

6.6 Tempering Summer Bypass

Feature available on selected models only (AS 90-0103-WINS-01).

The Tempering Summer Bypass feature, unique to Brookvent aircycle systems, functions via thermostatically responsive solenoid which operates on a scale between 20 Degrees Celsius (No Summer Bypass) and 27 Degrees Celsius (Fully engaged); gradually increasing the amount of air directed around the Heat Recovery Core as the temperature of the supply air from outside rises thus comfortably regulating the indoor air temperature during warmer months.

This feature is factory set, automatic, and requires no maintenance.

6.7 Fan Fault Indication

This will be indicated by a triangle symbol in the top left hand corner of the screen.

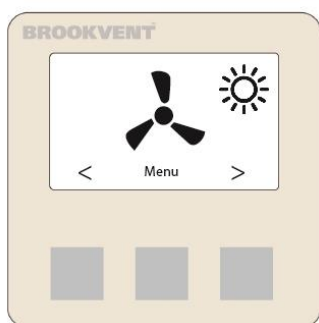
The display will indicate an issue with either fan.

Do not attempt to further diagnose the issue, all investigative and repair works should be completed by a competent person using original Brookvent parts.

6.8 Digital Controller - manual

0. Home Screen

Screen 0



1. Shows the fan speed that the unit is currently running at. This can be changed by pressing the right and left buttons on the controller a denoted by the arrow symbols.
2. Menu. By pressing the centre button this will give access to the menu options.
3. Automatic operation modes. This will display if the unit is operating under summer bypass conditions or if the unit is operating under frost protection conditions.
4. Fan fault indication. Should this symbol be present then contact your supplier to arrange for an engineer to investigate. (note this may momentarily flash on screen at point of start up. This is not a fault).

Home screen notifications.

1. Trickle Mode.



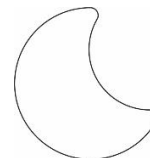
2. Boost Mode



3. Purge Mode



4. Night mode



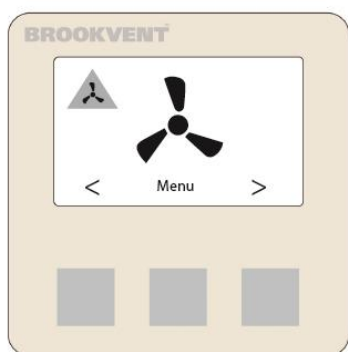
1. Fan with three blades indicates the unit is in trickle mode.

2. Fan with six blades indicates the unit is in boost mode. Boost mode has been triggered manually by switching to this mode on the display or automatically by an external switch or sensor.

3. Fan with eight blades indicates the unit is in purge mode. Purge mode has been triggered manually by switching to this mode on the display.

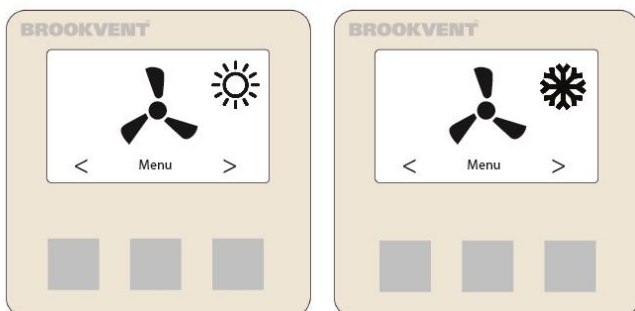
4. Crescent moon symbol indicates the unit is in night mode. Night mode has been triggered manually by switching to this mode on the display or automatically by the time setting.

Fan failure



Should the triangle with the fan symbol appear in the left hand corner of the screen; this indicates a fault in the system that an engineer will have to investigate.

Summer Bypass



If the sun symbol appears in the right hand corner of the screen this indicate that the summer bypass is in operation. If the symbol in the right hand corner is a snowflake then the unit is operating in its frost protection mode (no action is required).

Humidistat



If the fan Boost symbol appears with the letter H; This indicates that the system is boosting due to the internal humidistat being activated.

