Section 8 – Environment and disposal

Be conscious about the environment and help to protect it.

Disposal of packaging

The ventilation unit has been packaged carefully to protect it from damage during transport. The transport packaging consists of recyclable raw materials.
Please ensure to dispose of it in an environmentally responsible way.

Disposal of the device

Devices marked with this symbol must not be disposed of as normal residual waste. The device must be collected separately including accessories, empty batteries and rechargeable batteries. The disposal must be correct and in accordance with the applicable laws and regulations.

Newcombe House, Newcombe Way,

Orton Southgate, Peterborough, PE2 6SE

Tel: +44 (0) 844 372 7761

Fax: +44 (0) 844 372 7762

UK Technical Service Tel: +44 (0) 844 372 7766

UK Technical Service Email: Service.request@redringxpelair.com
UK Sales Email: rxsalesoffice@redringxpelair.com

© Xpelair   Xpelair reserves the right to alter product specification or appearance without notice.

Natural Air 180 Vertical
Natural Air 180 PH Vertical

Ventilation Unit With Heat Recovery

User manual

IMPORTANT:
In this installation manual, especially important notes are marked as WARNING! or NOTE!

User Manual

Contents

⚠ **WARNING:**

The unit contains rotating fans.
Do not put hands or fingers or any other objects into the unit or ducting.

⚠ **WARNING:**

THIS APPLIANCE CAN BE USED BY CHILDREN AGED FROM 8 YEARS AND ABOVE AND PERSONS WITH REDUCED PHYSICAL, SENSORY OR MENTAL CAPABILITIES, OR LACKOF EXPERIENCE AND NOWLEDGE IF THEY HAVE BEEN GIVEN SUPERVISION OR INSTRUCTION CONCERNING USE OF THE APPLIANCE IN A SAFE WAY AND UNDERSTAND THE HAZARDS INVOLVED. CHILDREN MUST NOT PLAY WITH THE APPLICANCE. CLEANING AND MAINTENANCE OF THE APPLIANCE SHALL NOT BE MADE BY CHILDREN.

Section 6 – Spare parts & Accessories

6.1 Spare Parts and Accessories

Spares and accessories can be ordered from RXG Sales (see end page for contact details).

Item	Part N°
Filter	42267SK
Filter access cover	42268SK
Duct spigot	23527AW
Fan and motor assembly	42269SK
Bypass motor and flap assembly	42270SK
Main Logic PCB	42271SK
Main connector PCB	42272SK
External sensors PCB	42273SK
Heater PCBs mounting bracket *	42284SK
Pre heater power PCB	42274SK
Boost heater power PCB	42275SK
Display / button PCB	42276SK
Display PCB face plate and buttons	42277SK

Item	Part N°
Externally mounted Humidity Sensor	93320AA
Externally mounted PIR Sensor	93321AA
Externally mounted CO_2 Sensor	93330AA
Externally mounted AQS Sensor	92097AA
External Carbon filter box c/w automatic pressure balancing fan	93323AA
External HEPA filter box c/w automatic pressure balancing fan	93322AA
External Defrost Pre heater box	90321AA
External Boost Heater box c/w NTC	90323AA
External wired remote operation kit	93329AA
Internally mounted Sensor Board kit	93324AA

* Mounting bracket is required when fitting the Pre-heater and/or Boost heater PCBs.

Table 6.1 Spare Parts   Table 6.2 Accessories

Section 7 – Customer Service and Warranty

11 Guarantee

UK: This ventilation unit is guaranteed against defects for 2 years from date of purchase.
Xpelair reserve the right to repair or replace the unit.
Keep your purchase receipt. Any problems, contact the address below.

Outside the UK: See International section.

In the unlikely event of a product breakdown during the guarantee period you should contact our Service and Repair Helpline who will be able to assist with the repair and advise the best course of action to be taken.

Please DO NOT remove the product prior to making this call as this may invalidate your guarantee.

Technical advice and Service

Tel +44 (0) 844 372 7766
Fax: +44 (0) 844 372 7767

Email: service.request@redringxpelair.com

UK Sales Office and Spares

Tel: +44 (0) 844 372 7750
Fax: +44 (0) 844 372 7760

International

Guarantee – Contact your local distributor or Xpelair direct.
Technical advice and Service – Contact your local Xpelair distributor.

⚠ **NOTE!**

Please be prepared to tell us the exact device type and serial number S/N, for your ventilation unit so that we can process your enquiry, customer service order or complaint correctly. You can find this information on the rating plate located next to the display and control panel on the main cover of the ventilation unit.

Filter maintenance

Note down any filter maintenance and other work carried out. All filters in the ventilation system should be checked at least every 6 months and should be changed at least once a year.

