4 in 1 Digital Thermostat RF

Models: VS20WRF and VS20BRF
VS10WRF and VS10BRF

INSTALLER / USER MANUAL

Contents

Icons used in this manual:

 Safety

 Important info

 Your benefit

For latest PDF installation guide please go to www.salus-controls.com

4x AAA Batteries

Box Contents

1 x Installer / User manual

Fixing screws

VS10WRF

VS20BRF

Product Compliance & Safety Information

INTRODUCTION

Thank you for purchasing the SALUS 4 in 1 room thermostat it must be used with the CO10RF Zigbee Coordinator. The Zigbee coordinator allows communication with other devices in the iT600 RF system range. Other Zigbee devices include wiring centre, system receiver & TRV.

iT600RF Range

SALUS Wiring Centre KL10RF

CO10RF

VS20 Thermostat

RX10RF

TRV10RF

Product Compliance

This product is CE compliant and meets the following EC Directives Electro-Magnetic Compatibility directive 2004/108/EC Low voltage Directive 2006/95/EC

Safety Information

Use in accordance with the regulations The SALUS VS10/20RF is to be used for room control of heating and hot water systems inside the house.

We hope you enjoy this product...

Product Compliance & Safety Information

These instructions are applicable to the SALUS model stated on the front cover of this manual only.

⚠ Warning

This product must be fitted by a competent person, and installation must comply with the guidance, standards and regulations applicable to the city, country or state where the product is installed. Failure to comply with the requirements of the relevant guidance, standards and regulations could lead to injury, death or prosecution.

⚠ Sources of danger

The thermostat must be disconnected from mains supply before removing the cover.

⚠ Emergency

Switch off the voltage to the individual thermostat wring centre or complete system.

⚡ 230V AC

⚠ Warning

Always isolate the AC Mains supply before installing or working on any components that require 230 VAC 50Hz supply.
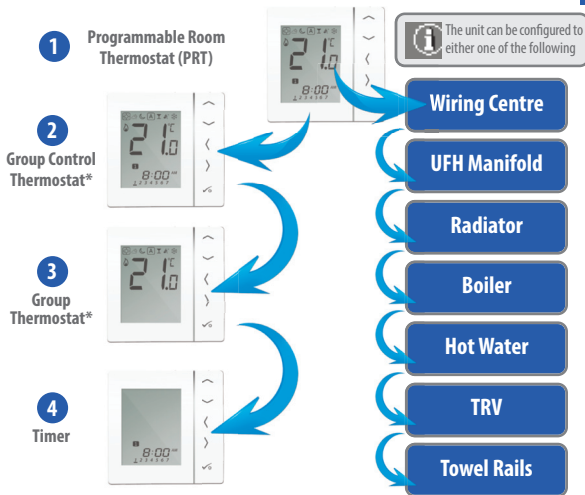
⚠ Installer parameter settings

The SALUS VS10 and VS20 are equipped with installer parameter section (see page 57) this must only be entered by the installer or competent person. Changing these parameters can have a serious effect on your heating system

🖐 For the installer

Please enter any parameter changes in the installer notes section (pages 90)

System Overview - Configuration Options

1 **Programmable Room Thermostat (PRT)**

The unit can be configured to either one of the following

2 **Group Control Thermostat***

3 **Group Thermostat***

4 **Timer**

Wiring Centre

UFH Manifold

Radiator

Boiler

Hot Water

TRV

Towel Rails

* Grouping and timer option only available when used with wiring centre.

System Overview - Configuration Options

Programmable Room Thermostat (PRT)
When configured for PRT (see page 32) it mainly works by itself and allows the user to have separate Time and Temperature control of each zone on the wiring centre, radiator valve or system receiver. Features like Vacation , Party frost mode have to set on each individual thermostat. All PRTs paired with a wiring centre can also use the global heat/cool changeover function if the your system supports this. This is achieved by using the heat/cool changeover connection on the wiring centre (see note 8 on wiring centre guide).