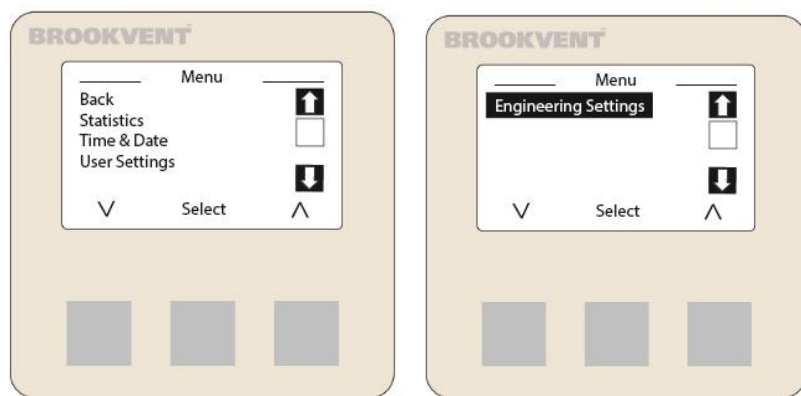
Overheat



If the fan Boost or purge fan symbol appears with the letter T; This indicates that the system is running at an increased rate due to the internal temperature of the dwelling being too high.

System will remain in this mode until the temperature decreases or it is cancelled by changing mode at the display.

1. Menu



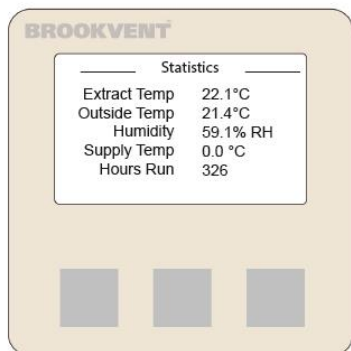
Screen 1a.

Screen 1a.

To navigate through the screens use the up and down arrows activated by the left and right buttons.

To enter a menu item press the middle button denoted as Select.

2. Statistics



The Statistics screen allows you to see what each sensor is reading in real time.

There is no adjustment possible in this screen as it is for information only!

3. Time and Date



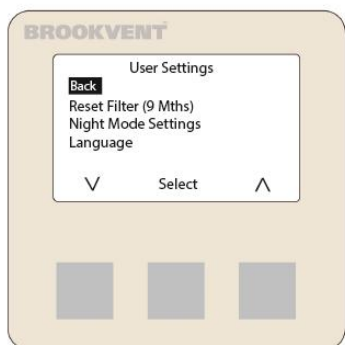
This screen allows you to set the correct time and date. This is particularly important if the night time mode is activated see point 4b.

Use the up and down arrows to set the hour (24 hour clock) and press next to move to the minutes.

Repeat these steps to set the date, at the end the Next will change to Set. Press this to save the changes and return to the previous screen.

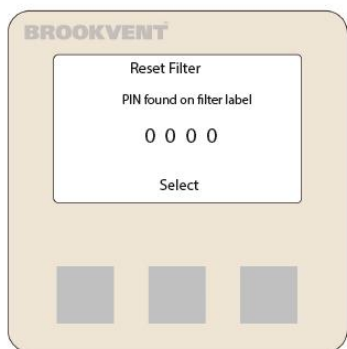
Note: There is no battery back up for the display; Therefore in the event of a power cut the time and date will need to be reset.

4. User settings



When you enter the User settings screen you are presented with several options that the user can change:

4a. Reset Filter



The Pin to reset the filters is on the tab of the filters.

To enter the pin first press Next. Then use the up and down arrows to select the correct number.

Press Next to select the next number until all four have been entered.

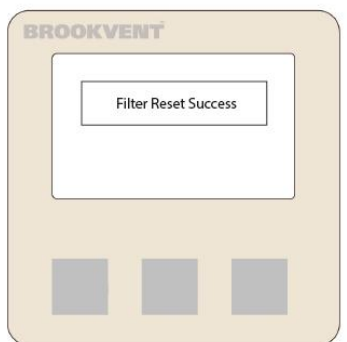
If the incorrect pin has been entered, you will be given a message and return to the previous screen. You will have to re-enter the pin again to access the reset filter menu.



On entering the set Next Reminder screen, you will be presented with the above options.

Brookvent recommend that you change your filters at least every 12 months; However, it is good practice to inspect them and clean them more regularly to maintain good indoor air quality and protect the MVHR unit.

Filters can be cleaned by removing from the unit and giving them a quick vacuum.



4b. Night Mode Settings



Night mode Disables the boost signals from the internal sensors and external boost signals.

Night mode can also have a dedicated speed setting that is set in engineering settings.

In the Screen above the night mode is enabled; therefore, the option given is to Disable Night Mode.

To disable the night mode, use the arrows to highlight the option and press select. This will disable the night mode and the option will change to Enable night mode.