Half Year	Year	Half Year	Year
Date: ☐ Checked ☐ Changed	Date: ☐ Checked ☐ Changed	Date: ☐ Checked ☐ Changed	Date: ☐ Checked ☐ Changed
Date: ☐ Checked ☐ Changed	Date: ☐ Checked ☐ Changed	Date: ☐ Checked ☐ Changed	Date: ☐ Checked ☐ Changed
Date: ☐ Checked ☐ Changed	Date: ☐ Checked ☐ Changed	Date: ☐ Checked ☐ Changed	Date: ☐ Checked ☐ Changed
Date: ☐ Checked ☐ Changed	Date: ☐ Checked ☐ Changed	Date: ☐ Checked ☐ Changed	Date: ☐ Checked ☐ Changed
Date: ☐ Checked ☐ Changed	Date: ☐ Checked ☐ Changed	Date: ☐ Checked ☐ Changed	Date: ☐ Checked ☐ Changed
Date: ☐ Checked ☐ Changed	Date: ☐ Checked ☐ Changed	Date: ☐ Checked ☐ Changed	Date: ☐ Checked ☐ Changed
Date: ☐ Checked ☐ Changed	Date: ☐ Checked ☐ Changed	Date: ☐ Checked ☐ Changed	Date: ☐ Checked ☐ Changed
Date: ☐ Checked ☐ Changed	Date: ☐ Checked ☐ Changed	Date: ☐ Checked ☐ Changed	Date: ☐ Checked ☐ Changed
Date: ☐ Checked ☐ Changed	Date: ☐ Checked ☐ Changed	Date: ☐ Checked ☐ Changed	Date: ☐ Checked ☐ Changed

---

Section 1 – Description of the device

1.1 Purpose

The unit is designed for controlled supply and exhaust ventilation of frost-free rooms within a building.

The air flows through air ducts.

Connecting exhaust hoods to the ventilation system is not permitted. The unit is not to be used as a dehumidifier.

1.2 Design

1. Back plate and sides
2. Operating unit
3. Inspection door
4. Front cover
5. Connection nozzle, extract air
6. Connection nozzle, supply air
7. Connection nozzle, exhaust air
8. Connection nozzle, fresh air
9. Defrost Heater supply output (Natural Air 180 PH variant only) *
10. Boost Heater supply output (Natural Air 180 PH variant only) *

* External Heater boxes (not supplied) are available as an accessory.

(See Section 6 - Spare parts & Accessories).

Fig. 1.1 Structure of the ventilation unit

1.3 Operating principle

The unit is fitted with two fans using energy-saving "EC" technology which carries out a controlled air exchange in applicable buildings.

Used air is drawn in to the unit as Extracted air from the rooms with the highest air humidity and odour (e.g. bathroom and kitchen) and is transferred to the outside as Exhaust air via a system of air ducts.

At the same time, a second duct system takes in Fresh air from outside the building and transfers it into living rooms and bedrooms as Supply air.

Both air flows are completely separate and are passed through a heat exchanger which recovers the waste heat from the extracted air to warm up the supply air. This ensures that the majority of heat is kept in the building.

An internal bypass can be opened so that fresh air is supplied to the intake rooms without being warmed up by the heat exchanger. Heat recovery is disabled in this case.

Halls and corridors normally act as transfer areas in which the air from the supply areas flows into the extract areas. Undercut doors and air transfer grilles are used so that the air flow between rooms is not restricted.

⚠ **WARNING:**
Free access to the unit and to the switch disconnecting it from the power supply must be ensured at all times.

Section 1 – Description of the device

⚠️ **NOTE!**
All air inlet and outlet openings and air transfer openings must not be obstructed, covered or closed so that an unhindered airflow is ensured. Settings made by the qualified technician must not be changed.

⚠️ **WARNING:**
Alterations made to the unit or system, as well as structural changes to the building, can affect safety. Always consult a qualified technician.

1.4 CE mark

The ventilation unit is designed and built in accordance with the relevant European standards and directives in order to meet the health and safety requirements. This is documented by the EC Declaration of Conformity and by the CE mark attached to the unit. For installation and use, any additional, applicable national laws, regulations and guidelines must be observed.

Section 2 – Control

2 Control

The unit is controlled using the display panel on the front of the unit.

Additional optional external sensors can be connected depending on the requirements of the site installation. *(Model Natural Air 180 : Optional, Internally mounted Sensor board kit required – RXG Part N° 93324AA).*

⚠️ **WARNING:**
The unit must not be used if it is damaged. Disconnect the unit from the power supply and notify your installer.

2.1 Display and control panel on the unit

The unit uses a 3 button control panel with a back lit text display giving menu-driven operations.

Navigate through the menu structure within one level using the ◄ and ► buttons. Select the required menu item using the OK button. Hold the ◄ button pressed for 1 sec. in order to switch to previous level.

Change the selected settings using the ◄ and ► buttons and save the set value using the OK button. Hold the ◄ button pressed for 1 sec. in order to exit the menu item without saving changes.

1	LCD display
2	◄ button: back / reduce
	◄ button for 1 sec: Level up
3	**OK** button: select / save / level down
4	► button: next / increase

Fig. 2.1 Display and Control panel

Annex

Programmed switching times (weekly timer schedule)

Use this schedule to note down the switching times and operating modes as programmed using :
User menu / Set the Timers and Clock.

