USER'S MANUAL

KV2 TwinFresh Easy



Touch Screen Control Panel

VENTS

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This user's manual is a main operating document intended for technical, maintenance, and operating staff.
The manual contains information about purpose, technical details, operating principle, design, and installation of the KV2 TwinFresh Easy unit and all its modifications.
Technical and maintenance staff must have theoretical and practical training in the field of ventilation systems and should be able to work in accordance with workplace safety rules as well as construction norms and standards applicable in the territory of the country.

SAFETY REQUIREMENTS

This unit is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the unit by a person responsible for their safety.
Children should be supervised to ensure that they do not play with the unit.
This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved.
Cleaning and user maintenance shall not be done by children without supervision.
Children shall not play with the appliance.

Ensure that the unit is switched off from the supply mains before removing the guard.

All operations described in this manual must be performed by qualified personnel only, properly trained and qualified to install, make electrical connections and maintain ventilation units.
Do not attempt to install the product, connect it to the mains, or perform maintenance yourself. This is unsafe and impossible without special knowledge.
Disconnect the power supply prior to any operations with the unit.
All user's manual requirements as well as the provisions of all the applicable local and national construction, electrical, and technical norms and standards must be observed when installing and operating the unit.
Disconnect the unit from the power supply prior to any connection, servicing, maintenance, and repair operations.

While mounting the unit, avoid compression of the casing!
Misuse of the unit and any unauthorised modifications are not allowed.
Do not expose the unit to adverse atmospheric agents (rain, sun, etc.).
Do not use the unit in a hazardous or explosive environment containing spirits, gasoline, insecticides, etc.
Do not sit on the unit and do not put objects on it.
The information in this user's manual was correct at the time of the document's preparation. The Company reserves the right to modify the technical characteristics, design, or configuration of its products at any time in order to incorporate the latest technological developments.
Never touch the unit with wet or damp hands.
Never touch the unit when barefoot.
BEFORE INSTALLING ADDITIONAL EXTERNAL DEVICES, READ THE APPROPRIATE USER MANUALS.



THE PRODUCT MUST BE DISPOSED SEPARATELY AT THE END OF ITS SERVICE LIFE.

DO NOT DISPOSE THE UNIT AS UNSORTED DOMESTIC WASTE.

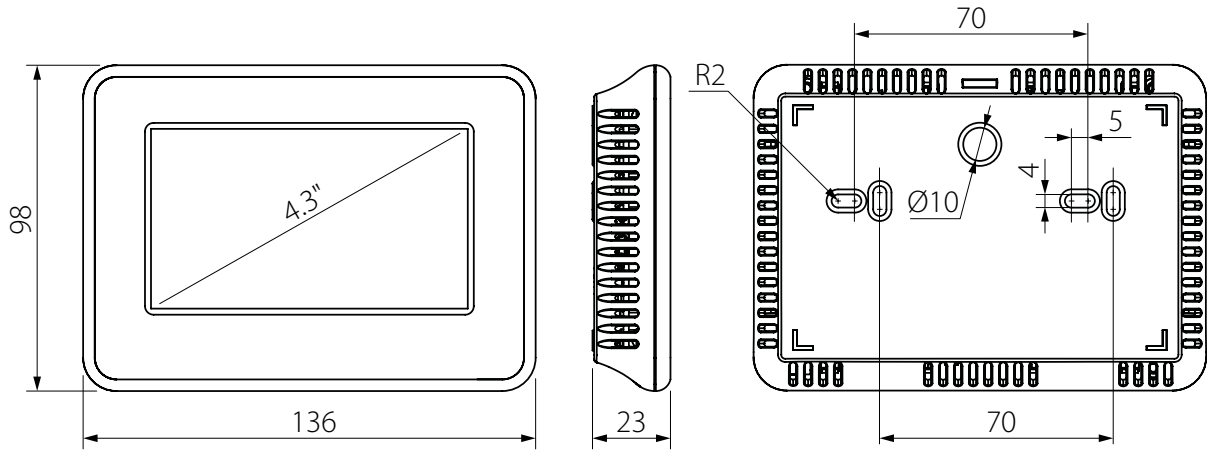
PURPOSE

The wall control panel with a sensor display is designed for controlling industrial and domestic supply and exhaust ventilation units as well as other air handling units.
The control panel is not designed for standalone operation. It is rated for continuous operation.

