Products with this symbol (crossed out wheelie bin) cannot be disposed as household waste. Old electrical and electronic equipment must be recycled at a facility capable of handling these products and their waste by-products. If you are purchasing replacement equipment your retailer may offer a 'take back' scheme, or will be able to give details of the nearest approved authorised treatment facility. Proper recycling and waste disposal will help conserve resources whilst preventing detrimental effects on our health and the environment.

WEEE Registered Code: WEE/ED0093VW







ISO 9001 Registered Firm

Smith's Environmental Products Ltd,

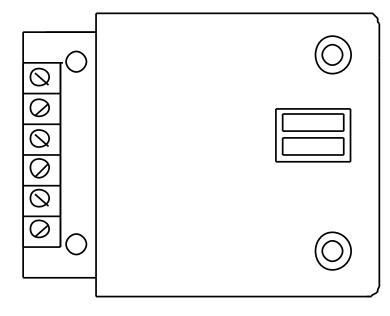
Blackall Industrial Estate, South Woodham Ferrers, Chelmsford Essex CM3 5UW Tel: 01245 324900 After Sales: 01245 324560 Fax: 01245 324422 E-mail: <u>info@smiths-env.com</u> Web: <u>www.smiths-env.com</u> For Ireland (Republic & Northern), contact MT Agencies on 00 353 1 864 3363

In light of our policy of continuous development Smith's Environmental Products Ltd reserve the right to alter specifications without prior notice.



Proportional Heat Output Controller Universal (15°C – 25°C)

Installation and User Guide Compatible with both Universal (UV, See pages 2-3) and Universal Concealed (UVC, See pages 4-5)



User Information.

This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance. Cleaning and user maintenance shall not be made by children without supervision. (Refer EN 60335-1 clause 7.12).



8

Introduction

The proportional heat output controller is for use with the Caspian Universal range of products. This controller replaces the manual controller and automatically reduces fan speed with air temperature rise in the area being heated.

Parameters of speed control by temperature are between 15°C and 25°C. This means at 15°C or lower the fan speed will be 100% and at 25°C or higher the fan will run at an extra low speed to maintain room temperature.

This accessory can also be used in addition with Smith's Adjustable low temperature cut-out.

Warning:

Isolate the power supply to the Caspian unit. *Do not* reconnect the power supply until the installation has been completed.

ALL ELECTRICAL INSTALLATIONS CONNECTIONS MUST COMPLY WITH THE LATEST EDITION OF THE IEE WIRING REGULATIONS (BS7671), AND ANY RELEVANT LOCAL AUTHORITY BYE-LAWS. CHECK THE VOLTAGE ON THE HEATER IS CORRECT FOR YOUR SUPPLY. IF IN DOUBT, CONSULT A QUALIFIED ELECTRICIAN.

Please note the guarantee may be invalidated if this product is not installed and used in accordance with these instructions.

Before commencing with the installation please check contents of box.

- X 1 Proportional controller (With sensor and Caspian UV mounting bracket).
- X 2 Self tapping screws (To fix the controller to the electrical panel)
- X 2 M5 machine screws (To attach bracket to heater)



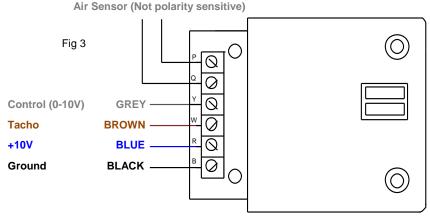
For Installation Instructions Specific to <u>Caspian Universal (UV) 60 / 90 / 120</u> products Please see pages 3-4



For Installation Instructions Specific to the <u>Caspian Universal Concealed (UVC) 90 / 120</u> products See pages 6-7

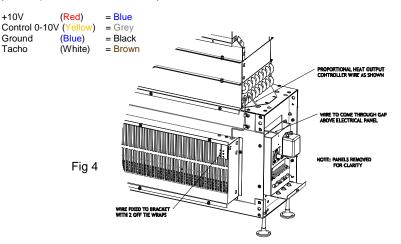
Please note the guarantee may be invalidated if this product is not installed and used in accordance with this guide.