Program		Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Time 1	Time							
	Mode							
Time 2	Time							
	Mode							
Time 3	Time							
	Mode							
Time 4	Time							
	Mode							
Time 5	Time							
	Mode							
Time 6	Time							
	Mode							
Time 7	Time							
	Mode							
Time 8	Time							
	Mode							
Time 9	Time							
	Mode							

Section 5 – Maintenance
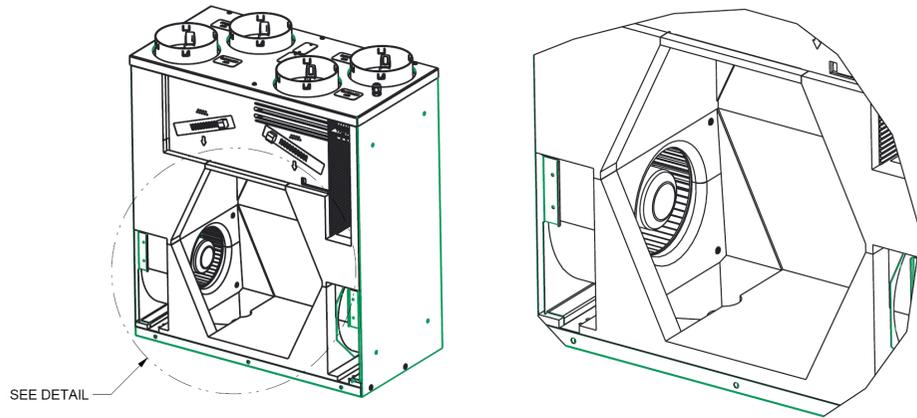
Fig. 5.3 Interior view of the unit (with the front cover and heat exchanger removed)

⚠️ **NOTE!**
Do Not use any detergents or cleaning agents containing grit, sodium carbonate, acid or chlorine as these can damage or corrode the surfaces!

5.4 Maintaining the condensate discharge lines

The condensate discharge lines on the underside of the ventilation unit and all installed traps must be checked regularly and must be cleaned if necessary.
Checking and cleaning should be carried out by a qualified technician.
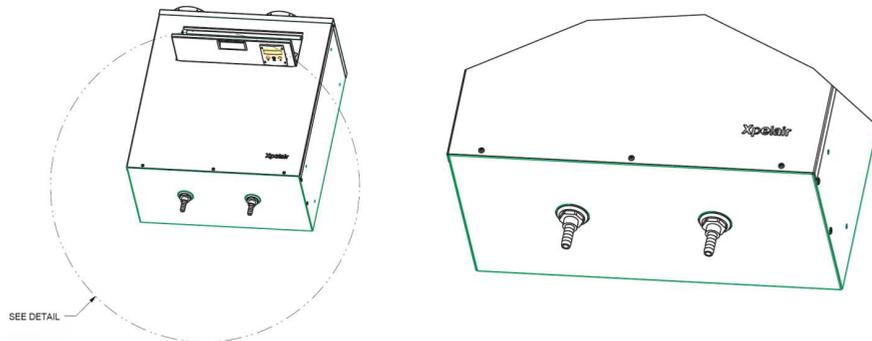
Fig. 5.4 Condensate discharge lines

⚠️ **WARNING!**
A faulty condensate discharge can cause faults on the unit and can also lead to water damage!

Section 2 – Control

2.1.1 Standard Display

The standard display shows information on the current operating status of the ventilation unit.

Fig. 2.2 Standard display
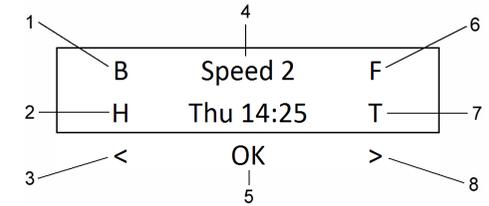
1	Bypass feature is On (No heat recovery)	4	Operating status and Time	7	Program Timers are On
2	Holiday Mode or Night Timer is On	5	Middle button: OK (Enter)	8	Right hand button: Menu right
3	Left hand button: Menu Left	6	Function for safe use with open flue fuel burners		

2.2 Operating modes

The unit offers 3 different fan speeds. The following operating modes are available:

Operating mode	Application
OFF	The ventilation unit should be in operation continually. (Including when occupants are absent for longer times). Off is not normally used.
AUTOMATIC	Automatic Speed change by internal humidity sensor and from external sensors (if fitted)
SPEED 1	Normal ventilation runs the system at minimum speed to correctly ventilate the property.
SPEED 2	Boost ventilation runs at a higher rate.
SPEED 3	Boost (Purge) ventilation runs for a user adjustable time interval: for rapid ventilation (e.g. removal of high humidity or stale air etc)

Table 2.3 Operating modes

The operating mode is set with the display and control panel of the ventilation unit on standard display using the ◄ and ► buttons.

2.2.1 Automatic operation

The unit is designed to operate in Automatic mode and will be set to this when the unit is powered up.

In automatic mode, the volume flow rate is set depending on the humidity in the exhaust air and (if fitted) the signals from any external sensors.

When more ventilation is required, the unit speed changes from Speed 1 to Speed 2 for as long as necessary. When less ventilation is required, the unit returns to Speed 1.