Group Control Thermostat
When configured for a PRT (see page 32) it can operate as a group control thermostat by assigning a group when pairing with the wiring centre this allows central control of up to 7 group thermostats see below, there can be a maximum of 2 groups per 8 zone wiring centre. Permanent temperature override, Holiday, Party, Frost modes, can be selected centrally from the Group Control Thermostat. Holiday will also be applied to a timer if applicable. The group thermostats can be also globally changed from heating to cooling thermostats if you system supports this by using the switched input connection on the WC (see note 8 on the wiring centre guide).

Group Thermostat
When configured as a digital thermostat and assigning a group when pairing with a WC it can operate as a group thermostat (see page 31), in group mode the group thermostat will follow the time schedule and any override modes of the group control thermostat. At least one group control thermostat is required for grouping see above. The group thermostat can have its own programmed temperatures, manual override and also be removed from the group temporarily or permanently.

Timer
When configured to timer (see page 32) the unit will operate as a timer with no temp control. This can be used for hot water control. The timer will also follow Holiday mode from the group control thermostat if applicable.

System Overview - Zigbee Coordinator

ⓘ Zigbee coordinator required for communication between these devices.

KL10RF

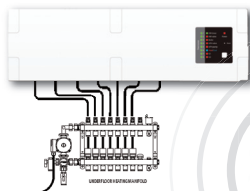VS10 / VS20RF

CO10RF

RX10RF

TRV10RF

System Overview - iT600 System

The thermostat can communicate with all these iT600 devices

System Receiver configured to one room receiver RX2. Refer to system receiver RX10RF.

System Receiver configured to boiler receiver. Refer to system receiver manual RX10RF.

Max 3 TRV per thermostat

System Overview - Hot Water Option

When the unit is configured as a hot water timer (see page 32) there are two methods of connecting the cylinder thermostat.

Unit configured to Hot Water Timer.

Cylinder thermostat options

1 Connected direct to WC (Default)

2 Connected direct to VS10/20RF (requires additional parameter change. See page 57)

System Overview - Hot Water Option

For convenience there is a unique built in option allowing the cylinder thermostat to be connected to either the HW Timer or Wiring Centre.

1 Connected direct to WC (Default)
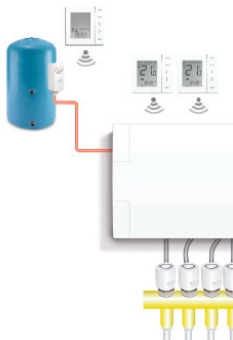
2 Connected direct to VS10RF/20RF
(requires additional parameter change see page 37)

Please refer to note 1 on Wiring Centre guide and pages 15 and 20 for more information.

Installation – Thermostat Mounting

Mounting position and installation
To ensure trouble free operation and efficient control, the unit is best positioned in a draft free area and at 130cm from the floor. Do not position the thermostat near any heat source, behind curtains, direct sunlight or an area of high humidity.
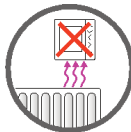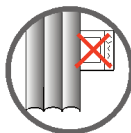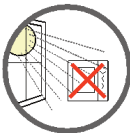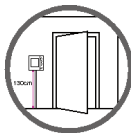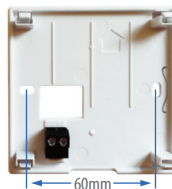

Not to be positioned on an exterior wall.

Installation – Thermostat Mounting VS20WRF
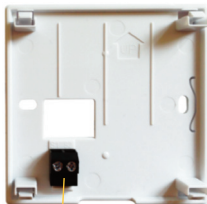

Carefully remove the front housing.

← 60mm →

Installation – Terminal Connections VS20WRF

Understanding your terminal connections

Rear of unit

Sensor Terminals
Can be used for external AIR, Floor sensor when configured as thermostat. Can also be used for Cylinder thermostat when configured for HW. See page 57.

