperature and humidity at the controller's installation location.

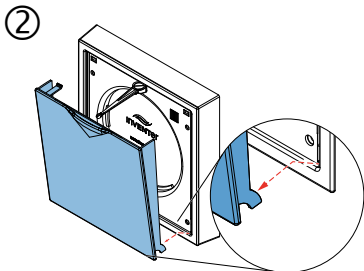
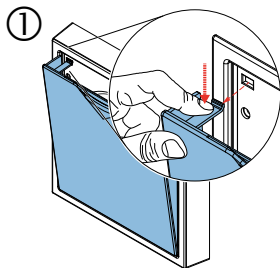
⇒ Initial set up of the Easy Connect e16 controller is executed.

5 Device pairing

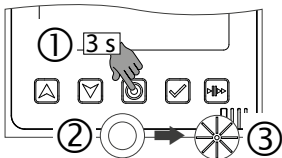
Up to 16 system components (ventilation units [Connect inner covers], sensors, switching contact) can be paired with the Easy Connect e16 controller and thus be integrated into the inVENTer Connect controller platform. To do so:


- activate component pairing on the controller;
- activate all system components to be integrated;
- complete component pairing on the controller.

Before pairing the ventilation units, remove the panel/closing flap of the Connect inner cover.

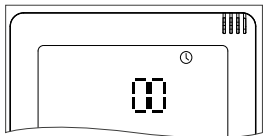


Step 1: Activate component pairing on the Easy Connect e16 controller



- ▶ Press the **mode key**  (approx. 3 seconds, (1)), until the LED flashes **WHITE** (2).
 - ⇒ The display illuminates.
- ▶ Release the mode key.
 - ⇒ The LED flashes **WHITE** (3).

While the **white LED flashes on the Easy Connect e16 controller** (approx. 5 minutes), all components to be integrated must be activated. If there is not enough time to activate all components, component pairing must be activated again on the Easy Connect e16 controller.

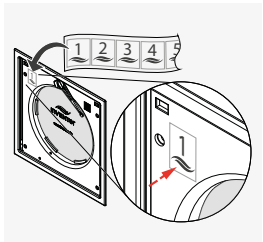


- ⇒ „00“ appears on the controller display as long as no ventilation unit or sensor has been detected and paired.

Step 2: Activating components to be integrated

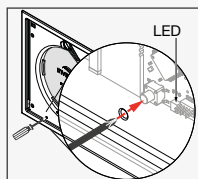


For a better overview it is useful to mark the sequence of the paired components with the supplied numbers.



- ▶ Mark the first paired component (here e.g. the inner cover) with the number 1.
- ▶ Before activating an component mark the paired devices consecutively in the pairing order.

Activated components are automatically recognised and paired by the controller. Activation of Connect system components is executed analogous and is shown here as an example on the Connect inner cover.



- ▶ Press the **push-button** on the respective component to activate:

Connect inner cover: button inside the housing; tool (pin \varnothing 2 mm/50 mm long, e.g. small screw driver) necessary to operate button inside housing.

FTS19-Connect outdoor: button inside the housing.

FTS19-Connect indoor: button on the underside of the housing.

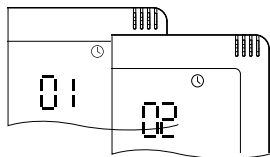
CS2-Connect | SK19-Connect: button on the housing's front-side.

⇒ The LED lights up (1).

- ▶ Press and hold the push-button again until the LED lights up GREEN (approx. 3 s). (2)

⇒ The component is ready for pairing with the controller.

⇒ The LED on the component flashes GREEN during component pairing and lights up solid GREEN when pairing has been completed. (3)

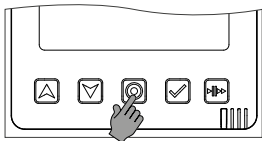



⇒ On the controller display, the number shown increases with each paired system component.

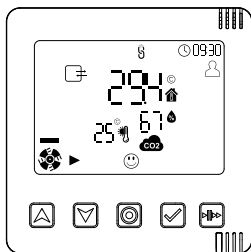
Step 3: Ending component pairing on the controller

After all components are paired, the pairing must be completed, if

- less than 16 components are paired, or
- time limit of 5 minutes after pairing activation on the controller is not exceeded.