2.2.2 Restart after power failure

After a power failure, the ventilation unit starts up in the mode it was set to before the power failure (usually Automatic mode).

2.3 Favourite User adjustments

The Favourites menu is used to make adjustments to the more commonly used features :
Set Speed 3 (Boost) timer, Stop Bypass timer, Program timers, Night timer and Holiday mode.

Section 2 – Control

Access: Press the OK button and keep pressed for 5 sec.

| Set Speed 3 |
| Boost Timer |

Stop Bypass
For *0* hr

Program Timers
Off (or On)

Night Timer
Run for *6* hrs

Holiday mode
Run for *8* days
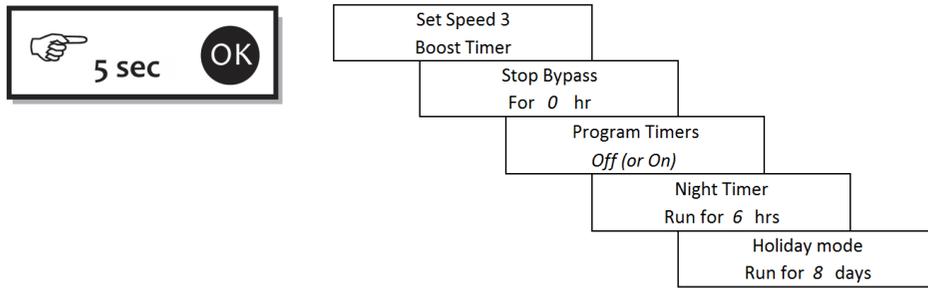
Fig. 2.4 Favourite User adjustments

⚠ **NOTE!**
The Night Timer can be adjusted 0 hour to 12 hours. Holiday mode can be adjusted 0 day to 30 days.
When set, the unit will run at Speed 1 at all times. *("H" will show in the Display window)*

⚠ **NOTE!**
Press the ◄ button for 1 second to return the display to normal.
(If no settings are made for 180 seconds, the display returns to the Standard display)

2.4 User menu

The user menu is used to program the weekly timer schedule, to set parameters and to view information about the status and operation of the ventilation unit.

Access: Press ◄ and **OK** buttons simultaneously and keep pressed for 5 sec.

Set the
Timers and Clock

Adjust User
Settings

User
Information

Set the
language
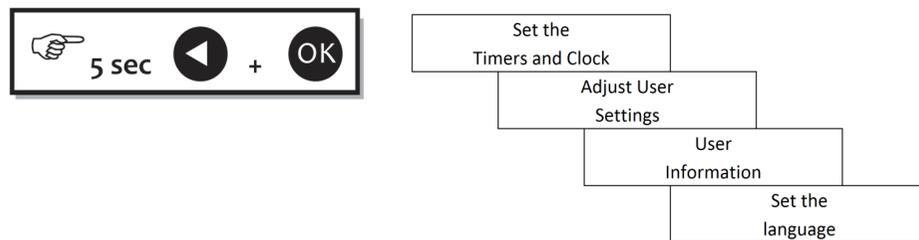
Fig. 2.5 User menu

⚠ **NOTE!**
Press the ◄ button for 1 second to return the display to normal.
(If no settings are made for 180 seconds, the display returns to the Standard display)

Section 5 – Maintenance

5.2 Cleaning the heat exchanger

⚠ **WARNING!**
Always isolate the unit from the power supply, before starting any cleaning!

Remove the front cover to the unit for access to the heat exchanger.

The plastic heat exchanger of the unit can be cleaned using clear water.
Cleaning should be carried out by a qualified technician.
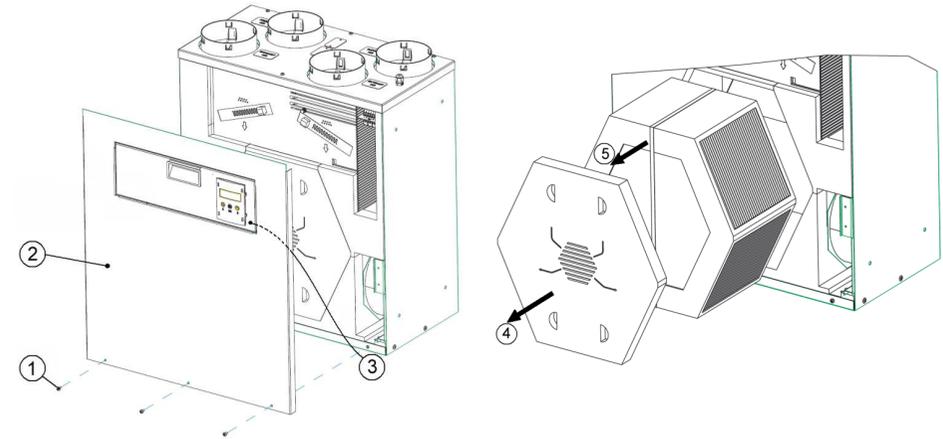
Fig. 5.2a Access to the Heat Exchanger   Fig. 5.2b Removing the Heat Exchanger

A. Disconnect the unit from the power and remove the front cover screws (1) and then the front cover (2).
B. Carefully remove the umbilical connector (3) from the back of the Display PCB.
C. Pull out the EPP cover (4) and then remove the heat exchanger using the pull strap (5).
D. Flush with lukewarm water (do not use cleaners), allow the water to drip off and insert it again.
E. Replace the EPP cover, secure the umbilical connector and re-fix the front cover.
F. Switch on the power.