TECHNICAL DATA

Unit voltage DC [V]	12-32
Current consumption at 24 VDC [A]	0.1
Power consumption [W]	2.5
Ambient temp. [°C]	+10...+45
Humidity range [%]	10-80 (without cond.)
Weight [g]	195
Protection class	IP20

OVERALL AND CONNECTING DIMENSIONS [MM]



INSTALLATION AND CONNECTIONS

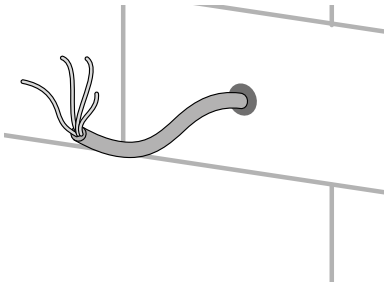
CHECK THAT THE UNIT IS DISCONNECTED FROM POWER SUPPLY PRIOR TO ANY OPERATIONS!

DO NOT LAY THE CABLE IN CLOSE PROXIMITY TO THE CONTROL PANEL CABLE!
WHILE ROUTING THE CONTROL PANEL CABLE DO NOT COIL THE EXTRA LENGTH.

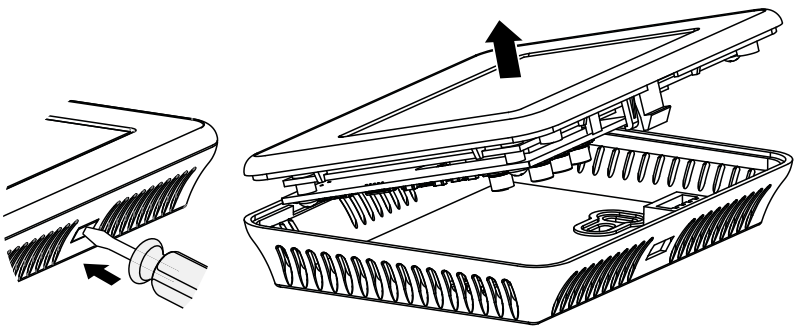
The KV2 TwinFresh Easy control panel's location is determined by first considering the general layout project of the TwinFresh Easy ventilator control system in a specific facility.
Warning! The control panel must be fixed still on a smooth surface in a working position.
The formation principle and structure of the TwinFresh Easy ventilator control system are specified in the CT1 TwinFresh Easy controller manual.
The control panel is connected to the CT1 TwinFresh Easy controller via the **J-Y(St)Y 2x2x0.8** signal cable.
The length of the wiring line connecting the KV2 TwinFresh Easy panel and the CT1 TwinFresh Easy controller cannot exceed 100 m.

Mounting sequence

1. Route the control cable to the control panel mounting location. The control cable must be routed permanently in the building wall.