- ▶ Press the **mode key**  to confirm the paired components. (1)

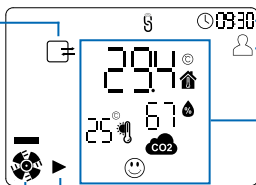


- ⇒ The display screen shows the information that the paired system components (inner covers, external sensors, switching contact) send to the controller.
- ⇒ The system operates in the default profile (factory settings).

Display screen

Ventilation mode

-  Heat recovery
-  } Unidirectional ventilation
-  Pause / Off







Time



Ventilation profile:
Default (can be modified)

System display:
via sensor technology transmitted values to the controller system

Ventilation level

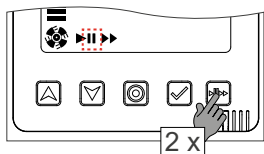
1	25 %	Air flow volume	
2	35 %		
3	50 %		
4	100 %		


Status

- ▶ Ventilation system operates with the pre-set ventilation profile
-  Ventilation system is paused
-  Ventilation system in Boost function

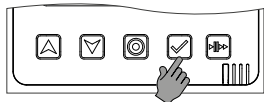
Once all system components are paired, refit the inner cover.

NOTICE: For this purpose the locking arm must be swivelled to the right!

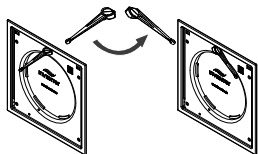


- ▶ Pause the ventilation unit: press the **pause key**  on the controller **twice**.

⇒ The pause symbol  flashes.

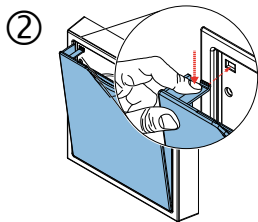
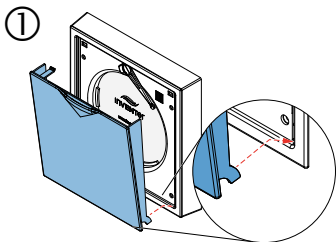




- ▶ Confirm with the **selection key** .



⇒ The locking arm swivels to the right.

- ▶ Mount the cover by sliding the lower lugs into the guide and pressing the cover against the Connect inner cover.



- ▶ Putting the ventilation unit into operation again: Press the **pause key**  on the controller until the „automatic“ symbol  flashes. The automatic closing flaps are opened again. The ventilation units start operating.

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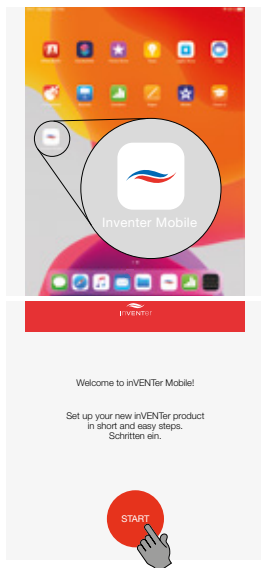
Setup with the app

For advanced settings, like setting up ventilation zones or assigning and changing ventilation profiles the app „inVENTer Mobile“ is compulsory.

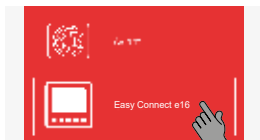


To connect the app to the controller, Bluetooth must be enabled and the app must be given location access.

- ▶ Download the „inVENTer Mobile“ app to your mobile device.



- ⇒ After successful installation of the app, the corresponding icon appears on the screen.
- ▶ Touch the icon of the „inVENTer Mobile“ app on the screen of your mobile device.
- ⇒ The start screen appears.
- ▶ Touch the START button.




⇒ A window appears with a selection of devices that can be paired with your mobile device if necessary..

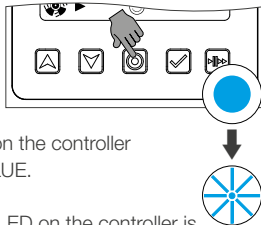
▶ Select the „Easy Connect e16“ here.