⚠ **NOTE!**
When cleaning the heat exchanger, do not use a high-pressure cleaner and do not use any detergents or cleaning agents!

5.3 Cleaning the ventilation unit

The unit can be cleaned on the outside and, after removal of the heat exchanger (see above), also on the inside using a damp cloth.
Cleaning on the inside should be carried out by a qualified technician.

⚠ **WARNING!**
Always isolate the unit from the power supply, before starting any cleaning!

5 Maintenance

The ventilation unit must be maintained regularly to ensure good air quality and energy efficiency.

⚠ **WARNING!**
Always disconnect the unit from the power supply before starting any maintenance work!

5.1 Filter maintenance

All air filters in the system must be maintained regularly to ensure good air quality and efficient operation.
The following maintenance intervals are recommended :

- Check filters at least every 6 months.
- Change filters if required.
- Change filters at least annually. *See Spare Parts for replacement filters.*
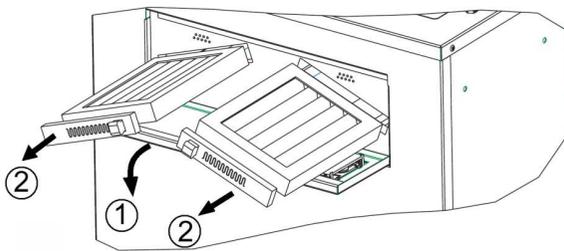
Fig. 5.1 Filter change

1 Open access door on front of unit
2 Pull out the filters, clean or change and replace

⚠ **NOTE!**
Note down the filter maintenance carried out (See Annex in User manual)

Maintenance of the fresh-air and exhaust-air filters can be carried out without the use of any tools.
Note down the date of the filter change.

Reset: After filter maintenance, reset the filter message and interval counter by selecting :

Filters changed "*Yes*" and pressing the OK button.

⚠ **NOTE!**
The unit must not be used without filters! (Without filters the unit performance will quickly degrade and the heat exchanger will "clog up").

Use only original spares. Other filters and other grades can affect the proper functioning of the unit.

5.1.2 Maintenance of the external air-filter box *(when fitted)*

The ventilation unit is equipped with internal air filters.
An additional external air-filter box can be fitted to the duct work.

- To help protect the ventilation unit, a coarse pre filter box can be fitted to the Fresh air incoming duct.
- A pollen filter box, for allergy sufferers, can be fitted to the Supply air duct work.

The panel filters used in the external filter box must be maintained in the same way as the filters in the ventilation unit.

2.4.1 Set the Timers and Clock : Use the ◀ and ▶ keys to select, then press OK
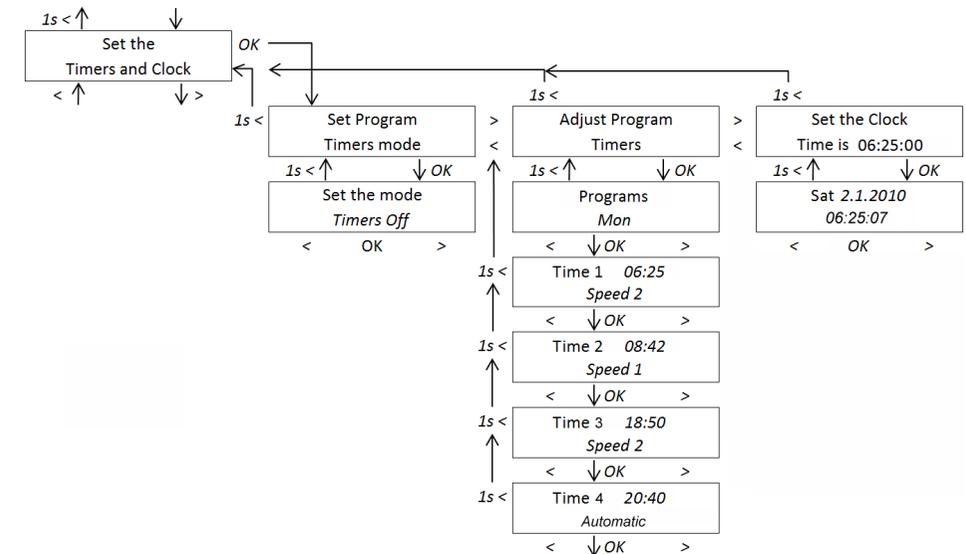
Fig. 2.6 User menu : Set the Timers and Clock

Option : "Set Program Timers mode" : Select then press OK

Set the mode : Press **OK** then ◀ or ▶ keys to select "Timers *Off*" or "Timers *On*".
Press **OK** to select the option required.

Press ◀ key for more than 1 second to move back up the menu.

