Eco-Airvent™

Eco-Pro3 VHR controller - Operating Instructions

Eco-Pro3 HRU controller has been specifically designed to control Eco-Airvent CHR, VHR & RHR heat-recovery units.

The controller is pre-wired and built into the unit with separate commissioning device c/w display screen.
All units come pre-set to our catalogue settings, but the following parameters can be easily adjusted on site:

* individual fan speed adjustment
  (commissioning speed for extract and supply fans)
* automated summer bypass temperature setting
* automated night cooling (purge) temperature setting
* filter maintenance interval / filter timer reset feature
* BMS override timer
* Boost override timer
* fault output test

Welcome Screen
This screen is activated when mains power is applied for the first time. Subsequent "soft start" signals will result in "Initializing..." message upon activation following standby mode

> Eco-Airvent
> Eco-Pro3 v3.33

System Settings
Press both buttons simultaneously to activate and cycle through the main menu by pressing black button.
Please note, this menu can only be activated if the unit is running in boost or trickle mode!

> System settings
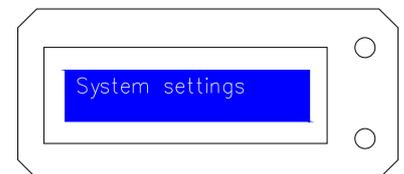
Default Extract
Press red button to enter default (commissioning speed) setting menu. Unit will automatically go into default mode if previously it was operating in trickle mode. Press black button until desired extract fan output power is displayed and then press red button to save settings (output power is displayed as a percentage, e.g. 88% of maximum)
Please note, default speed can be adjusted between 40% and 100%!

> System settings
> Default Extract
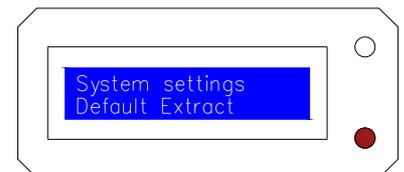
Default Supply
Press red button to enter default (commissioning speed) setting menu. Unit will automatically go into default mode if previously it was operating in trickle mode. Press black button until desired supply fan output power is displayed and then press red button to save settings (output power is displayed as a percentage, e.g. 88% of maximum)
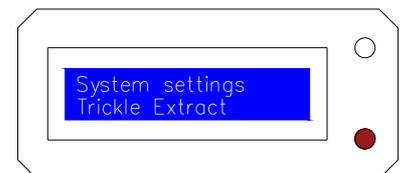Please note, default speed can be adjusted between 40% and 100%!

> System settings
> Default Supply
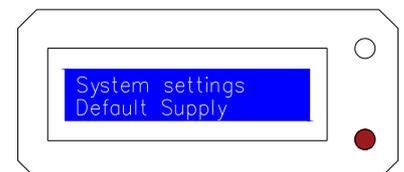
Trickle Extract
Press red button to enter trickle (normal speed) setting menu. It will display the calculated value based on default extract setting. This cannot be changed.
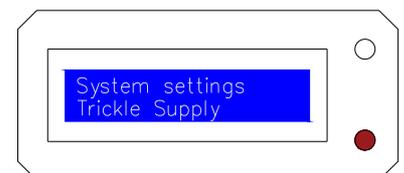Please note, trickle extract speed is set automatically!

> System settings
> Trickle Extract

Trickle Supply
Press red button to enter trickle (normal speed) setting menu. It will display the calculated value based on default supply speed setting. This cannot be changed.
Please note, trickle supply speed is set automatically!

> System settings
> Trickle Supply

Eco-Pro3 VHR controller - Operating Instructions

Bypass temperature setting
Press red button to enter "Bypass Temp." setting menu. Press black button until desired temperature is displayed then press red button to save settings. Temperature range is between 18-25°C
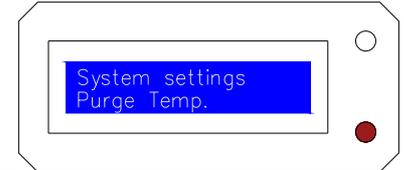Please note, temperature reading is taken at the supply air spigot!