⇒ The display screen shows the request to pair with the controller.

Establish a Bluetooth connection by

▶ pressing the **mode key** , until the LED turns BLUE.

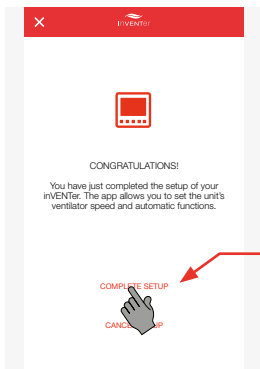


⇒ The LED on the controller flashes BLUE.

▶ While the LED on the controller is flashing BLUE, press the „Connect“ button on your mobile device.

⇒ The controller and mobile device connect.

⇒ A message appears on your mobile device when the connection is completed.

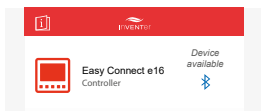


▶ Select „COMPLETE SETUP“.



▶ You can enter a freely selectable name (max. 24 characters) in the window that appears.

▶ Confirm by pressing „OK“.



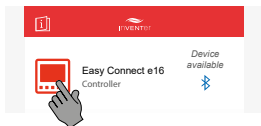
⇒ The controller appears on the display to indicate that it is connected and available.

⇒ The Bluetooth symbol appears in blue.

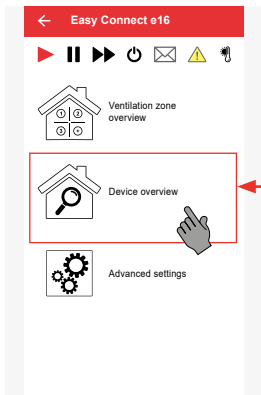
7

Ventilation zone allocation

Once all desired components have been integrated into the system, they can be assigned to individual ventilation zones.



▶ Press the area with the available controller on the mobile device.

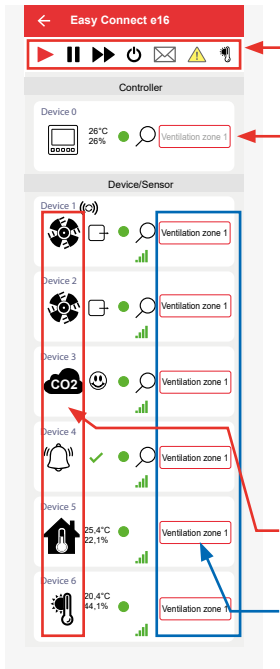


⇒ A window with the possible menus appears:

- Ventilation zone overview
- Device overview
- Advanced settings

▶ Select the „Device overview“.

⇒ All paired devices and their status are displayed.



Navigation bar: cross-zone control and information.

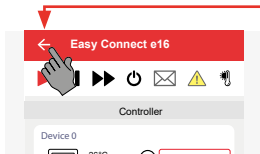
The controller, as the central control unit, is always displayed as the first device and is automatically assigned to ventilation zone 1. This cannot be changed (in grey).

All other components are displayed in the order in which they were paired and designated (corresponds to numbering whilst pairing). By default, all devices are assigned to one of the four ventilation zones defined in the system (min. 2 ventilation units per zone and an even number of units!).

► **Device symbol:** Press the icon of a paired device and rename it if necessary.

► Press the „**ventilation zone**“ button and change the ventilation zone assignment. Text in grey: ventilation zone cannot be changed.

The menu item „Device overview“ is described in the inVENTer Connect controller platform's detailed operating instructions (5022-0006).



► Press the arrow in the upper left corner of a display window to return to the menu window. The arrow always takes you back one application level.

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Assigning ventilation profiles

If all ventilation zones have been assigned, predefined ventilation profiles can be assigned to them. The assignment is based on ventilation planning and room use..

▶ Select the Ventilation zone overview in the menu window.

▶ In the window that opens, press the symbol of the ventilation profile (ex factory: Default)

⇒ A window appears in which the properties of this ventilation zone are displayed.

