

Note: If you do not wish to set the Hot Water program press the Mode button to return to the normal display and the Control will then be in normal operating mode for Heating.

If HOT WATER is selected for programming

Select programme for EACH day:

Press + or - buttons to select P1, P2 or Pd* for day 1 Press OK to confirm program setting for day 1 Press + or - buttons to select P1, P2 or Pd* for day 2 Press OK to confirm program setting for dav 2

Repeat the procedure for days 3 to 7 Finally, Press OK to confirm program setting for day 7

*If Pd is selected - set required program:

Press - button repeatedly to set the required Night period (eg. to 06.00 - This will be shown at the bottom of display) Press + button repeatedly to set the required Day period (eg. to 09.00 - This will be shown at the bottom of display) Press - button repeatedly to set the required Night period (eq. to 17.00 - This will be shown at the bottom of display) Press + button repeatedly to set the required Day period(eg. to 22.00 - This will be shown at the bottom of display) Finally Press - button repeatedly until 00.00

shows on display Press OK to confirm setting

Repeat this procedure for each day of the week - the settings for each day can be different if required.

After Pressing OK to confirm the Hot Water program setting last weekday (day 7), the display will automatically return to the normal display - showing current room temperature, time and program settings.

The Control is now in the Normal operating mode for both Heating and Hot Water

OTHER CONTROL OPTIONS

Temperature override

The 'day' (ON) temperature setting can be altered when the control is in a 'day' (ON) period of the program. Press + or - to increase or decrease the temperature setting between 5°C and 30°C. Then press Mode button to quit.

The 'night' set-back (OFF) temperature setting can be altered when the control is in a 'night' set-back (OFF) period of the programme. Press + or - to increase or decrease the temperature setting between 5°C and 30°C. Then press Mode button to quit.

The heating control function will automatically return to the set programme at the next switching operation.

Note: The 'day' (ON) temperature setting cannot be altered when the control is in a 'night' set-back (OFF) period and, likewise, the 'night' set-back period cannot be altered when the control is in a 'day' (ON) period.

Mode options

Pressing the Mode button allows the following



Press once: To view today's Hot Water program. If required use +/- buttons to manually override Press twice: To manually switch Heating OFF Press 3 times: To manually switch Heating ON Press 4 times: For Party function - extends current day temperature setting until 00.00 Press 5 times: For Holiday function - to set this use the following procedure:

Use + button to set the number of days holiday - then Press OK to confirm. Set fixed temperature for holiday period then press OK to confirm.

NOTE: Control automatically reverts to standard program after holiday period.

Press OK button to guit any manually selected mode and to revert to normal operating mode.

Low battery

The batteries will run the Transmitter for a period of between 18 months and 2 years depending on amount of signal transmission (which is dependant on settings).

Emergency mode

Should the batteries be allowed to go completely flat (or a construction feature presents a total block to RF signals), when the



Press Mode button to end programming and return to normal display

Receiver does not pick up any radio signal for a period of one hour it will go into an emergency mode condition

During emergency mode, the receiver LED will flash rapidly and the heating will work in a fixed cycle of 3 minutes on and 7 minutes off. Once the batteries are replaced (or the block to the RF signal removed) and the signals are again received the Receiver will revert to the normal ON or OFF operation as required by the Transmitter



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This manual is accurate at the date of printing but will be superseded and should be disregarded if specifications and/or appearances changed in the interests of continued product improvement

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RFTKIT Fitting and User Instructions for RF 7-day 2-channel **Programmable Room Thermostat**

Suitable for

Vortex Pro Kitchen/Utility & External models Vortex Pro Combi & External Combi Models

IMPORTANT

These fitting Instructions supersede all previous instructions supplied for this control and also shown in the Installation instructionsl supplied with the boiler

FITTING INSTRUCTIONS

KIT CONTENTS

The Wireless (RF) Two-channel Programmable Room Thermostat KIT (RFTKIT) contains the MARKINGS ON THE TERMINAL BLOCK. following items:

1 x RFT Twin-channel wireless (RF) Programmable Thermostat unit (to be wall mounted) 1 x FM/2 Receiver/switching unit (to be installed in wall mounted enclosure provided) 1 x Wall mounting enclosure - for FM/2 Receiver unit 1 x Fitting and User instructions

INSTALLATION

unit

1. INSTALL THE FM/2 RECEIVER UNIT

Important: Ensure the electrical supply to the boiler has been isolated before fitting the FM/2 hoiler

1.1 Fit the wall mounted enclosure

Refer to Fig.1 below.

Remove transparent cover

Unscrew the two recessed screws and remove the main cover from the wiring base. Remove the terminal cover from the wiring

base Wiring base



Figure 1. Wall mounted enclosure for RM/2 receiver unit

Position wiring base in required location inside the property. Mark and drill three holes in the wall and fix using suitable wall plugs and screws (not provided).

