DVS® EC Reclaim Connect

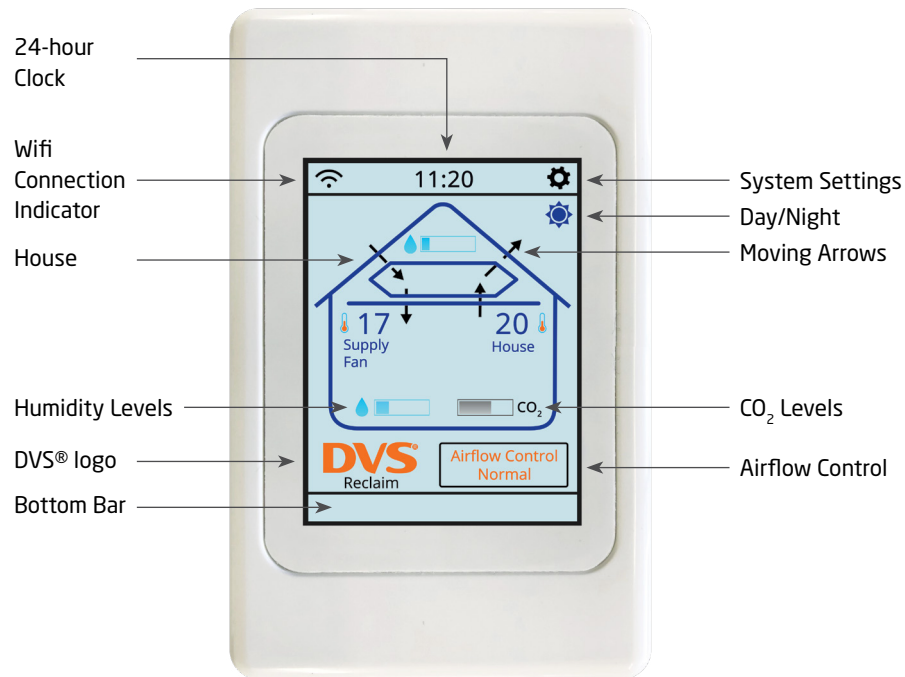## User Guide

Enjoy a healthier, more comfortable home

0800 387 387   **www.dvs.co.nz**

Your **DVS® Reclaim Connect system** represents the latest in Balanced pressure heat recovery home ventilation technology. The large easy to read touch screen allows you to see what Is happening with your system and to make adjustments if you need to. The system Is also able to be connected to your home Internet to allow trouble free, automatic downloads of software Improvements.

Following is an explanation of what each home screen icon means or is used for.

On your home screen (top to bottom)

Note: We will expand on the use of the home screen and the icons listed below, later in this user guide.

WiFi connection indicator

This Indicates whether or not you are connected to your home WiFi router.

24-hour clock

This is updated via the internet or where you have no internet connection you are able to manually adjust.

System settings

Day or Night

Near the top right of the screen is a small Sun ☀ or Moon ☾ icon. There is an ability in the DVS® to make the system behave differently depending on the time of day or night.

Note: Typically, this is not needed as the system will self-adjust to the changes in day and night temperature, humidity and CO_2 levels if needed. If you would like to find out more about this setting please call us on 0800 387 387.

Moving arrows

The black broken lines and arrows will appear to move when the system fans are rotating.

Note: if it they are not moving the system has stopped the fans. This could be for a number of control logic reasons and is nothing to be concerned about.

House

In the "roof space" section of the house you can see the blue air supply humidity level bar indicator. Also, an elongated hexagonal shape which represents the heat exchanger. The "inside" section of the house shows you the temperature of the air supply (Supply Fan) measured after the heat exchanger and the temperature measured at the Connect control panel (House). You will also see a second blue bar humidity level indicator showing the humidity measured at the Connect control panel. Finally, a black bar CO_2 level indicator measured at the remote CO_2 sensor(s) in the home. The humidity levels indicated are Absolute Humidity.

DVS®

Touch the DVS® logo briefly and our phone number will appear.