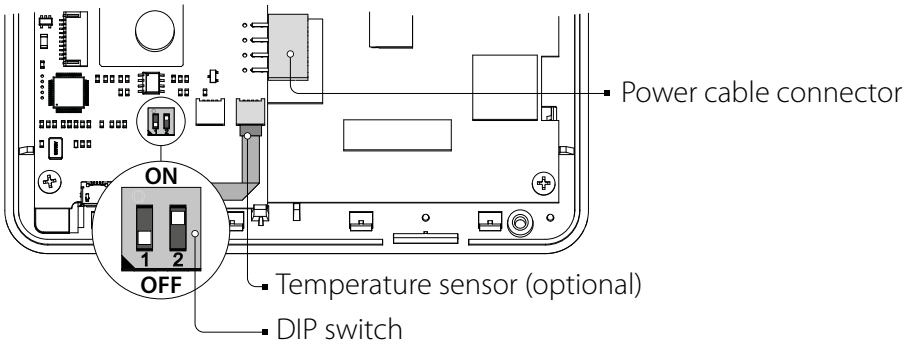


2. Using a screwdriver, gently press the latch at the end of the panel casing and separate the casing parts.

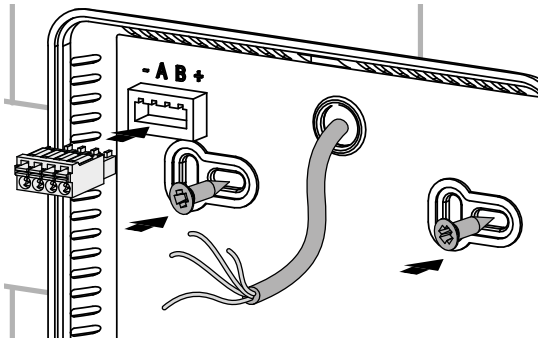


DIP switch

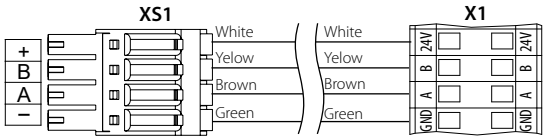
- Switch **1** must be in the **OFF** position, it is used to program the control panel and is only used by the service engineer.
- Switch **2** must be in the **ON** position if the control panel is located at the beginning or end of the RS-485 bus.
  It is used to activate/deactivate the terminal resistor.

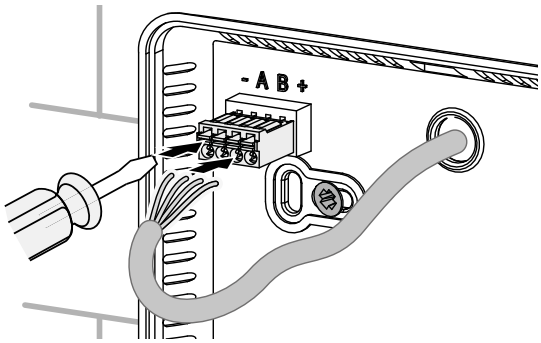


3. Feed the cable through the round hole on the back of the panel and secure the panel to the mounting surface using screws. Insert the connector into the holder.

