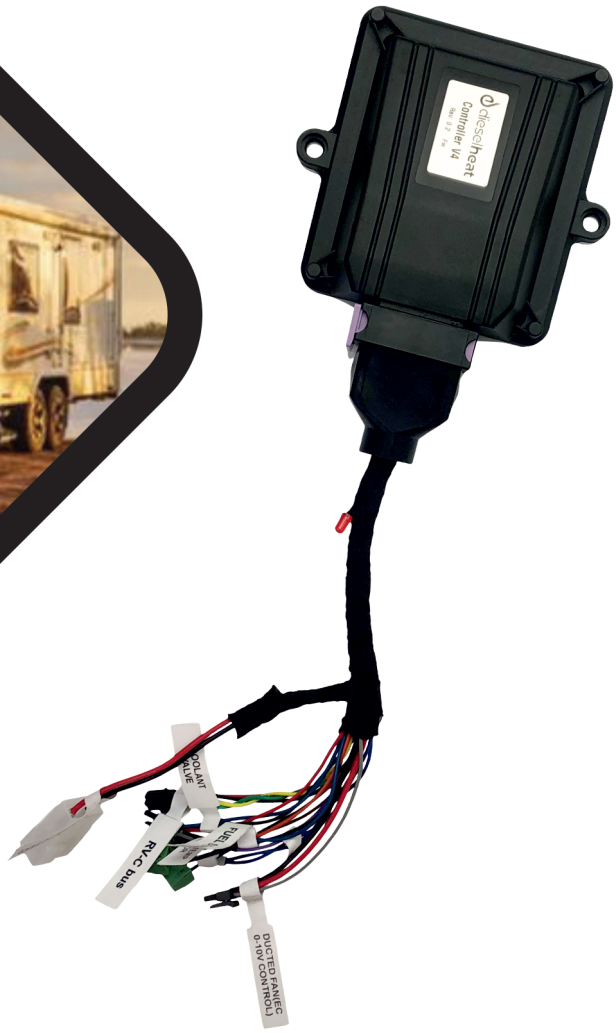




Dieselheat RV-C Controller Installation

V1
2026

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www.dieselheat.com.au

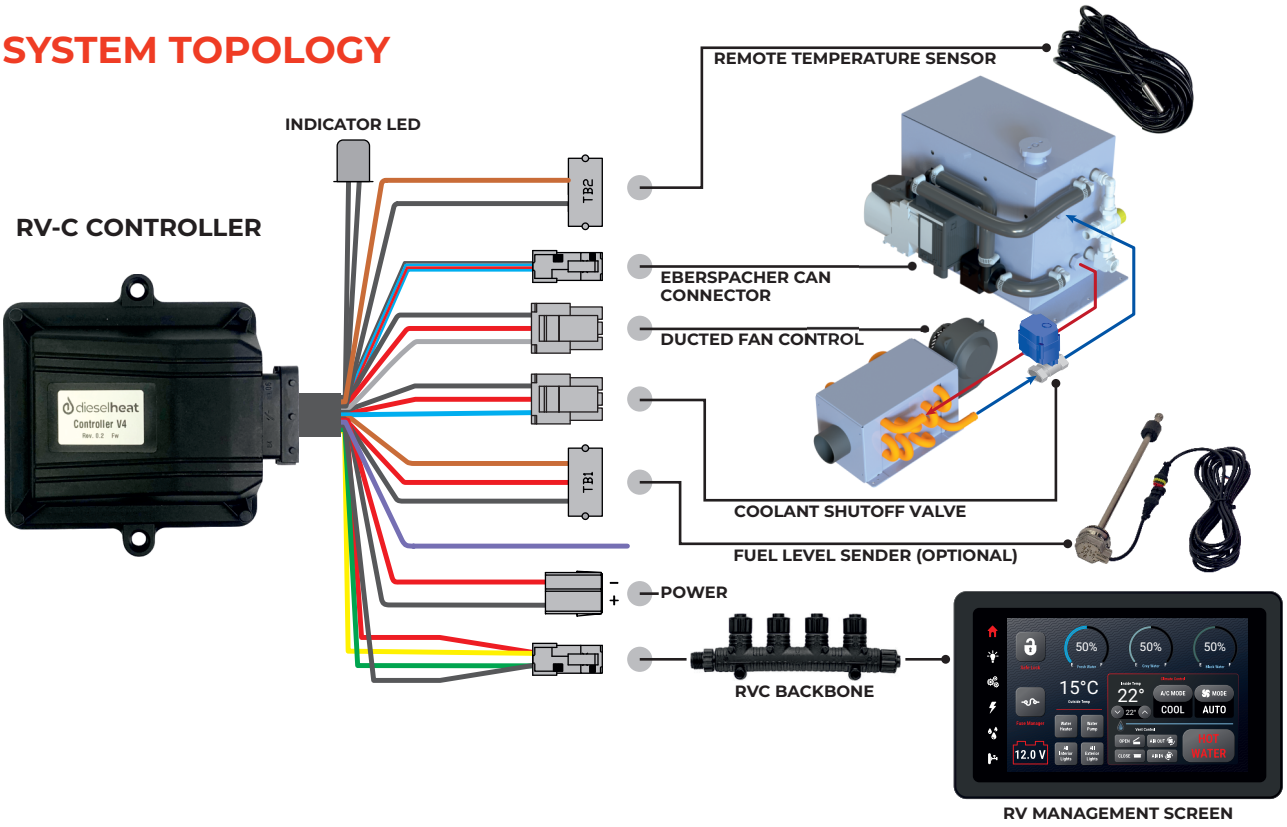
INTRODUCTION

The Dieselheat RV-C controller is designed to work with the Dieselheat DH Hydronic series combo diesel air and water heaters. This controller is not designed to function on its own; a certified compatible screen is required to control the Dieselheat system via this controller.

The controller is certified to work with the following 3rd party screens:

- Redarc Horizon
- Garmin Empirebus

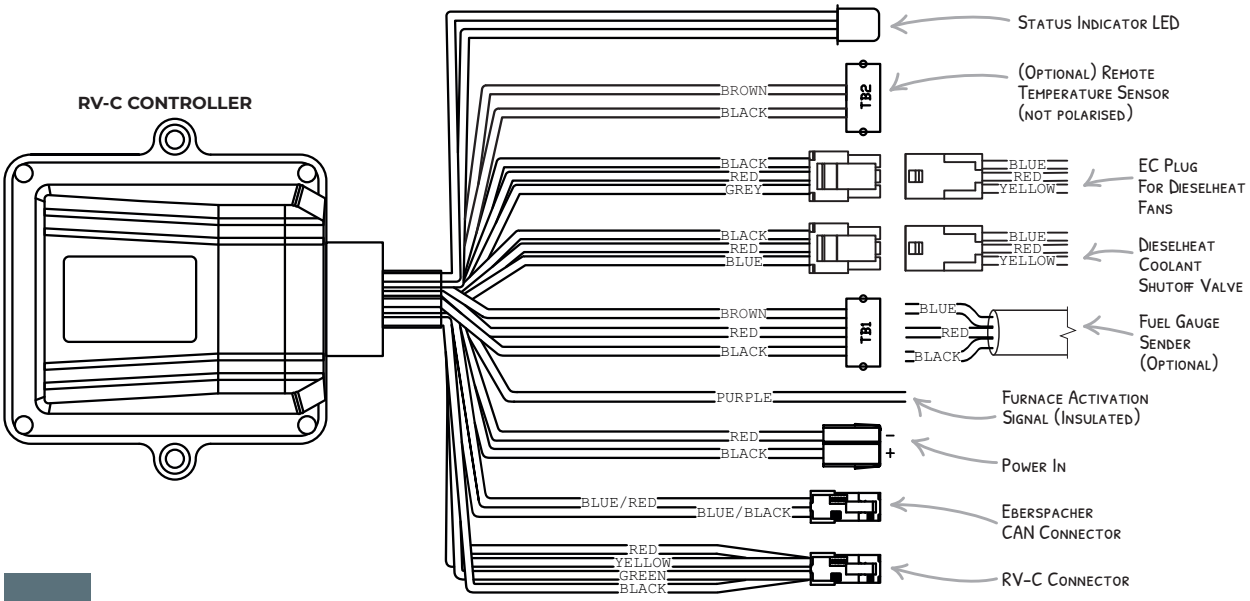
SYSTEM TOPOLOGY



INSTALLATION AND MOUNTING

Secure the controller in the vicinity of the DH Hydronic system via the 2 mounting holes.

WIRING AND CONNECTIONS



REMOTE TEMPERATURE SENSOR

The RV-C thermostat comes pre-configured to use the remote temperature sensor, so it must be connected prior to using the thermostat. Position the sensor at approximately chest height in a position where it can sense the overall room temperature.



FUEL LEVEL SENSOR (OPTIONAL)

The optional Dieselheat fuel level sensor can be installed in the dieselheat black wafer fuel tank in place of the normal mechanical gauge. The sensor can be connected to the RV-C controller which then broadcasts the fuel level to the compatible management screen.



POWER LOOM

For Dieselheat RV-C thermostats, a power loom for the thermostat is supplied. This loom utilises the spare fuse socket in the Eberspacher loom to supply power to the RV-C controller.
Insert the fuse connector into the spare socket in the Eberspacher loom. A 10A fuse is already supplied.
Connect the other end to the RV-C controller loom.



RV-C CONNECTOR CABLE

The RV-C connector cable connects from the RV-C thermostat to the RV-C hub. The RV-C hub must have a 120ohm termination resistor installed in order for RV-C communication to work. All standard Redarc and Garmin hubs include these resistors.