Option : "Adjust Program Timers" : Select then press OK

Use the ◀ or ▶ keys to select the **Day** or **Set of days** in which a timer function is required.
For each Day or Days use the ◀ and ▶ buttons and **OK** to set the switching time and the operating mode.

- The timer uses a 24 hour clock display.
- The operating modes that can be chosen are :
  Automatic (This will return the unit to its normal Automatic mode)
  Speed 1 (Use this speed for normal continuous ventilation)
  Speed 2 (Use this speed to clear higher levels of humidity, such as from using a shower)
  Speed 3 (Use this to provide a short time purge of the building)
  Off   (Use this to switch the ventilation Off : Under normal circumstances Off should not be used)
  None   (Use this if no change is required for a time slot)

Press ◀ key for more than 1 second to move back up the menu.

⚠ **NOTE!**
As a record, note the programmed switching times in the schedule table included in the annex.

Option : "Set the Clock" : Select then press OK

On the first line of the Display use the ◀ or ▶ and **OK** buttons to select the **Day** the **Month** and the **Year**.
On the second line use the ◀ or ▶ and **OK** buttons to select the **Hour** the **Minutes** and the **Seconds**.

Press ◀ key for more than 1 second to move back up the menu.

2.4.2 Adjust User Settings : Use the ◄ and ► keys to select, then press OK
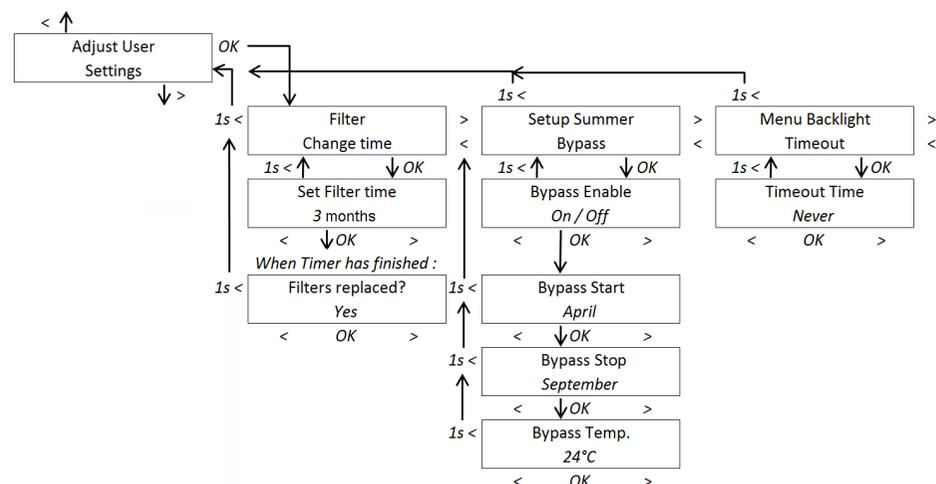
Fig. 2.7 User Menu : Adjust User Settings

Option : "Filter Change Time" : Select then press OK

Use this to adjust how long the fans run before the filters need to be changed.

Press **OK** to show "Set Filter time". (Pre-set value is "6 months"). Use the OK and ◄ or ► buttons to select a new filter time. (Adjustable 2 to 12 months).
Press **OK** to select the option required.

At the end of the Filter time the Display will show
- "**Replace Filters**" and the unit will continue to run as normal.
- Press "**OK**" to show "**Filters replaced?**". Use the **OK** and ◄ or ► buttons to select "**Yes**" or "**No**"

"**Yes**" removes the Filter message and restarts the Filter time. The Display returns to normal.
"**No**" returns to the "Replace Filters" Display.

⚠ NOTE!
The filter interval is not reset through power failures or when the unit is switched off.

Option : "Setup Summer Bypass" : Select then press OK

The heat recovery feature is automatically turned off in the summer months by the opening of a "summer bypass" shutter inside the unit. When the summer bypass is open, the cooler outside air is supplied directly into the property without being heated up by the extracted warm air.

Press **OK** to show "Bypass Enable". Press **OK** and ◄ or ► buttons to Select "**On**" or "**Off**" – Default is On.
Use ◄ or ► and **OK** buttons to Change and Select :
- The "**Bypass Start**" Month, when the Bypass feature will begin – Default is April (from 1st of the month).
- The "**Bypass Stop**" Month, when the Bypass feature will end – Default is October (to end of the month).
- The "**Bypass Temp.**" is the Room temperature above which the Bypass will operate – **Default is 21°C**.

During the set months period, the Bypass will open ("**B**" shows) when the following exists :
- The temperature **Inside** the property is **1°C above** the Bypass Temp and
- The temperature **Outside** the property is **1°C below** the Bypass Temp

4 Fault finding

Filter, status and fault messages are shown on the display of the control panel on the front of the unit.

If there are any active fault messages, the display will flash.