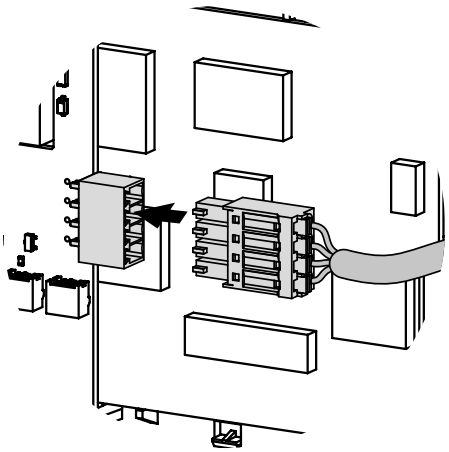


4. Connect the power cables according to the wiring diagram.

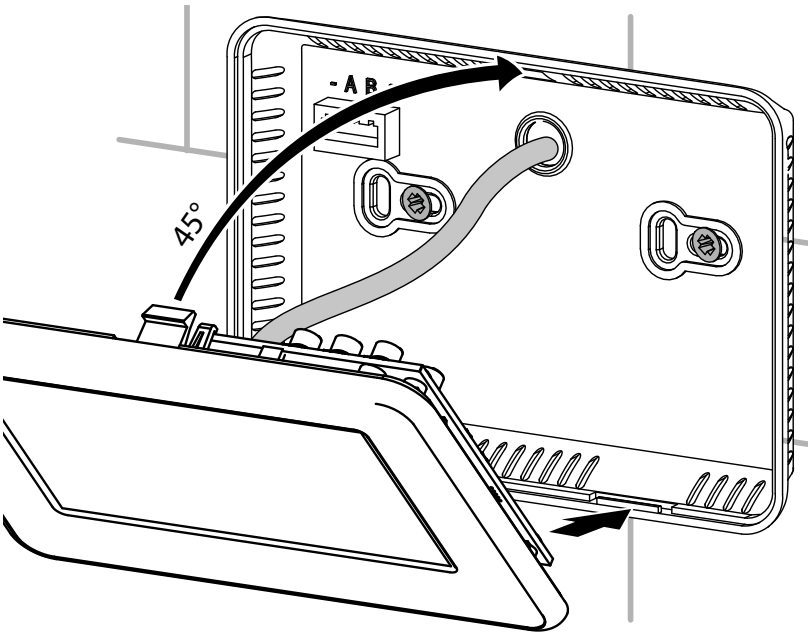




5. Insert the cable connector from the holder and connect it to the corresponding connector on the board.

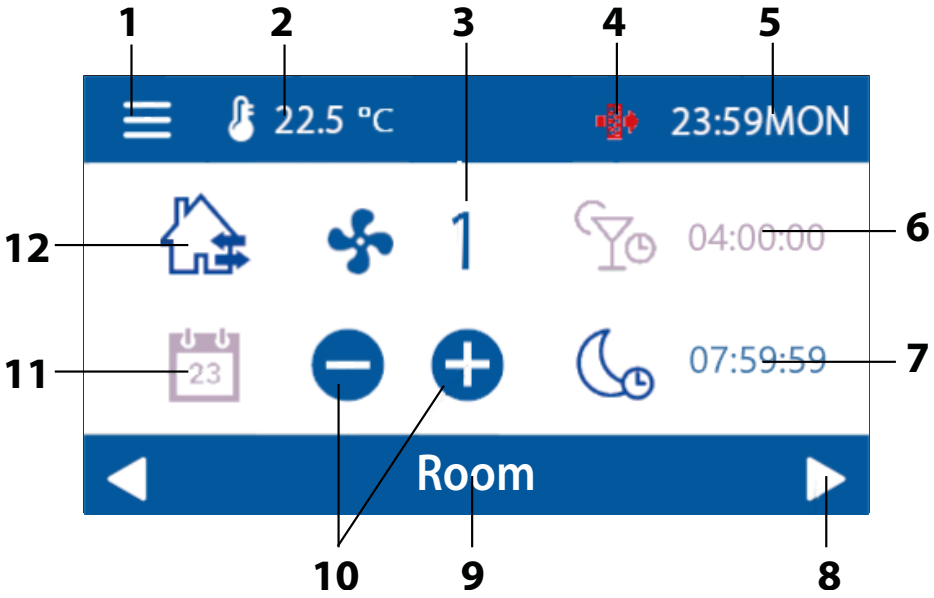


6. Align the bottom end of the front panel with the grooves on the bottom end of the back panel at a 45° angle and snap into place.



CONTROL

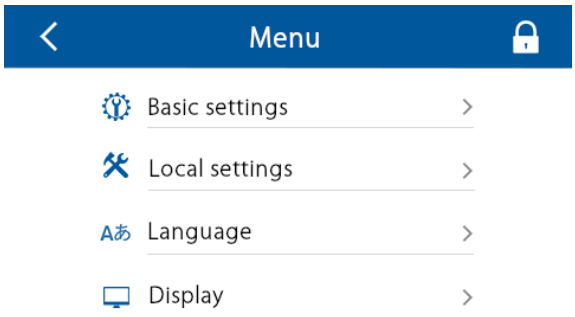
Home page



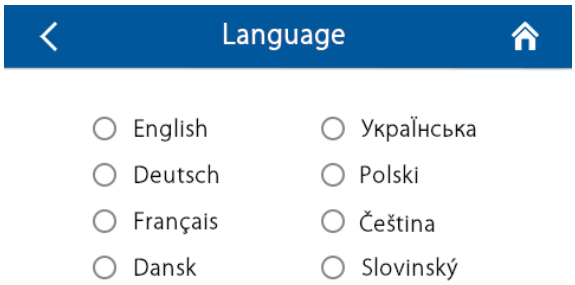
1. Transition to the main menu
2. Temperature in the room the panel is located in.
3. Display the selected speed.
4. The indicator notifying about the need to replace the filter in the corresponding control zone.
5. Display the time and day of the week.
6. Control and display the 4-hour "Party" mode timer.
7. Control and display the 8-hour "Night" mode timer.
8. Change the control zone.
9. Name of the control zone.
10. The buttons used to set the fans' speed.
11. Control and display the "Weekly schedule" mode.
12. Control and display the "Heat recovery" mode.

Setting up the control panel operation

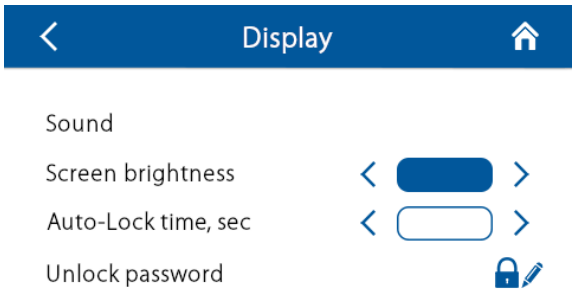
MENU



To select the interface language, click on the go to **Menu** ▸ **Language** and select one of the proposed languages.



To configure the screen brightness, go to **Menu** ▸ **Display**, set the desired brightness value using the digit keypad, to do this, press the brightness value or the "<", ">" symbols. Possible values: 0…10.