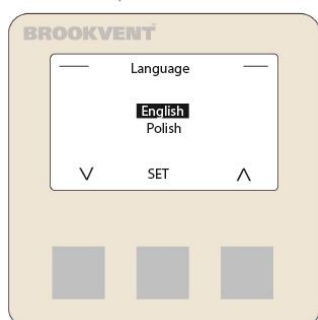


To set the time that the system will enter night mode press the arrow keys until the Set Time option is highlighted.

Using the arrow keys and the centre Next key set the start and finish time you want the system to enter and leave night time mode.

This will enter night mode in this time range at the same time every day as long as night mode is enabled.

4c. Language



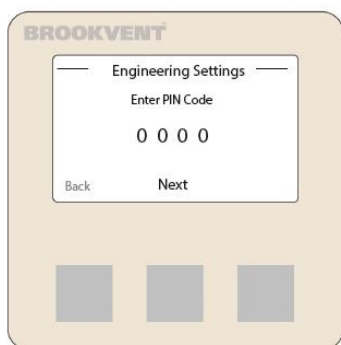
The language in which the menus are displayed can be changed in this menu.

The default language is English.

The language can be set by selecting this menu and using the arrow keys to navigate to the required language.

Press the middle key dented Set to change the language.

5 Engineering Settings



Engineering settings are pin protected and are for use by the commissioning engineer.

It is important that these settings not tampered with after commissioning to ensure good indoor air quality and help the unit to run as intended.

For commissioning engineers, the pin is 9876

First press Next and then using the arrow keys select the first number.

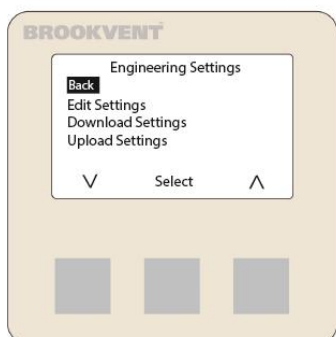
Press the middle Next Key to move to the next digit.

When entering the last digit Next will change to Set.

If the Pin is incorrect you will receive a message and have to go through the process again.

On entering the correct pin, you will be presented with the list of options over several screens.

5a Engineering settings



Edit Settings allows you to commission and set up the operation of the system.

Download settings allows you to download saved settings from an already commissioned system to the display.

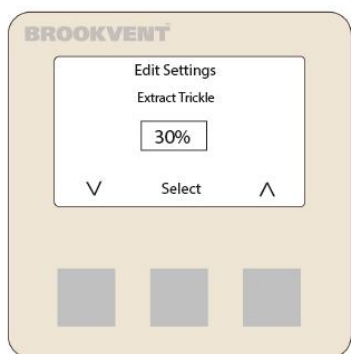
Upload settings allows you to upload settings from a commissioned display to a new unit as a baseline for commissioning.

5b



Use the arrow keys to navigate to the setting you want to change and press the middle Select key.

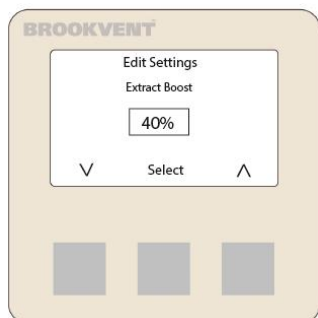
5b-1 Extract Trickle



Press the up and down to set the percentage fan speed between 0-100%. Pressing and holding the arrow button will change the speed by 5%. The fan speed will change as you set it but there may be a slight delay of approximately 5 seconds. To move the percentage points 1 at a time just press and release the arrow button.

Note: the unit needs to be in trickle mode for changes to be noticed or measured.

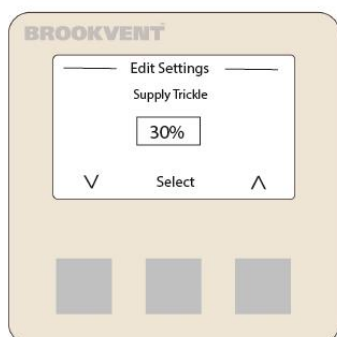
5b-2 Extract Boost



Press the up and down to set the percentage fan speed between 0-100%. Pressing and holding the arrow button will change the speed by 5%. The fan speed will change as you set it but there may be a slight delay of approximately 5 seconds. To move the percentage points 1 at a time just press and release the arrow button.

Note: the unit needs to be in Boost mode for changes to be noticed or measured.