Connect the either four or five wires required (depending on boiler type and control system used) to the terminal on the wiring base. Refer to Fig.2 Connection diagram

IMPORTANT CONNECT WIRES TO THE CORRECT NUMBERED TERMINALS (AS SHOWN IN FIG.2) IRRESPECTIVE OF THE OTHER

1.2 Fit FM/2 receiver into enclosure Working from the back of the FM/2 unit. carefully prise the unit out of the mounting it is supplied in using a small flat bladed screwdriver.

Once removed from mounting, fit the FM/2 unit on to the wiring base. Locate the five spade terminals of the FM/2 unit in the corresponding spring connectors Push firmly until the terminals are fully into the spring connectors. and the unit is correctly located on the wiring base

Cut the underside of the terminal cover as required to accommodate the cable to the Re-fit the terminal cover - locating the two inner

edges into the groove on either side of the terminal block and sliding it into place.

Re-fit the Main cover to the wiring baselocating it onto the two guide pins on the base and fasten using the two screws provided.

Re-fit the transparent cover.

1.3 Connection to boiler Important: Ensure the electrical supply to the boiler has been isolated before connecting the FM/2 unit

Refer to Fig.2 - Connection diagram

Vortex Pro Kitchen/Utility - System & Nonsystem Models

1. Remove front and top boiler casing panels. Remove the four screws and lift off top cover from control panel. 2. Remove Brown wire link from terminals1 & 4 on the boiler terminal block. 3. Connect the four or five wires from the FM/2 wiring base to terminals on control panel refer to Fig.2 Connection diagram. 4. Re-fit top cover to control panel and fasten with the two screws.

*When using the RFT kit with an 'S-plan' type control system (i.e. using 2 x 2 - port zone valves) there must be NO connection to Terminal 6 in the boiler control panel.

Vortex Pro External Modules 1. Remove the boiler door and top casing panel.

2. Remove the three screws (two at top and one below control panel) and remove cover from left hand end of control panel. 3. Connect the four* or five wires from the FM/2 wiring base. Feed wires through upper cable clamp and connect to terminals in control nanel - refer to Fig 2 Connection diagram 4. Re-fit control panel cover and secure using the three screws.

*When using the RFT kit with an 'S-plan' type control system (i.e. using 2 x 2 - port zone valves) there must be NO connection to Terminal 14 in the boiler control panel.

Vortex Pro Combi – Internal Models

1 Remove front and top boiler casing panels Loosen (do not remove) the four screws securing control panel to the side panels. Hinge the panel forward to access top and rear of control panel. 2. Remove the two screws and lift off the terminal block cover from top of control panel 3. Remove both the Red and Black wire links from terminals 17 & 18 and 19 & 20 on control panel 4. Connect the four wires from the FM/2 wiring base to terminals on control panel - refer to Fig.2 Connection diagram. Note: there must be NO connection made

from terminal 4 on the FM/2 unit.

5. Re-fit terminal block cover on control box and fasten with the two screws.

Vortex Pro Combi – External Models

1. Remove the boiler door, top casing panel and insulation from boiler. 2. Remove the two screws at top of control panel (in cross member). Hinge down control panel front. 3. Connect the four wires from the FM/2 wiring base. Feed wires through lower cable clamp and connect to terminals on control panel refer to Fig.2 Connection diagram. Note: there must be NO connection made from terminal 4 on the FM/2 unit. 4. Re-fit control panel front and secure using the two screws.

IMPORTANT

When the RFT kit is used with the Vortex Pro External Combi boiler, there must be NO electrical connections to terminals L1 and L2 on the Boiler isolation plug - e.g. no programmer. timer or room thermostat should be connected to the plug to control either the heating or hot water functions of the boiler. These are NOT necessary as the RFT programmable room thermostat will control both the heating and hot water operation of the boiler.



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or Vortex Pro Combi e boilers (Internal and

tinu S/MF ent no 4 lenimeT mort ebem External models) there must be NO connection

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receiver will not communicate until the

3. COMMISSIONING (RF LINKING)

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1

Mounting transmitter unit

commissioning process (detailed below) has

(radio frequency) link between the transmitter

Having titled the receiver and transmitter the

set must be commissioned so that the RF

and receiver is established. The transmitter and

Different codes ensure that adjacent RF systems on the same frequency do not conflict

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neen carried out.

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rensmitter unit onto backplate.

2.3 Fitting the Transmitter

spould be maintained.