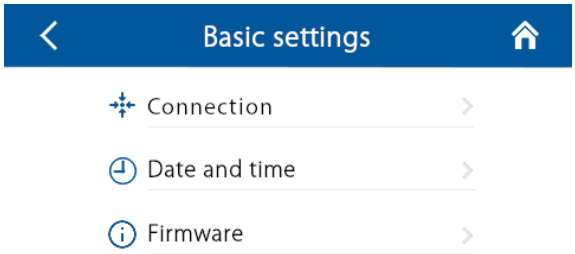


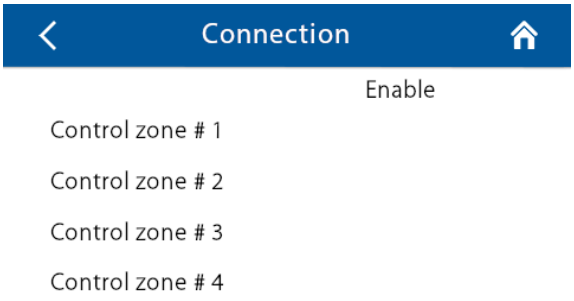
To set the auto-lock time, go to **Menu** ▸ **Display**, set the desired value of the auto-lock time using the "<", ">" symbols.
If the value is reduced to 0, the auto-lock mode will be deactivated, as indicated by the corresponding "**off**" indication.
Possible "off" values: 5, 10, 15, 20,…300 seconds.

To enable/disable the unlock password change, go to **Menu** ▸ **Display**.
In the **Unlock password** line, select the appropriate character to enable/disable password unlocking.
To change the unlock password, click on the edit symbol and enter the new four-digit password.

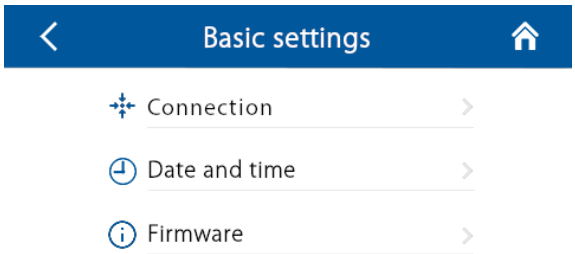
To switch the sound signal on/off, go to the Display menu and check the corresponding box in the Sound line.
A beep sound will confirm the operation.

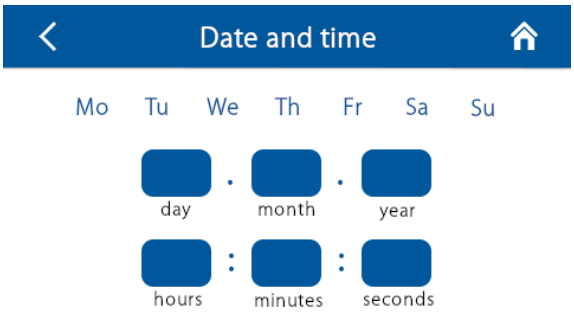
To connect/disconnect the control zone, go to **Menu** ▸ **Basic settings** and select ▸ **Connection**. Select which control zones will be active.



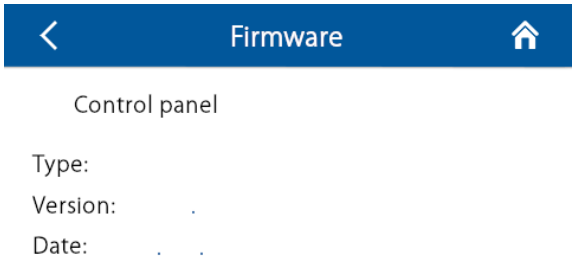


To configure the current date and time, go to **Menu** ▸ **Basic settings** ▸ **Date and time**. Set the current values.

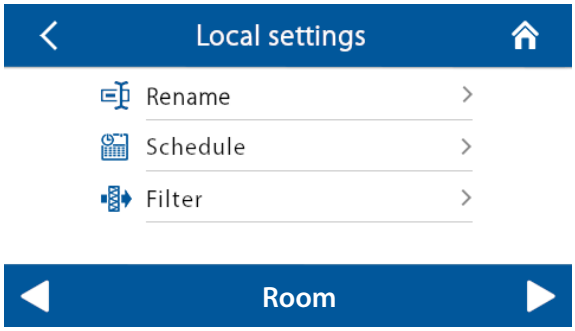


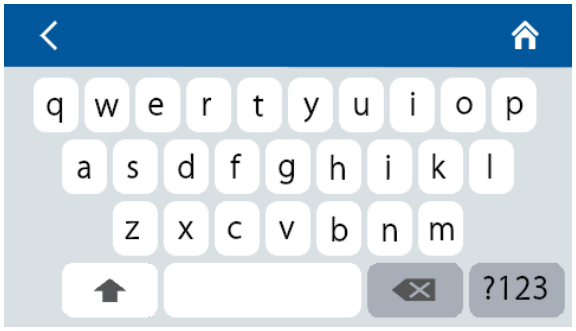


Go to **Menu** ▸ **Firmware** to see the current version of the panel's firmware.