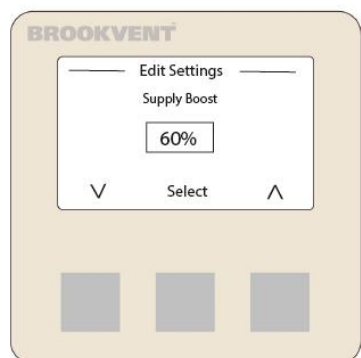
5b-3 Supply trickle



Press the up and down to set the percentage fan speed between 0-100%. Pressing and holding the arrow button will change the speed by 5%. The fan speed will change as you set it but there may be a slight delay of approximately 5 seconds. To move the percentage points 1 at a time just press and release the arrow button.

Note: the unit needs to be in trickle mode for changes to be noticed or measured.

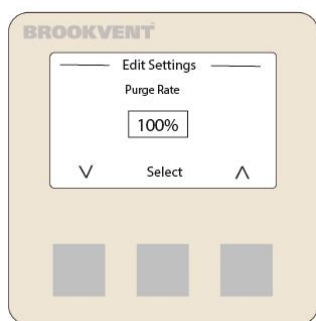
5b-4 Supply Boost



Press the up and down to set the percentage fan speed between 0-100%. Pressing and holding the arrow button will change the speed by 5%. The fan speed will change as you set it but there may be a slight delay of approximately 5 seconds. To move the percentage points 1 at a time just press and release the arrow button.

Note: the unit needs to be in Boost mode for changes to be noticed or measured.

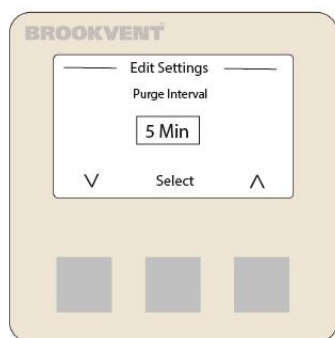
5b-5 Purge Rate



Purge is used to rapidly vent the dwelling for a short period of time and is generally used where windows cannot be opened. E.g. Toast is burnt, rooms being painted etc.

Press the up and down to set the percentage fan speed between 0-100%. Pressing and holding the arrow button will change the speed by 5%. To move the percentage points 1 at a time just press and release the arrow button.

5b-6 Purge interval



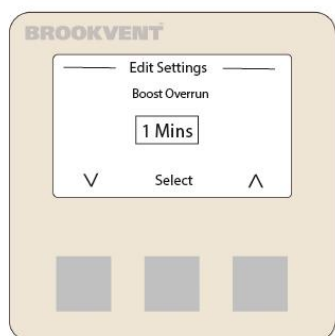
This sets the length of time you want the system to purge. As this is generally a high level of ventilation it is not possible to leave the unit running in this condition constantly.

The times can be set in 5-minute intervals up to 60 minutes.

After this time period the unit will come out of purge mode; but can be put back into this mode if required.

Brookvent recommend a time period of 15 minutes or less for this function.

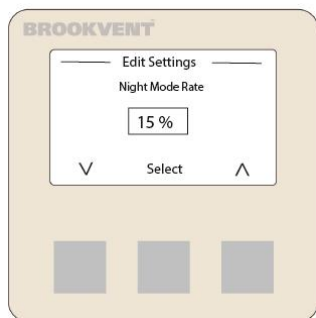
5b-7 Boost Over run



A boost over run can be set to allow the system to continue boosting after the boost signal (either from internal sensors or external signals) has stopped. As the system returns to the trickle rate after the boost signal ends this is not generally required but can be useful to prevent sensors sending the unit in and out of boost when the conditions are close to their switching point.

The default setting is 1 minute but this can be changed using the arrow key and the middle set button.

5b-8 Night Mode Rate

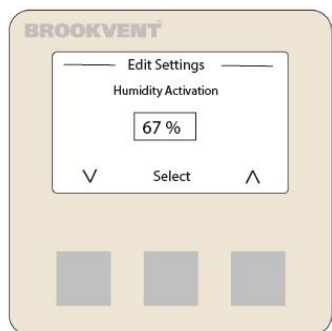


Night Mode disables boost signals and can have a separate fan speed. In order to avoid inadequately ventilating the property, Brookvent recommend that this fan setting should be set at the same level as supply trickle.

Press the up and down to set the percentage fan speed between 0-100%. Pressing and holding the arrow button will change the speed by 5%. The fan speed will change as you set it but there may be a slight delay of approximately 5 seconds. To move the percentage points 1 at a time just press and release the arrow button.

Note. The same fan percentage will be applied to both fans therefore there may be an imbalance in the ventilation rates in this mode.