System settings
Bypass Temp.
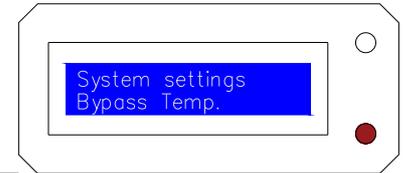
Purge temperature setting
Press red button to enter "Purge Temp." setting menu. Press black button until desired temperature is displayed then press red button to save settings. Temperature range is between 15-28°C
Please note, temperature reading is taken at the return air spigot!

System settings
Purge Temp.

Heater switching temperature setting
Press red button to enter "Room Temp." setting menu. Press black button until desired temperature is displayed then press red button to save settings. Temperature range is between 10-22°C
Please note, temperature reading is taken at the supply air spigot!

System settings
Room Temp.
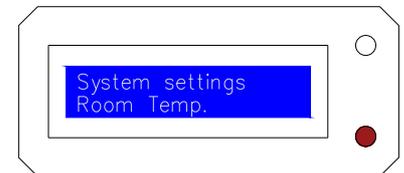
Filter life setting
Press red button to enter "Filter life" setting menu. Press black button until desired filter life is displayed then press red button to save settings. Filter life can be set to 12, 18 or 24 months
Please note, this is NOT used if DPS based filter maintenance alarm has been fitted to the unit!

System settings
Filter life
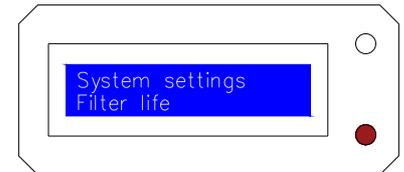
Reset filters setting
Press red button to enter "Reset filters" setting menu. Press black button for 5 seconds to reset filter life timer.
Please note, this menu should be used ONLY after filter change!
Please note, this is NOT used if DPS based filter maintenance alarm has been fitted to the unit!

System settings
Reset filters
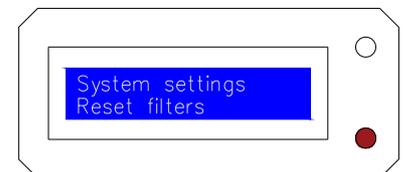
Duct mounted damper control setting (where fitted)
Press red button to enter "Duct control" setting menu. Press black button to select between "Yes" or "No to activate or deactivate automatic control of duct mounted shut-off dampers

System settings
Duct control
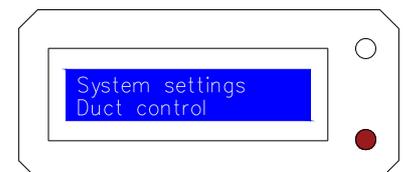
Duct mounted heater control setting (where fitted)
Press red button to enter "Heater control" setting menu. Press black button to select between "Yes" or "No to activate or deactivate temperature based control of duct mounted heater

System settings
Heater control
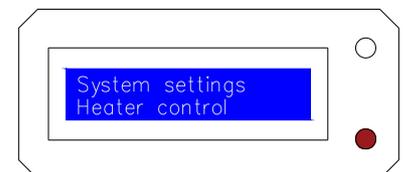
BMS override setting (where BMS override button fitted)
Press red button to enter "BMS override" setting menu. Press black button until desired override interval is displayed then press red button to save settings. Override range is between 1-10 hours
Please note, leave this setting on "0" if no user override button is installed!

System settings
BMS override
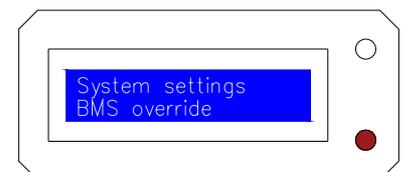
Boost override setting (where boost override button fitted)
Press red button to enter "Boost override" setting menu. Press black button until desired boost interval is displayed then press red button to save settings. Override range is between 15-120 minutes with 15 minutes increments
Please note, leave this setting on "0" if no user override button is installed!