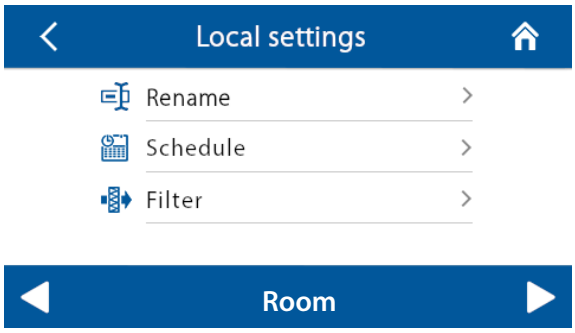


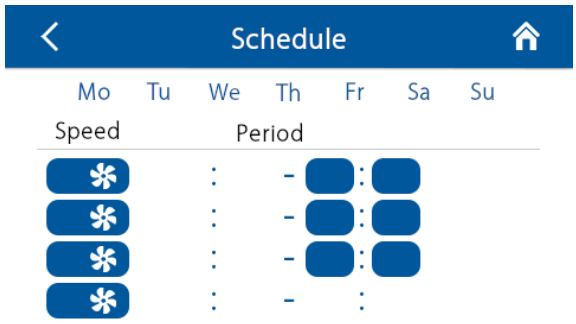
To change the name of the control zones, go to **Menu** ▸ **Local Settings** ▸ **Rename**.



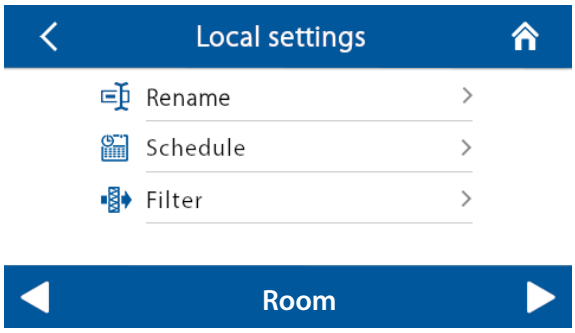


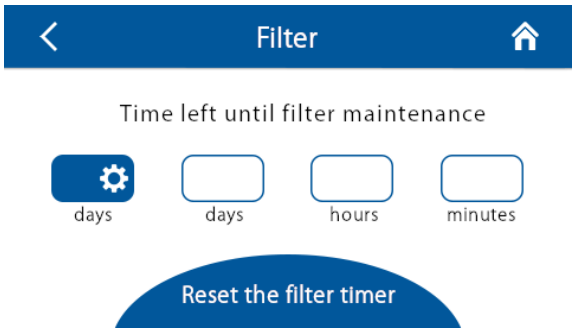
To set a weekly schedule, go to **Menu** ▸ **Local Settings** ▸ **Schedule**.
The schedule is set for each control zone separately.





To configure the period before filter replacement in the current control zone, go to **Menu** ▸ **Local Settings** ▸ **Filter**.
Set the desired number of days (70…365) before the filter replacement indication is activated.





STORAGE AND TRANSPORTATION REGULATIONS

- Store the unit in the manufacturer's original packaging box in a dry closed ventilated premise with temperature range from +5 °C to + 40 °C and relative humidity up to 70 %.
- Storage environment must not contain aggressive vapors and chemical mixtures provoking corrosion, insulation, and sealing deformation.
- Use suitable hoist machinery for handling and storage operations to prevent possible damage to the unit.
- Follow the handling requirements applicable for the particular type of cargo.
- The unit can be carried in the original packaging by any mode of transport provided proper protection against precipitation and mechanical damage. The unit must be transported only in the working position.
- Avoid sharp blows, scratches, or rough handling during loading and unloading.
- Prior to the initial power-up after transportation at low temperatures, allow the unit to warm up at operating temperature for at least 3-4 hours.