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notitined buts

are inserted with the correct polarity. Clip

packplate to secure it to the wall surface.

good quality alkaline batteries. Ensure batteries

mounting on backplate, insert the batteries (2 x

Ensure screwdriver lugs are at the top. Before

Select at least two of the mounting holes in the

packbigie inds and gently levering as shown.

by inserting a flat-bladed screwdriver into the

not required, but a minimum temperature

and a background (or night set-back)

temperature for those periods when heating is

(comtort) temperature when heating is required,

RF Obstruction guidelines

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Brick & mortar

stereduction in KIP signal strength after passing through different materials

Transmitter location considerations

Figure 3

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internal & external

Pro Combi e

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12

Re-inforce wall Metallic material 40 -80% 90 -100%

programmed to deliver temperature for a day

ambient room temperature and it can be

30% - 30%

given in Fig.5 to ensure that any obstacles to

Constructional materials within domestic

2.2 Constructional RF obstructions

including direct sunlight (see Fig. 3).

2. INSTALL THE TRANSMITTER

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Figure 2. Connection diagram

FM/2 Receiver

the Vortex Pro External Module control panel

KITCREN/UTILITY DOLLET CONTROL PAREL OF LETTINAL 14 IN

system(i.e using 2 x 2-port zone valves) there must

When using the RFT kit with an 'S-plan' type control

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or9 xerror for Terminal 6 in the Vortex Pro

2.1 Transmitter location

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draughts or any extraneous sources or neat,

transmitter unit. This should be away from

Identify a suitable location to wall-mount the

of radio frequency signals. Refer to guidelines

structures have a varying impact on the strength

the RF signal are minimised

within the property, where it will sense the

The transmitter should be centrally located

Remove the backplate from the transmitter unit

V5V LR6/AA) into the transmitter. Use only

ч_G.

Π.

To commission the Transmitter/receiver set

To set up RF link oliow the procedure below:

Mode button

nothud ent policion talinov .(8.61 estimates) and hold small Black button on Receiver Using the tip of a ballpoint pen, press

On transmitter, press Mode and Menu Release Black button. LED remains on. then again 2-3 seconds later. bns ylatsibammi sarlash DEL flashes immediately and

to tollowing section headed To set up (see Fig.6) Display shows ED 01. Refer buttons together for about 2 seconds

lack button

Press OK. Display shows Fu on (with Energy duty

Press OK. Display shows Fu on. (buiuselt 'no

Once a signal is received by the transmit mode for up to 3 minutes. Transmitter goes into permanent

Receiver the LED will go to an

set up and the Receiver will switch secure RF communications have been intermittent flash. This indicates that

Press OK to quit permanent transmit ransmitter. according to the settings of the

mode and to return to normal operation.

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. 900 - 100

To set up Energy duty (ED)

If required, the ED setting can be

not water and timed thermostatic control of

programmable device giving timed control of

restored without the need to re-commission the

Receiver will still function when mains power is

I he code is stored in 'non-volatile' memory in

The commissioning process transfers a unique

nsulated (e.g. older un-renovated houses) or

03 can be used where the property is less well

to the building heat loss. Settings ED02 and ED

renovated houses) where the boiler is matched

The default setting ED 01 is best suited for well

then press Mode button to quit and

ED 03 = 25.5 minutes

ED 02 = 17 minutes

setunim 8.8 = 10 GE

Press OK to confirm your selection,

to select a new ED value from the

insulated properties (e.g. new or recently

nousiedo ismon or mulei

code from the Transmitter into the Receiver.

Important. The Transmitter is a 7-day

the Receiver. It there is a power cut, the

where the boiler may be undersized.

While ED 01 is displayed, press + or system. The default setting is ED 01. time, to the reaction time of the heating

3

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point, then follow the programming procedure

If you wish to set the Hot Water program at this

display will prompt you to set the Hot

program setting last weekday (day /), the

After Pressing OK to confirm the Heating

the week - the settings for each day can

(e.g. at 23.00) Press - button repeatedly

After setting the OFF time for the last

Repeat this procedure for each day of

Water program for each day.

Press OK to confirm setting

ON (Day) period of the day

at the bottom of the display.

shown on the Program Indicator

The Program periods set will be

shown on the display as above.

ON and OFF times during the day.

Repeat the above steps to set further

osla si sidT. (00.00, ce) visition on the

Liess + priton repeatedly until the

and also on the 24 hour Program

on the display (eg. 06.00).

/ (veb not gouttee

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ol day 1

.mumixem 0°05

Pd* for day 2

Pd* for day 1

mumixem 3°31 of muminim

- IO + SSOI

emperature

following procedure:

Press OK to confirm setting

Teating/Hot Water

6ume

Select programme for EACH day:

Night (set-back) temperature range 5°C

Press OK to confirm night temperature

Note: Day temperature range 15°C minimum to

buttons to adjust night temperature

Press OK to confirm day temperature

Press + or - buttons to adjust day

Set Day and Night temperature levels:

Set HEATING program first by using the

netsW toH = r

gnitseH = 🎹

Press + or - buttons to select

Step 3: Select Heating or Hot Water:

Press OK to contirm weekday setting

Press OK to confirm minutes setting

Liess + or - buttons to adjust weekday

Indicator at the bottom of the display.