Airflow Control

Touch this to quickly adjust the airflow up or down.

The bottom bar

The bottom bar is where you will see any system notifications appear.

CO$_2$ levels

Note: The system is equipped with one CO_2 sensor. A plug-in device which pairs with your Connect control panel. If the CO_2 control function is enabled (using the Settings menu) the system is programmed to increase the ventilation rate when the CO_2 level rises above 1000ppm. For specific CO_2 level information see the graphs section of the diagnostics menu. The system can be fitted with up to 4 of these remote sensors. When more than one sensor is fitted the system calculates the average CO_2 concentration across the sensors.

How to adjust or check on the operation of your DVS®

Note: The system is programmed at the time of installation according to the size of your home.

Most Customers find they don't need to make any adjustments to their system. The system costs very little to run and is programmed to give optimal ventilation performance for your home whilst being as unobtrusive as possible. However, if you need to make adjustments or to check on what the system is doing, the instructions below are a handy guide for you.

Turning the system ON or OFF

Touch the settings icon ⚙ at the top right of the home screen then – POWER OFF. The system is now OFF. To turn the system ON – touch the screen. The system will re-start.

Help icon

Where applicable, the settings adjustment screens will also contain a ❓. If you touch that you will be given an explanation of the nature of the settings and if applicable the effect of adjusting them.

Fan settings

Adjusting your fan settings increases or decreases the level of ventilation or how aggressive your system is. Your system has been programmed for your home. The DVS® will typically perform well without the need to make fan settings adjustments. However, you are of course able to make adjustments.

Fan Speed programming adjustment

Touch settings icon ⚙ then – SETTINGS > FAN SETTINGS > FAN CONTROL – Slide the Fan Speed bar up (to the right) or down (to the left) – OK > EXIT > EXIT

This setting changes the programmed fan speed for your system. This setting adjusts how passively or aggressively the system behaves.

Note: if you adjust the programmed fan setting up or down and notice any reduction in the performance of the system, you can revert back to the typical programming for your home by adjusting the setting back to the half way point.

Humidity settings

For adjusting the sensitivity of the system to an air supply which is more humid than the air inside the home. A higher setting will mean the system reacts more quickly to a humid air supply then remains off for a period of time and until the air supply is dry enough to continue ventilating your home. The DVS® technician sets this function when the system is installed, however, this setting can be increased or decreased.

Note: To prevent nuisance stopping and starting (oversensitivity) the DVS® is programmed to allow some minor higher air supply humidity readings before it will stop ventilating. Please call DVS® on 0800 387 387 if you need assistance and before you adjust these settings.

Humidity settings

Touch settings icon ⚙ then – SETTINGS > HUMIDITY CONTROL – Scroll the Humidity sensitivity or Humidity time up or down to the level you wish - OK > EXIT

CO$_2$ Sensing & control

For enabling or disabling the CO$_2$ control function. The DVS® technician enables this function and pairs the sensor(s) when the system is installed, however, this function can be Enabled (turned on) or Disabled (Turned off).

CO$_2$ Enable / Disable

Touch settings icon ⚙ then – SETTINGS > CO$_2$ CONTROL > ENABLE (touch the Enable/Disable slide switch icon to change to Enable or Disable) - OK > EXIT

CO$_2$ Sensors

The DVS® Connect range has one remote plug in CO$_2$ sensor as a standard inclusion. Extra sensors can be fitted with a maximum of four sensors per system. When multiple sensors are fitted the system uses the average CO$_2$ reading across all sensors to activate a higher ventilation rate when the average CO$_2$ concentration rises above 1000ppm.

Connecting CO$_2$ sensors to the system

Plug in the CO$_2$ sensor in your room of choice (typically a living room or master bedroom, however any room which is normally occupied and has a DVS® vent in it will be fine). Press and hold the pairing button on the front of the sensor until the green LED light, (this is only visible when looking through the vent at the bottom of the sensor) is on continuously. This takes 5 seconds. If the LED light is a little difficult to see, just hold the button in and count 7 seconds.

