

OPERATING GUIDE FOR DVS G3® AUTOMATIC SUMMER VENTILATION

Introduction

The purpose of the DVS® Automatic Summer Ventilation System (also known as Auto Summer Vent) is to deliver a <u>continuous</u> supply of fresh filtered air, by automatically changing the air source to draw from an external air vent when the roof space air becomes too warm.

The DVS® Automatic Summer Ventilation System is NOT a home cooling or air conditioning system. However, by ventilating the home with a



continuous supply of fresh filtered air drawn from an external vent on the cooler side of the house, Automatic Summer Ventilation is able to regulate the build-up of heat inside the home that would normally occur due to the home being closed up or inadequately ventilated on hot summer days. Homes will also cool down to a more comfortable temperature more quickly on summer evenings, when the outside temperature drops.

Setting the DVS® Auto Summer Vent

The G3® offers several options for controlling the operation of your Auto Summer Vent.

From the Current Status screen, press MENU three times to access MAIN MENU 3. Then select EXT VENT which will bring up your MODE options.



Mode

Use the MODE button to select whether the EXT VENT is permanently Shut or Open, or operates according to Auto function, Timer or Dual (combined Auto and Timer functions), as follows:



Shut

Recommended when cooler temperatures arrive, and you no longer wish to ventilate the home using cooler external air.

The DVS® Summer Ventilation External Vent is permanently closed irrespective of roof cavity temperature, or any timer setting. Fresh air is drawn solely from INSIDE the roof space.

Open

Recommended in warmer areas when night time temperatures remain high, and continuous 24-houra-day ventilation via the external vent is preferred.

The DVS® Automatic Summer Ventilation System is permanently open irrespective of roof cavity temperature, or any timer setting. Fresh air is drawn solely from OUTSIDE the roof space.

Auto

Recommended in areas where hot days may be followed by cool evenings.

AUTO enables some heat recovery from the warming roof space in the morning to warm the cooler home, and ensures effective summer ventilation during hotter days.

AUTO mode automatically opens the external vent in the DVS® Auto Summer Vent system when the air in the roof space exceeds the Auto set temperature. When the air temperature falls below the preset temperature, the external vent will automatically close and air will be drawn from the roof space.

When temperatures can vary significantly, Auto provides the dual benefits of external ventilation on warm or hot days, coupled with extended heat recovery from the roof space on cooler days. The balance between external ventilation and heat recovery is set by the AUTO temperature selected; a higher temperature provides more heat recovery while a lower temperature provides more external ventilation.

We suggest an Auto setting at or around 21°C, the temperature at which the Air Handling Unit profiles automatically increase the airflow. (see Auto Summer Vent profiles below). In hotter areas you may wish to set it lower and in areas with cooler summer nights you may wish to set it a little higher to take advantage of warming roof temperatures to take the chill off the house in the mornings. During spring and autumn when nights are cooler, you may wish to set a higher temperature than during the hotter summer months. Experiment to find the best Auto set temperature for you and your home.

After selecting Auto press the UP/DOWN arrows to increase or decrease the roof space temperature at which the DVS® Summer Ventilation System will open and close.

The Auto temperature may be set between 10°C and 40°C.

Timer

The DVS® Auto Summer Vent system will be OPEN and draw fresh air from the external vent only between the times programmed in the Timer menu, regardless of the temperature in your roof space.

The Timer mode provides up to seven combinations of days and times when the DVS® Auto Summer Vent system will switch on and off. Each programme represents a start and end time for a day or combination of days (e.g. Mon-Fri or Sat-Sun, or Mon-Sun or individual days).

Detailed instructions on setting the Timer are shown below in Section 3.

Dual

This mode combines Auto and Timer functions (above) so that the DVS® Auto Summer Vent system will operate according to the Timer settings, but ONLY when the roof space temperature is HIGHER than the temperature set in Auto. To utilise Dual, it is necessary to set BOTH a maximum roof space temperature under Auto mode, AND set your preferred On and Off settings in the Timer mode.

External Vent Air Temperature

When the external vent is open, the external airflow temperature (measured as it flows through the Air Handling Unit) will be shown above the vent on the Current Status screen.



Setting the Timer

Before setting any Timer programme, it is important to check and set the CLOCK correctly, as all Timer settings rely on the day and time being correct.

- 1. From Main Menu 3, select EXT VENT...
- 2. Select SET TIMER.
- 3. Select Programme 1 using the PROG button. Each time you enter any of the Timer functions it will default to Prog 1 and the ON time.
- 4. To select the ON day or days, repeatedly press the 'DAY' button to scroll through and select individual days or groups of days that you wish to set the ON/OFF times for. Eleven individual days or combination of days will appear in sequence along the top of the screen in the following order:

Mon / Tue / Wed / Thu / Fri / Sat / Sun, i.e. each individual day only
Mon Tue Wed Thu Fri i.e. all five weekdays grouped together
Sat Sun i.e. two weekend days only grouped together
Mon Tue Wed Thu Fri Sat i.e. six days grouped together
Mon Tue Wed Thu Fri Sat Sun i.e. all seven days of the week grouped together

- 5. Once you have selected one of the above options, you may now select the time you would like the Auto Summer Vent to switch ON by pressing the 'HOUR' and 'MIN' (minute) buttons. If you go past your desired time, just keep pressing the 'HOUR' or 'MIN' buttons until the desired time re-appears.
- 6. After selecting the desired ON day(s) and time, press the OFF button. The OFF time section will be highlighted and is now ready to set the OFF time.
- 7. Select the time you wish the Auto Summer Vent to switch OFF by again pressing the 'HOUR' and 'MIN' buttons as in 5.above. If, after setting the OFF time you wish to amend the ON time, simply press the ON button to highlight the ON time section and make the changes. Repeat for OFF time if you wish to amend the new or any existing OFF time.
- 8. Press and release the 'PROG' button again to save the settings for PROG 1. The timer will automatically bring up PROG 2.
- 9. If you wish to set ON/OFF times for another day or combination of days in PROG 2 repeat the steps from 2 to 6 above. You can programme up to seven ON/OFF settings.
- 10. When you have finished setting the ON/OFF times, press the 'EXIT' button to save all the timer settings and return the display panel to the Current Status screen

Note: If you wish to delete any preset Timer programmes, bring up the respective PROG by pushing the PROG button and press the DAY, ON, OFF, HOUR and MIN buttons until - -:- - appears in the respective fields.

Automatic Summer Ventilation Profiles

It is important to select a profile for the Air Handling Unit when using the DVS® Auto Summer Vent system.. The Auto Summer Vent profiles are designed to maximise the benefit of the DVS® Auto Summer Vent system, by automatically increasing the airflow to enhance the cooling effect when temperatures exceed certain levels.

Profiles 1 and 2 automatically INCREASE the speed of the Air Handling Unit to provide an increasing level of airflow when the roof space temperature exceeds 21°C. Profile 1 airflow is moderately higher with airflow increasing through the profiles.

Profiles 5 and 6 also automatically INCREASE airflow by the same amounts as above. However, the main difference is that when the roof space temperature falls below 15°C, the speed of the Air Handling Unit will steadily DECREASE, reducing the cooling effect of the cooler air.

Recommendations

Important Information

DO NOT USE the summer profiles when using the Auto Summer Vent system. "Summer" profiles are designed for G3 systems without external vents and are designed to temporarily switch the DVS® system off when the roof temperatures become too hot, thus cancelling out the benefits of installing an Auto Summer Vent system in the first place.

REMEMBER to SHUT the external vent when cooler weather arrives and you no longer wish to draw air from outside.