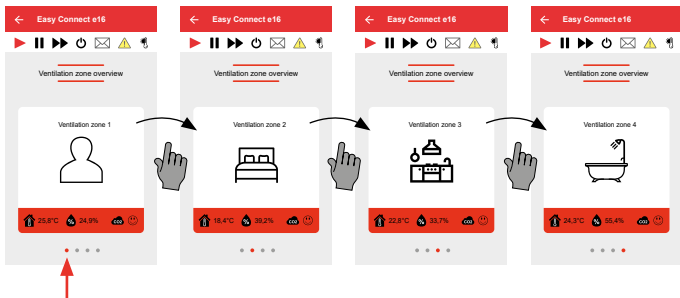
▶ Press the profile symbol.

⇒ A selection window with the possible ventilation profiles appears.

▶ Press a ventilation profile to select it for the respective zone.

Weitere Lüftungszonen auswählen:

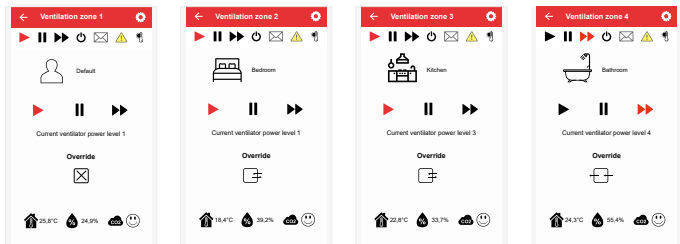
- ▶ Press the arrow in the upper left corner of the display window to return to the menu „Ventilation zone overview“.



- The total number of points corresponds to the number of defined ventilation zones.
- The red dot shows which ventilation zone is currently selected.
- By scrolling/ swiping through the screens, you can access the properties of the next defined ventilation zone.

- ▶ Tap on the respective zone's profile symbol.

⇒ The window opens in which the values for this zone are displayed.



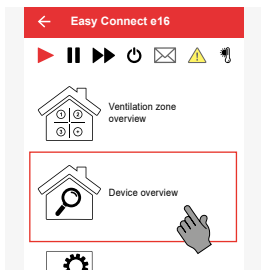
For these settings, follow the menu navigation on your mobile device or the description in the inVENTer Connect controller platform's detailed operating instructions (📖 5022-0006).

9

Optional: Setting a signal amplifier

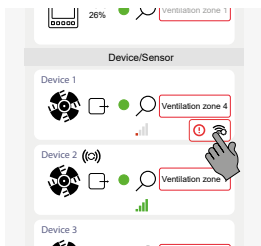


It is only necessary to set up this function if the radio signal from the controller does not reliably reach all of the components integrated in the ventilation system.

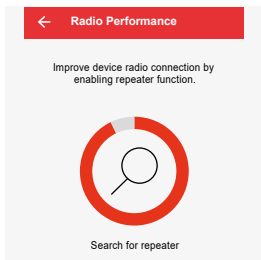


When setting up an amplifier the user selects a device that requires signal amplification. The controller system searches for possible repeaters.

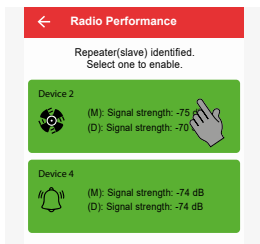
▶ Press the „Device overview“ button.



▶ Press the „Radio signal weak“ symbol of the component, that needs signal amplification (repeater necessary).

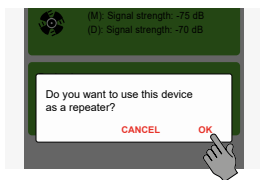


⇒ An internal search is made for devices that are available as signal amplifiers for the device.



- ▶ Select the device that is to act as a signal amplifier from the suggestions.

If several devices are suggested as possible repeaters, the topmost device rated as the most suitable by the app.



- ⇒ The adjacent window opens asking you to confirm that the component is to be used as a signal amplifier.
- ▶ Press „OK“ to confirm the component as repeater.

⇒ The selected component acts as repeater.

10 Guarantee and service

inVENTer GmbH provides a five-year guarantee for electronic components. This covers premature product wear.

In the case of a warranty or guarantee claim, contact your local distributor or factory representative.

For technical support, contact our service staff.



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Version: 3.0 – 11/2021

Item number: 5022-0010



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