This is shown digitally on the display

required first ON (Day) time is shown

Finally, Press OK to confirm programme

Press OK to confirm programme setting

Press + or - buttons to select P1, P2 or

Press OK to confirm programme setting

Press + or - buttons to select P1, P2 or

Repeat the procedure for days 3 to 7

Press - button repeatedly until the

*If Pd is selected - set required program:

required first OFF (Night) time is shown

Finally

visition of the display

be different if required.

Press + or - buttons to adjust minutes

Press OK to confirm hours setting

Step 2: Set Time & Day:

Press Reset or

Press Menu or

process again.

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Barty mode

Remove/insert batteries

Step 1:To enter programming mode:

room temperature, time and program settings.

Pressing the Mode button at any time will take

simply press reset and start the programming

become confused or enter an incorrect setting,

follow the procedure below. If at any point you

To set the required temperatures and times

instructions for further details on use of

Refer to 'Mode Options' section of these

To manually switch heating to ON (normal Day) setting

To manually switch heating to OFF (set-back) setting

Display of current information – time, room temperature

Mode button symbols

to switch Heating OFF, to switch Heating ON,

selections: To view today's Hot Water settings,

Figure 9 - Transmitter buttons

NO

uouna sni-

Hot water setting for the current day.

Party function and Holiday function.

Mode button: Used to make Manual

Menu/OK button –

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Node button

Transmitter Buttons

Transmitter Display

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+ & - Buttons: Used to make settings

Menu/OK button: Used to enter programming

required time and temperature settings on the

There are four main buttons used to make the

automatically changes to show the Hot Water

the Air temperature, Time, Day or Night setting

In normal operating mode, the display shows

Figure 8 - Transmitter display

spoued NO 6ulwous

naicator

NO JOIOS

Heating/ Hot water

rogram indicator

P. 5. 4. 6. 8 10 18 10 18 50 55 54

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secouds in every minute the display

in operation and Heating program. For 5

Transmitter. These are as follows (refer to

(OK) mode or to contirm a setting (OK)

A STTIMSNAAT SHT SNIMMAA90A9

you back to the display showing the current

Press + or - buttons to adjust hours

ruis represents the set-back temperature.

emperature, and where no blocks are visible.

Where blocks are visible this represents day

Along the lower edge of the display is shown a

mergonic representation of today's program.

mode, day or night set-back temperature

program (Pd) for Hot water - or vice versa.

Alternatively, you could use one of the pre-set

pre-set program for both, as they are selected

In this case they do not have to be the same

You can opt to use either of the two pre-set

set your own ON/OFF times for the Heating

NO niege bns 05.80 of 00.80 mort NO si S9

The Transmitter has two pre-set programmes

A remote boiler mounted

A battery powered timer /

8.01 as a strength of the second seco

P1 is ON continuously from 07.00 to 23.00

A third option Pd is available. This allows you to

These are referred to as P1 and

Receiver/switching unit (FM/2) -

for both the Heating ON/OFF times

and Hot Water ON/OFF times.

programmes for Heating and also for Hot water.

programmes for Heating but set your own

separately in the programming process.

the weekday, ambient temperature, operating

In normal operating mode the display will show

selected. See Fig.8

Transmitter Display

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Inermostat

Refer to 'Programming the transmitter'

or Heating and Hot Water are set separately.

shoined emit FIO bus NO ent :TNATROGMI

Water ON time periods and off during the Hot

independent of the heating control function. It

The Hot Water control function is completely

to use the lower 'set-back' temperature during

any time of the day or night, e.g. you may want

Note: A 'set-back' temperature period can be at

is reached and on again when the temperature

(Day setting) or OFF (Night 'set-back' period) -

NO ns nentrie rei emperature - in either an ON

The Heating control function switches the boiler

a lower 'set-back' (Night) temperature during

maintain either the normal (Day) temperature

The Heating control function operates to

central heating

setting during the Heating ON time periods and

Timed control of hot water

frequency (RF) programmable room thermostat

The Grant RFT kit is a 7-day two-channel radio

Transmitter by following the procedure shown

Transmitter, as described above, program the

After installation of the Receiver and

I imed/thermostatic control of

the day when your house is unoccupied.

falls below the set temperature.

the Heating OFF time periods.

coutrol providing both

USER INSTRUCTIONS

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simply switches the hot water on during the Hot

The control set is made up of

Water OFF time periods.

cusinged to match the heating cycle