5b-9 Humidity Activation



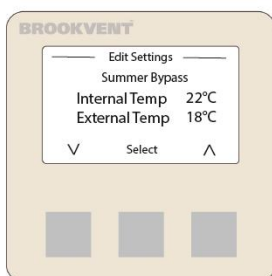
This sets the point at which the internal humidistat will activate boost. The measurement is taken at the unit so care needs to be taken to account for dilution from the wet rooms that are not in use.

Generally, this is set at 70% and is disabled for the first hour after the unit has been switched on to allow for commissioning.

The default setting is 70% but this can be changed using the arrow keys and the middle set button.

Note: changing this setting to 100% effectively switches this function off. Too low a setting could leave the unit in boost constantly!

5b-10 Summer Bypass (selected models only)



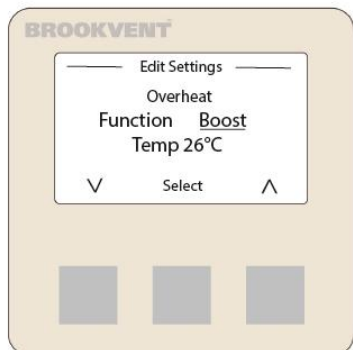
Set at default rates for the standard passive Summer bypass module.

The active summer bypass units can be set to operate on the conditions on this screen (not yet available).

Press the arrow keys to adjust the temperatures and press the middle Select button to change to the External temperature.

5b-11 Over-heat protection

This is an automatic setting to increase the ventilation rate when the temperatures within the dwelling exceed comfortable levels.



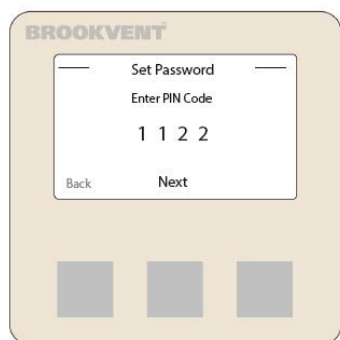
By pressing the arrow keys, you can change the function between boost or purge. Press Select to move to the temperature at which this will be activated.

Use the arrow keys to change the temperature to the desired level.

Press set to save the changes. This function can effectively be switched off by setting a very high temperature.

Note the measurement is taken at the unit so care needs to be taken to account for dilution from the other rooms in the case that only one of the rooms is likely to over-heat.

5b-12 Set Password



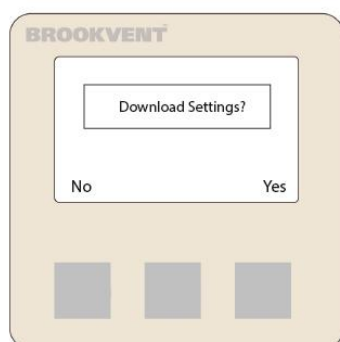
The password to enter Engineering settings is printed in the manual, but if you wish this can be changed to your own unique 4-digit code.

On entering the Set password screen, you are reminded what the current password is.

Press next to continue and use the arrow keys to change the digit to the required value. Press next to move over to the next digit. When you get to the last digit, press Set to save the new password.

Should you ever forget this password please contact Brookvent.

5c Download settings



Download setting can be used when connecting a new display to unit that has been set up.

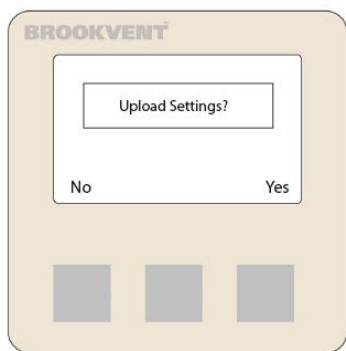
This will down load the settings from the main board to the display.

After connecting the new display, enter engineering settings but DO NOT enter edit settings.

Go to Download press the right hand key denoted Yes

To go back to the previous screen, press the left hand key denoted No.

5d Upload Settings



Upload setting can be used when connecting a display that has been programmed to a new unit.

i.e. when the unit are being set but the controllers are not being left with the end user or when multiple similar properties are being commissioned, initial settings can easily be achieved.

This will upload the settings from the display to the main board.

After connecting the display, enter engineering settings but DO NOT enter edit settings.

Go to Upload press the right hand key denoted Yes

To Upload press the right hand key denoted Yes.

To go back to the previous screen, press the left hand key denoted No.

Upload settings can be used to Pre-commission units in similar property types or similar operational specifications i.e. if all units in the project have the same purge rate, night time settings over run time etc/ this can speed up the commissioning process.

Note it should not be assumed that units with the same settings fitted in the same type of property will achieve the required airflows. Full commissioning should still be carried out.