This puts the CO$_2$ sensor in pairing mode, which lasts 60 seconds.

Then go to the DVS® controller:

a. Touch the settings icon ⚙ then – UTILITIES > MANAGE CO2 > ADD SENSOR

b. A box will show, which initially just says **Connecting**

c. When the CO$_2$ sensor has been found the box shows **Success**, New CO2 Sensor added

d. Repeat for additional sensors (up to 4 can be connected).

Once the sensor(s) has been added, press RESTART. The preparation for connection is now made.

Note: After Restarting, the system will need approximately 20 minutes to establish proper connections and begin accurate CO$_2$ level readings. A CO$_2$ level indicator will appear on the home screen and detailed information will be available in the diagnostics menu.

If you have more than one sensor, each will need to be individually paired to the controller rather than pairing them all at the same time. Select RESTART when all are connected.

Cleaning the CO$_2$ sensor

Disconnect from the wall socket and brush with a clean dry paintbrush or similar to remove any external dust. The sensor is self-calibrated so requires no adjustment.

WiFi connection and software upgrades

To check for upgrades or reconnect to your WiFi

Touch the WiFi icon 📶 then choose – WiFi Scan or Check for upgrades (whichever is applicable) – then follow the instructions.

Clock

To manually adjust the clock

Touch the clock numbers 11:20 then - SET DATE AND TIME > EXIT

Filter change reminder reset

Touch settings icon ⚙ then – SETTINGS > FILTER OPTIONS > NEW FILTER INSTALLED > YES > EXIT > EXIT

Note: This setting is intended to reset the filter reminder on your system. Resetting this means that you will receive a reminder to change your filter again, on the control panel, in 12 months.

Optional Features

These include Tempervent air warmers, Roof Space Solar Gain and Automatic Summer Bypass.

To access the optional features (if fitted)

Touch Settings icon ⚙ then – INSTALLED OPTIONS > TEMPERVENT AIR WARMER or SOLAR GAIN or SUMMER VENT > ENABLE or DISABLE

On the "control screen" choose the method of control you wish to use and go through each step to set the control parameters – EXIT > EXIT

Some guidance on optional feature settings

The system will give you the ability to control the optional feature(s). These can include running the feature for a short period of time as and when you need to. This is called a Manual option. Alternatively, you may wish to run the optional feature(s) at a set time every day or night. This is called a Timer option. If you select this control option, you will then be asked to set up the timer appropriately.

There is also the ability to activate the optional feature(s) using temperature as the activation method. If you choose that option, you will then be asked to set the temperature and so on. Of course, you are also able to have a combination of both temperature and time. All of these control settings are programmable by you in the Control Screen.

Recommended settings for optional features

Tempervent Air Warmer

In Cooler months – ENABLE (touch the Enable/Disable slide switch icon to change to Enable) > CONTROL: = Temp & Timer (Set temp to 8°C) + Timer (ON 2100 / OFF 0700)

Note: The system fan speed will remain as programmed.

Note: This limits the time on and the air supply temperature below which the feature will operate.

In Warmer months – OFF

Roof Space Solar Gain

In Cooler months - ON - Mode = Temp (18°C) + Timer (ON 1800 / OFF 2300) – Fan speed (High)

Note: This sets the roof space temperature above which the feature will operate and limits the time period it will operate in.

Additional Note: In the above example the solar gain function will begin when the roof space is above 18°C but only "IF" the house temperature is lower than 18°C.

In Warmer months - OFF

Auto Summer Vent Bypass

In Cooler Months - OFF

In Warmer Months - ON - Mode = Temp (suggested Temp setting 18 to 21 degrees) - Fan Speed = (MAX)

Note: The Summer Vent Bypass feature operates on a pre-set in-house temperature (measured at the control panel). When the in house temperature exceeds the pre-set temperature AND the air outside (measured by a remote sensor located outside the home) is cooler than the air at the control panel, the system will divert the incoming fresh air around the heat exchanger to increase the volume of fresher air being introduced.