⚠ WARNING:
**Repairs must only be carried out by qualified technicians.
Use only original spare parts from the manufacturer.**

Code	Display	Status	Cause	Action
-	Replace Filters	Running	Filter maintenance (Filter interval expired)	Check / change filter, reset the filter.
-	Cool Down Protection	Off	Switch off for frost protection of unheated rooms (Extract air temperature < 3°C)	Turn room heating on. Automatic recovery after 30 minutes when temperature is above 3°C
-	SMOKE ALARM UNIT IS OFF	Off	External smoke detector has activated. Check and reset as appropriate.	See external Smoke detector device
-	Check Fireplace Ventilation	Off	External room pressure sensor continues to detect a pressure fault.	Check ducting system for blockages and fix if required. Check correct operation of supply fans and fix if required. Reset screen message when fault cleared (Press OK for more than 5 seconds)
-	None (Display is Off)	Off	Power failure (no display, device not running)	Switch on power supply
-	None (Display is Off)	Running	Faulty display. Faulty connection	Replace display PCB. Check and re-connect umbilical plug to Display PCB.
E05	E05: Ext. overload	Off	Power supply breakdown, 24V DC overload. External controllers and sensors, incorrect wiring, short circuit.	Check wiring of external controllers and sensors
E11	E11 Supply Start	Off	Faulty Supply fan ventilator / supply air does not start * No Supply fan speed for 30 s, cable break, fan blocked or defective.	Check / replace connection cable / Check replace Supply fan
E12	E12 Extract start	Off	Faulty Extract fan ventilator / supply air does not start * No Extract fan speed for 30 s, cable break, fan blocked or defective.	Check / replace connection cable / Check replace Extract fan
E21	E21 FreshAir NTC	Running	Faulty Fresh Air duct NTC	Replace Fresh Air NTC sensor
E22	E22 Supply NTC	Running	Faulty Supply Air duct NTC	Replace Supply Air NTC sensor
E23	E23 Extract NTC	Running	Faulty Extract Air duct NTC	Replace Extract Air NTC sensor
E24	E24 Exhaust NTC	Running	Faulty Exhaust Air duct NTC	Replace Exhaust Air NTC sensor
E25	E25 Humidistat	Running	Faulty Extract duct Humidistat sensor	Replace Extract duct Humidistat sensor

Table 5.1 Messages and faults

3 Safety functions

3.1 Function for safe use with open flue fuel burning devices.
Only to be used if permitted by relevant regulations in your country of use.

(Prevents open flue gases being drawn back into the room.)

The ventilation unit has an integrated function for safe use with open flue devices. With this function enabled (indicted by an "F" in the standard display), the air pressure outside and inside is kept in balance which ensures that the unit can be used safely with the open flue device.

3.2 Frost protection (Display shows "Cool Down Protection")

(Protects ventilated rooms or areas from cooling down too much)

If the property is not heated in low outdoor temperatures (e.g. when the heating has been switched off or it has broken down), the unit cannot recover any heat from the extracted air. In order to prevent cooling down of the rooms and to protect from frost damage, the unit is switched off automatically when the extracted-air is less than +3°C.
The display reads "**Cool Down Protection**".
Pressing **OK** will show "**Switch Room Heating On**".

The ventilation unit will switch back on again after 15 or 30 minutes, depending on the room temperature.
It will remain Off if the extracted air is still less than 3°C.

3.3 Smoke detector (Safety cut-out)

The ventilation unit can be switched off immediately by an external smoke detector (emergency stop function).

When the smoke alarm is activated, the unit cannot be switched on.

- The display reads "**SMOKE ALARM, UNIT IS OFF**".

When the smoke alarm is over :

- The display reads "**SMOKE ALARM OVER, Press OK**".

Press the **OK** button to return the unit to Normal operation in the "Off" state.

- Select "Automatic" to re-start the unit.

Option : "Menu Backlight Timeout" : Select then press OK

Use this to adjust how long the Display backlight remains On when no buttons have been pressed.

Press **OK** to show "**Timeout Time**". (Pre-set value is Never. i.e. the backlight is always On).

Use the **OK** and ◄ or ► buttons to select a new filter time. (Adjustment is 15 seconds to 10 minutes).

Press **OK** to select the option required.