RV-C CONTROLLER PARAMETERS

Controller parameters are stored in the RV-C controller and modify it's behaviour. Parameters are stored in non volatile memory so are only reset to default if the reset command is sent to the RV-C controller either from the Dieselheat screen or an compatible controller.

Param code	Parameter name	Parameter description	Data type	Value definition	Default value
1	FAN_AUTO_MIN	Minimum fan speed for automatic fan mode	uint8	0 - 10. (10 means 100%)	0
2	FAN_AUTO_MAX	Maximum fan speed for automatic fan mode	uint8	1 - 10. (10 means 100%)	10
3	PID_KP*	Proportional gain for automatic fan speed control	uint8	0 - 30	12
4	PID_KI*	Integral gain for automatic fan speed control	uint8	0-15	7
5	PID_KD*	Derivative gain for automatic fan speed control	uint8	0 - 5	0
6	—	Reserved	uint8		
7	HIGH_ALT	High Altitude mode	uint8	0: disabled 1: enabled	0
8	DYNAMIC_SA	Enable dynamic addressing	uint8	0: disabled 1: enabled	1
9	TEMP_SOURCE	Use local temperature sensor or from RV-C	uint8	0: RV-C 1: Local NTC	1
10	TEMP_SRC_INST	Defines the instance value of the ambient temperature source to monitor when TEMP_SOURCE is set to 0.	uint8	1-250	10
11	FUEL_SENS_EN**	Enable broadcasting fuel level value	uint8	0: disabled 1: enabled	0

* Not recommended to be adjusted
**This parameter sets to enabled automatically if a fuel level sensor is detected at over 10% fuel level.

FAULT CODES

If the RV-C controller is communicating with a compatible management screen, faults and alerts will be displayed on the screen. A full list of faults and alerts can be found on the following webpage.

Note: *If RV-C communication is lost for over 3 minutes the controller will flash 6 flashes - in this case check RV-C wiring and the controller screen (power, configuration).*

FLASHING LED FAULT CODES

The Dieselheat RV-C controller will also display common faults to aid installation by flashing sequences on it's LED which is mounted on the loom close to the controller.

RV-C Controller Faults

RV-C controller faults are faults associated with the RV-C controller.

LED Flashes	Flash Count	Description
▬	1	Output 1 short circuit (Fuel Sensor and Coolant Valve Power)
▬ ▬	2	Output 2 short circuit (Furnace Activation)
▬ ▬ ▬	3	Output 3 short circuit (Coolant Valve Signal)
▬ ▬ ▬ ▬	4	Output 4 short circuit (Spare)
▬ ▬ ▬ ▬ ▬	5	Ambient temperature not detected or out of range
▬ ▬ ▬ ▬ ▬ ▬	6	RVC Signal not detected (30sec ping from screen not found)

Eberspacher Furnace Faults

The Eberspacher furnace faults are related to the connected Eberspacher furnace. Only the most common or likely faults to be found during installation are covered here. For a full fault list the full fault code number list on the management screen must be consulted.

LED Flashes	Flash Count	Description
▬ ▪	1 long 1 short	Eberspacher Furnace CAN communication not detected. Check Eberspacher furnace
▬ ▪ ▪	1 long 2 short	Flame cutout – start process / control ranges 0–25%, 25–50%, 50–75%, 75–100%
▬ ▪ ▪ ▪	1 long 3 short	Safety time – exceeded (Unit cannot start, no component fault)
▬ ▪ ▪ ▪ ▪	1 long 4 short	Cold air – timeout
▬ ▪ ▪ ▪ ▪ ▪	1 long 5 short	Operating lock-out – too many safety timeouts
▬ ▪ ▪ ▪ ▪ ▪ ▪	1 long 6 short	Metering pump – Interruption
▬ ▪ ▪ ▪ ▪ ▪ ▪ ▪	1 long 7 short	Metering pump – Short circuit
▬ ▪ ▪ ▪ ▪ ▪ ▪ ▪ ▪	1 long 8 short	Water pump – Short circuit, Water pump – Interruption
▬ ▪ ▪ ▪ ▪ ▪ ▪ ▪ ▪ ▪	1 long 9 short	Control box/Heater cutout due to overvoltage
▬ ▪ ▪ ▪ ▪ ▪ ▪ ▪ ▪ ▪ ▪	1 long 10 short	Control box/Heater cutout due to undervoltage

TWO YEAR PRODUCT WARRANTY

Dieselheat offers a 2 year warranty on this product. Upon receipt of proof of purchase of a product, Dieselheat will, where possible, provide product support via telephone or email.
If Dieselheat determines that the issue necessitates the return of the product for inspection and/or repair, it is your responsibility to uninstall the product and return the product at your cost to Dieselheat. Upon repair of the product, Dieselheat will return the product to you at its cost. It is your responsibility to reinstall the product.

See our full warranty terms on our website.