MANUFACTURER'S WARRANTY

The product is in compliance with EU norms and standards on low voltage guidelines and electromagnetic compatibility. We hereby declare that the product complies with the provisions of Electromagnetic Compatibility (EMC) Directive 2014/30/EU of the European Parliament and of the Council, Low Voltage Directive (LVD) 2014/35/EU of the European Parliament and of the Council and CE-marking Council Directive 93/68/EEC. This certificate is issued following test carried out on samples of the product referred to above.
The manufacturer hereby warrants normal operation of the unit for 36 months after the retail sale date provided the user's observance of the transportation, storage, installation, and operation regulations. Should any malfunctions occur in the course of the unit operation through the Manufacturer's fault during the guaranteed period of operation, the user is entitled to get all the faults eliminated by the manufacturer by means of warranty repair at the factory free of charge. The warranty repair includes work specific to elimination of faults in the unit operation to ensure its intended use by the user within the guaranteed period of operation. The faults are eliminated by means of replacement or repair of the unit components or a specific part of such unit component.

The warranty repair does not include:
- routine technical maintenance
- unit installation/dismantling
- unit setup

To benefit from warranty repair, the user must provide the unit, the user's manual with the purchase date stamp, and the payment paperwork certifying the purchase. The unit model must comply with the one stated in the user's manual. Contact the Seller for warranty service.

The manufacturer's warranty does not apply to the following cases:
- User's failure to submit the unit with the entire delivery package as stated in the user's manual including submission with missing component parts previously dismounted by the user.
- Mismatch of the unit model and the brand name with the information stated on the unit packaging and in the user's manual.
- User's failure to ensure timely technical maintenance of the unit.
- Damage to the unit casing and internal components caused by the user.
- Redesign or engineering changes to the unit.
- Replacement and use of any assemblies, parts and components not approved by the manufacturer.
- Unit misuse.
- Violation of the unit installation regulations by the user.
- Violation of the unit control regulations by the user.
- Unit connection to power mains with a voltage different from the one stated in the user's manual.
- Unit breakdown due to voltage surges in power mains.
- Discretionary repair of the unit by the user.
- Unit repair by any persons without the manufacturer's authorization.
- Expiration of the unit warranty period.
- Violation of the unit transportation regulations by the user.
- Violation of the unit storage regulations by the user.
- Wrongful actions against the unit committed by third parties.
- Unit breakdown due to circumstances of insuperable force (fire, flood, earthquake, war, hostilities of any kind, blockades).
- Missing seals if provided by the user's manual.
- Failure to submit the user's manual with the unit purchase date stamp.
- Missing payment paperwork certifying the unit purchase.



FOLLOWING THE REGULATIONS STIPULATED HEREIN WILL ENSURE A LONG AND TROUBLE-FREE OPERATION OF THE UNIT



USER'S WARRANTY CLAIMS SHALL BE SUBJECT TO REVIEW ONLY UPON PRESENTATION OF THE UNIT, THE PAYMENT DOCUMENT AND THE USER'S MANUAL WITH THE PURCHASE DATE STAMP

CERTIFICATE OF ACCEPTANCE

Unit Type	Touch Screen Control Panel
Model	
Serial Number	
Manufacture Date	
Quality Inspector's Stamp	

SELLER INFORMATION

Seller	
Address	
Phone Number	
E-mail	
Purchase Date	
This is to certify acceptance of the complete unit delivery with the user's manual. The warranty terms are acknowledged and accepted.	
Customer's Signature	

Seller's Stamp

INSTALLATION CERTIFICATE

The _____ unit is installed pursuant to the requirements stated in the present user's manual.		
Company name		
Address		
Phone Number		
Installation Technician's Full Name		
Installation Date:	**Signature:**	
The unit has been installed in accordance with the provisions of all the applicable local and national construction, electrical and technical codes and standards. The unit operates normally as intended by the manufacturer.		
Signature:		

Installation Stamp

WARRANTY CARD

Unit Type	Touch Screen Control Panel
Model	
Serial Number	
Manufacture Date	
Purchase Date	
Warranty Period	
Seller	

Seller's Stamp



Manufacturer: Ventilation Systems LLC,
Ukraine, Kyiv, 1 M. Kotsyubynskoho Street
Address of production facilities:
Ukraine, Kyiv Region, Fastiv District, Boyarka, 36 Sobornosti Street

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