2.4.3 User Information : Use the ◄ and ► keys to select, then press **OK**

Using this menu, you can display a wide range of information about the operation and status of the unit. **Settings cannot be adjusted in this menu.**
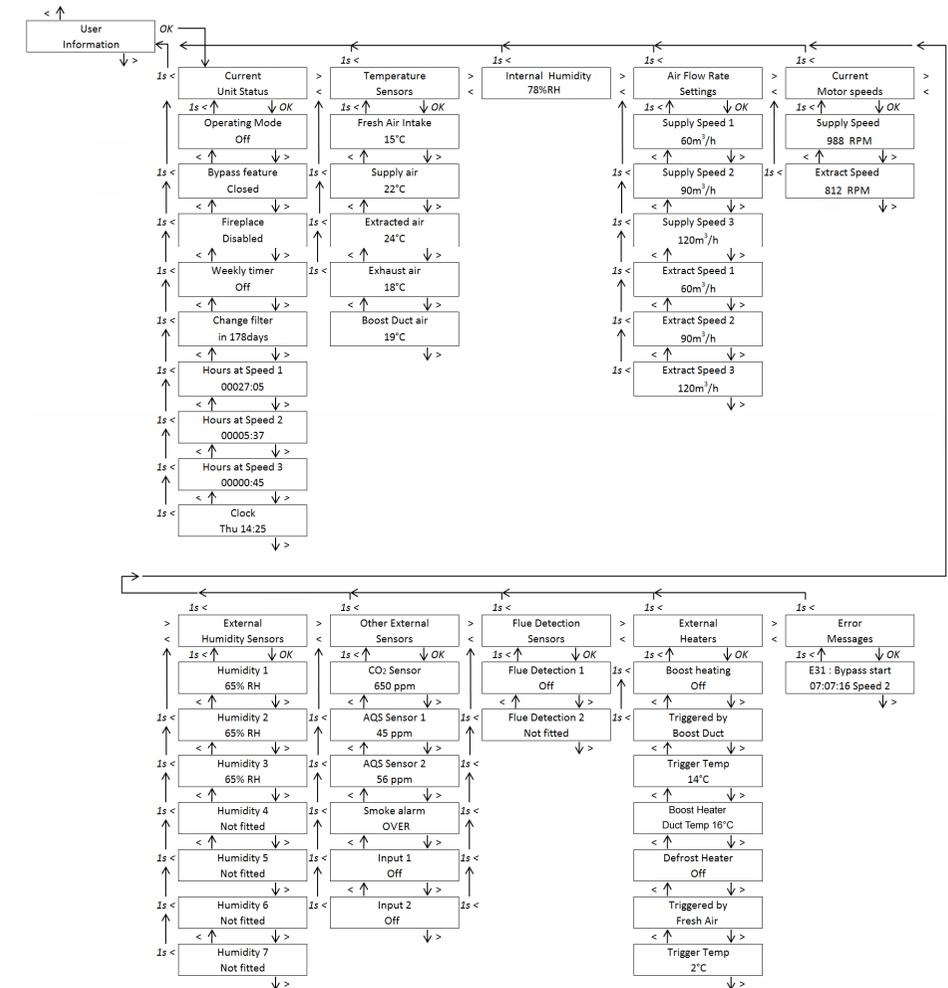
Fig. 2.8 : User Menu : Information

⚠ **NOTE!**
Press the ◄ button for 1 second to move back up the Menu.
(If no settings are made for 180 seconds, the display returns to the Standard display)

Option : "Current Unit Status" :

Displays the current operating mode, the status of the bypass flap, the status of the function for safe use with fire safety function (see Section 3.1), the weekly timer, the filter change time, the operating hours and the current time.

Option : "Temperature Sensors" :

Displays the temperatures of the Supply air, Exhaust air, Fresh air, Extract air, and (if fitted) the Boost Duct air.

Option : "Internal Humidity" :

Displays the current humidity level (% RH) measured by the internal humidity sensor.

Option : "Air Flow Rate Settings" :

Displays the set Supply and Extract air flow rates at Speed 1, 2, and 3.

Option : "Current Motor Speeds" :

Displays the current speeds (in RPM) of the supply-air ventilator and of the extract-air ventilator.

Option : "External Humidity Sensors" :

When an externally wired humidistat is fitted, its current humidity level (% RH) can be displayed. (Up to 3 sensors can be remotely wired).

Option : "Other External Sensors" :

When fitted, the current level of other external sensors can be displayed : CO2 sensor (ppm), AQS Sensor 1 (ppm), AQS Sensor 2 (ppm), Smoke Alarm status, Volt Free Input 1 (Off or On), Volt Free Input 2 (Off or On).

Option : "Flue Detection Sensors" :

When fitted, shows the status of the two Flue detection inputs.
(Note when these connections are open the status is On, when closed the status is Off).

Option : "External Heaters" :

Displays the status of the Pre-heater and Boost heaters, their trigger temperature values and which duct temperature is used as the sensor.
(Note : The display will show the correct status even if the heaters are not fitted).

Option : "Error Messages" :

Displays any current fault message as well as the last twenty fault messages, each with date, and operating mode at the time when the fault occurred.

2.4.4 Language Setting : Use the ◄ and ► keys to select, then press **OK**

Use this menu to set the Display language. Choose English or German (Factory set to English).
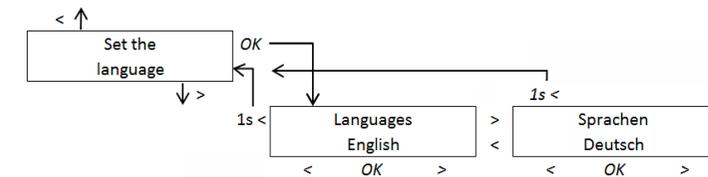
Fig. 2.9 User Menu : Set the Language

2.5 Tips for saving energy

The unit is used to protect the building structure, to improve the air quality and to bring users more comfort. It also improves the energy efficiency of the building. The unit should not be switched off, even if the building is unoccupied for long periods of time.

2.5.1 Windows

The windows of the property can be opened and closed at any time. (e.g. For natural ventilation). However, especially in low outdoor temperatures, windows should be kept shut in order to make full use of heat recovery by the ventilation unit.

2.5.2 Filter

Clogged filters increase the energy consumption of the ventilation unit. Filters have to be maintained and changed regularly (see section "Maintenance").