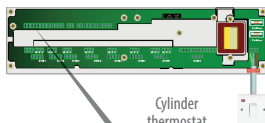## Installation – Thermostat External Sensor VS20WRF

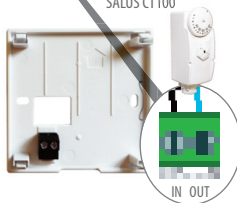SALUS External sensor (Sold separately)

Note: If you are using an external sensor, the unit has to be configured for External Air Sensor or Floor Protection Sensor please see device parameter setting page 57.
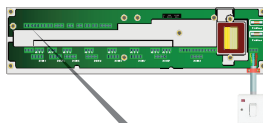
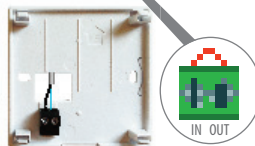## Installation – Hot Water Timer Cylinder Thermostat VS20WRF

Cylinder
thermostat
SALUS CT100

Link must be fitted

IN OUT

IN OUT

WC connected cylinder thermostat (Default)

HW Timer connected cylinder thermostat

Note: The unit can be configured for Cylinder thermostat or connected to the Hot Water Timer. Please see device parameters page 57. For additional Wiring Centre information refer to note 1 on Wiring Centre guide.

Installation – Thermostat Mounting VS20WRF

Once you have connected your choice of external sensor (if applicable)
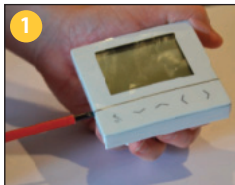

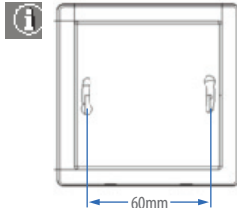

Insert batteries

Note: Please proceed to page 23
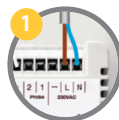
Installation – Thermostat Mounting VS10WRF

Carefully remove the front housing.

60mm

Installation – Terminal Connections VS10WRF

**Understanding your terminal connections**

Rear of unit

Power Terminals 230 Vac
Used for supplying power to the unit. 230V supply can be sourced from the wiring centre or any convenient source.

Sensor Terminals
Can be used for external AIR, Floor sensor when configured as thermostat. Can also be used for Cylinder thermostat when configured for HW.

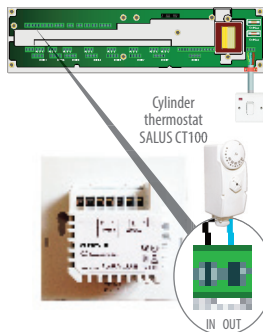## Installation – Thermostat External Sensor VS10WRF
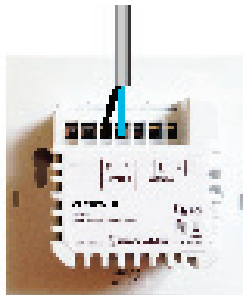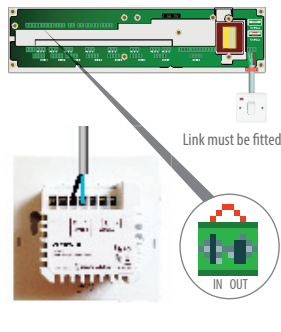
SALUS External sensor (Sold separately)

Note: If you are using an external sensor, the unit has to be configured for External Air Sensor or Floor Protection Sensor please see device parameter setting page 57.

Installation – Hot Water Timer Cylinder Thermostat VS10WRF

Cylinder thermostat SALUS CT100

Link must be fitted

IN   OUT

IN   OUT

WC connected cylinder thermostat (Default)

HW Timer connected cylinder thermostat

Note: The unit can be configured for Cylinder thermostat or connected to the Hot Water Timer. Please see device parameters page 57. For additional Wiring Centre information refer to note 1 on Wiring Centre guide.