- 6. Attach the proportional heat output controller to the mounting holes show in fig 2.
- 7. Re-connect the four wires from the speed controller to the appropriate connectors on the proportional controller. (See fig 3)



Note:

If your heater was built before October 2014 or the colours shown in this diagram do not match those on your unit please refer to the below Key:

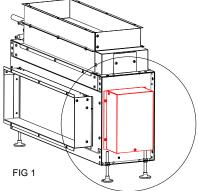


- 8. Cable tie the sensor wire to the bracket in the inlet grille, ensure that the tail of the sensor is mounted freely in the airflow behind the return air grill. (The UV bracket supplied in with the kit can be discarded)
- 9. Route the sensor wire to the proportional controller as shown in figure 4. Connect the sensor wire to the proportion heat output controller (Figure 3)
- 10. Turn on the electrical supply and any other external controls (room stat / timer etc.
- 11. Turn on the boiler and check that the heater is working correctly.
- 12. The fan speed will reduce as the returning air temperature rises.

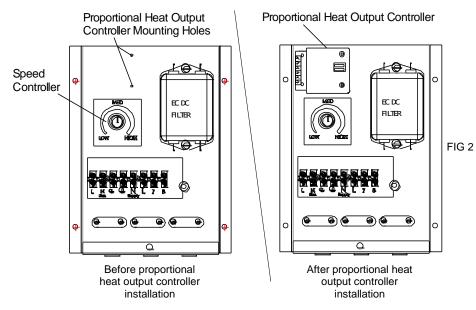
Caspian Universal Concealed (UVC) Installation:

ENSURE THAT THE ELECTRICAL SUPPLY TO THE PRODUCT HAS BEEN ISOLATED

1. Identify and remove the 4 screws that attach the electrical panel cover (Shown in red, Fig 1).



- 2. Remove the screws attaching the electrical panel to the chassis so that it becomes free (See fig 1). **Do not disconnect any wires at this point.**
- 3. Turn the electrical panel over to reveal the circuit board of the speed controller.
- 4. Disconnect the four wires attached to the circuit board on the rear of the controller. Put the two wire thermistor/ sensor wire to one side for later use.
- 5. Refit the electrical panel, ensuring that the 4 wires removed are still accessible.

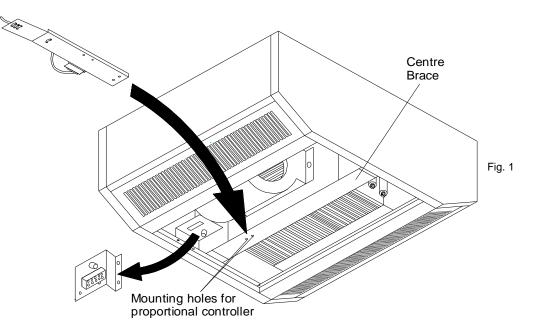


Note: Standard speed controller becomes redundant once the proportional heat output controller is fitted

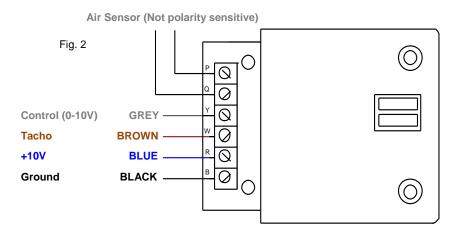
Caspian Universal (UV) Installation:

ENSURE THAT THE ELECTRICAL SUPPLY TO THE PRODUCT HAS BEEN ISOLATED

1. Unlock and remove front access panel of the Caspian UV unit. Keys are provided with the heater.



- 2. Remove the two screws attaching the electrical panel so that it becomes lose (See fig 1). **Do not disconnect any wires at this point.**
- 3. Turn the electrical panel over to reveal the circuit board of the speed controller.
- 4. Disconnect the four wires attached to the circuit board on the rear of the controller.
- 5. Refit the electrical panel, ensuring that the 4 wires removed are still accessible.
- 6. Re-connect the four wires from the speed controller to the appropriate connectors on the proportional controller. (See fig 2)



NOTES

Note:

If your heater was built before October 2014 or the colours shown in this diagram do not match those on your unit please refer to the below Key:

+10V	(Red)	= Blue
Control 0-10V (Yellow)		= Grey
Ground	(Blue)	= Black
Tacho	(White)	= Brown

- 7. Identify the two threaded inserts in the centre brace of the unit; these will be slightly offset to the right (See fig 1)
- 8. With the two screws provided fix the proportional controller bracket supplied in the kit to the threaded inserts. The controller should be on the fan side of the bracket.
- 9. Ensure that the tail of the sensor is mounted freely in the airflow behind the return air grill
- 10. Refit the front access panel and lock with keys provided.
- 11. Turn on the electrical supply and any other external controls (room stat / timer etc.
- 12. Turn on the boiler and check that the heater is working correctly.
- 13. The fan speed will reduce as the returning air temperature rises.