Fan Speed setting

The Fan Speed setting you choose for the above optional features is the fan speed the system will run at when the optional feature(s) is activated.

Other settings

The recommended settings for optional features above have proven to provide optimal operation for those features. You can choose alternative modes of operation and settings within the settings menus for each optional feature.

If system performance reduces, please revert to the recommended settings or call us on 0800 387 387.

Utilities

For access to system Diagnostics, To Restore System Defaults or to Restart the Keypad.

Diagnostics

In system Diagnostics you are able to view System Information, Raw Values, Faults and Graphs.

System Information

Touch Settings icon ⚙ then – UTILITIES > DIAGNOSTICS > SYSTEM INFORMATION > EXIT > EXIT

This information tells you the build details of the keypad and AHU (the fan unit). This information may be useful to DVS® if we are helping you to resolve any system fault diagnosis and so is for reference only.

Raw Values: Touch Settings icon ⚙ then – UTILITIES > DIAGNOSTICS > RAW VALUES – Scroll down to read the values - EXIT > EXIT > EXIT

Raw values are intended for DVS® service department reference only.

In Raw Values you are able to view real time data. For e.g. Fan speed(s), Relative Humidity, Absolute Humidity, CO_2 levels at each sensor fitted, Temperatures etc. Some of this information is transferred to the system graphs which you are also able to view in the Diagnostics menu.

Faults

Touch Settings icon ⚙ then – UTILITIES > DIAGNOSTICS > FAULTS > EXIT > EXIT > EXIT

Informs you of any system faults.

Graphs

Touch Settings icon ⚙ then – UTILITIES - DIAGNOSTICS > GRAPHS > OK – Swipe across to read the available graphs - EXIT > EXIT > EXIT

The Graphs menu is in two sections. They are:

24 hour recording of: Temperatures (air supply temperature and temperature in your home, at the control panel), Absolute Humidity (air supply and in the home, at the control panel), CO_2 levels at each sensor fitted and Fan RPM.

7 day recording of: Temperatures (air supply temperature and temperature in your home, at the control panel), Absolute Humidity (air supply and in the home, at the control panel), CO_2 levels at each sensor fitted and Fan RPM.

Restore Defaults and Restart Keypad

Please contact DVS® if you intend to use these functions.

Useful Tips

System Performance

Your DVS® will help to provide a healthier, drier living environment.

Ventilation, heating (in cooler months) and cooling (in warmer months) are all keys to providing a drier, healthier and more comfortable living environment.

Winter (or cooler months)

Your DVS® is programmed to supply enough ventilation for your home based on the size of your home. If the home is now drier, you may wish to reduce the level of ventilation using the Fan Speed adjustment. The ideal being to have the minimum level of ventilation while retaining a drier, healthier home. If the home is not yet drier, you can increase the Fan Speed adjustment to ventilate at a higher level.

Summer (or warmer months)

Experience has found increasing the Fan Speed setting to higher levels provides better ventilation in warmer months.

Note: If you feel you have DVS® system performance issues, turn the system off and call 0800 387 387 so that we can assist with this issue.

Filter(s)

Maintenance of the equipment, including replacement of the air filter(s) with genuine DVS® filter(s), is required to ensure the durability and performance of the system for the warranty period and beyond. As the serviceable life of the DVS® filter(s) is not likely to be more than one year and will vary with location and environmental factors outside of the control of the Company, DVS® New Zealand Limited recommends replacing the filter(s) with a genuine DVS® filter(s) annually.

A message will show on the controller when your filter(s) are due to be changed.

Call us on 0800 387 387 or visit www.dvs.co.nz to purchase filters or arrange for one of service technicians to come and change your filter for you.

Five Year Warranty

DVS® Manufactured and branded products carry a 5 year on site parts and labour warranty. The warranty is dated (begins) on the day of installation and/or supply of the goods. Non DVS® manufactured and branded products carry the warranty provided by the specific product manufacturer.

The warranty covers manufacturing faults in the product (equipment) and product failure caused by incorrect installation.