System settings
Boost override
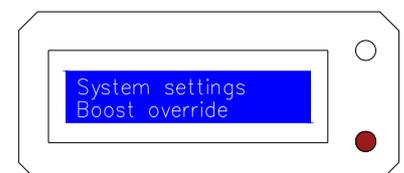
Eco-Pro3 VHR controller - Operating Instructions

Fault feedback test (where fitted)
Press red button to enter "Fault test" setting menu. Press black button to activate/deactivate site installed fault feedback/BMS device. LCD display light will turn on if fault is activated and turn off if fault is deactivated. Press red button to end fault feedback test.

System settings
Fault test
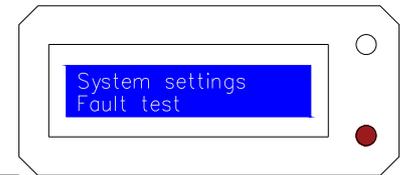
**DPS calibration** (where differential filter sensors fitted)
Press red button to enter calibration menu and hold it to perform the sensor calibration sequence. It will take around 2 minutes to fully calibrate the sensors, please don't interfere with this operation. Once calibrated, the system will return to normal operation.
Please note, this menu should be used ONLY after complete ventilation system has been fitted and commissioned!
Due to differences in filter construction, the calibration should be repeated after each filter change!

System settings
DPS calibration
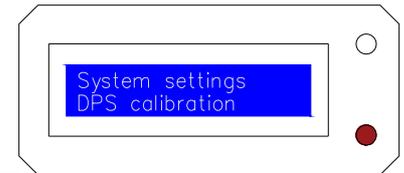
Exit menu setting
When displayed press red button to exit settings menu and return to normal operation.
Please note, if no buttons are pressed for 5 minutes, the system will exit automatically!

System settings
Exit menu
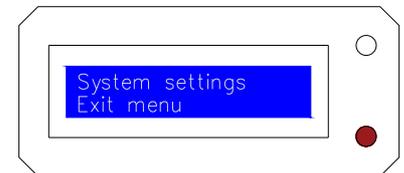
TROUBLESHOOTING

If unit is not responsive, switch off mains supply, wait for 10 seconds then switch back on.
Ensure unit is powered via an RCD to prevent possible damage to fans or controller!

## If the unit develops a fault or filters require changing, the following messages will be displayed

Fan failure
Switch off mains supply to unit, wait for 10 seconds then switch back on. After the unit has performed the first run checks, error signal should be cleared and unit can be operated normally. If error signal persists, please call our technical department for options!

Supply fault
Extract fault
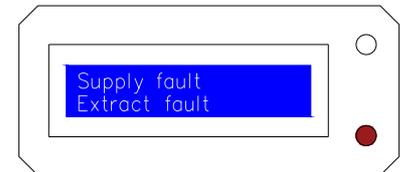
Filter change
Switch off mains supply to unit and make sure it's isolated. Change filters in accordance with unit's O&M manual. Follow instructions included in this instruction manual to reset filters!

Change filters
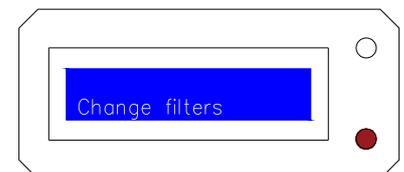
Temperature sensor failure
Switch off mains supply to unit, wait for 10 seconds then switch back on. After the unit has performed the first run checks, error signal should be cleared and unit can be operated normally. If error signal persists, please call our technical department for options!
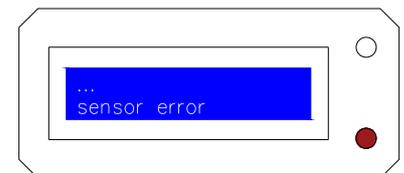
...
sensor error

Please enquire for a range of accessories specifically designed to work with our controller, such as:
* manual BMS and boost override panel
* fault feedback panel
* PIR, CO2 automatic boost accessories
* automatic timer switch controls

We reserve the right to make changes and upgrades without any prior notice.