Installation – Thermostat Mounting VS10RF

Check that the wiring is completed for:

1 Power Terminals

2 Sensor Terminals (if applicable)

You are ready to secure the rear housing to the wall box

Please use the screws provided

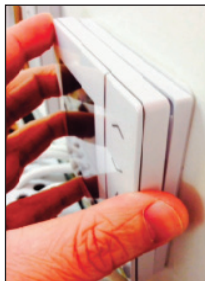Ensure the orientation arrow is pointing upwards.

Installation – Thermostat Mounting

Fit the front housing to the rear housing

Ensure the pin connections are aligned

1 Align the front housing at the bottom edge.

2 Lightly press until you hear a positive click.

Installation – LCD Graphics

ICON	FUNCTION
	BOX means to select the mode e.g. means the current setpoint is Hi temp, means the Hi temp is not selected.
	Sunny: Hi comfortable temperature.
	Cloudy: Middle comfortable temperature.
	Moon: Low comfortable temperature.
A	**Programmable thermostat Program mode indicator:** Indicates program is running, Auto On or Auto Off. For group thermostat this indicates that it is a member of a group.
	Party indicator: When Party mode is active.
	Vacation indicator: When Vacation mode is active
	Frost protection indicator: Frost protection is active, not available in cooling mode (if applicable)
	RF Transmission is active
M1	**Group 1 Control Thermostat**
M2	**Group 2 Control Thermostat**
1	**Group 1 Thermostat**
2	**Group 2 Thermostat**

Installation – LCD Graphics

ICON	FUNCTION
	Heat indicator: Indicates heat is required.
	Cool mode indicator: Indicates cooling is required (if applicable)
88.8	**Temperature indicator:** Display the room temperature. Display the set-temp. Also used to show the other information.
	Temporary manual override indicator: If the set temperature is changed when in program mode, the hand will appear until the next program start time.
1 2	**Programs number indicator:** In AUTO program mode or Temporary override is running, it means the current program running.
1 2 3 4 5 6 7	**Day indication:** 1 = Monday

Installation – LCD Graphics

ICON	FUNCTION
	Hot Water (HW) indicator: Unit has been configured for HW Timer.
	Hot Water (HW) indicator: Indicates that there is Hot Water demand.
A	**HW Program mode indicator:** Indicates program is running.
1	**HW Mode indicator:** Mode for 1 period of HW a day, from Program 1 ON to Program 3 OFF.
ON	**HW Mode indicator:** Indicates continuously On.
OFF	**HW Mode indicator:** Indicates continuously Off.
B	**HW Mode indicator:** Indicates Boost +1hr override.

Installation – LCD Graphics

ICON	FUNCTION
	Floor sensor probe indicator Show only when Air + Floor sensor is connected.
	Low battery indicator: Batteries need to be replaced.
	Setting indicator: Indicate the unit is in setting mode when program setting. Indicate the manual mode.
	Keylock indicator: Shows that keys are inactive.

Installation – User Interface

KEY	FUNCTION
⌃ OR ⌄	1. Increase or decrease setpoint temperature. 2. Increase or decrease Day, Clock, Timer, Party, Holiday and Boost. 3. Select installer parameter value.
⟨ OR ⟩	1. Mode selection. 2. Long press to return to home display without saving. 3. Short press to return to the previous screen when it is in user/installer setting mode.
✓	1. OK key: Short press to confirm selection. 2. Long press to save and exit. 3. Long press to enter the user settings.
⌃ + ⌄ LONG PRESS	Lock/Unlock
✓ + ⟨ ⟩ LONG PRESS	Enter Installer parameter settings

Installation - Graphics Key

Press once

xx → Press x amount of times

Hold for five seconds

Flashing

Short press to back up ‹

Short press to save and
long press to save and exit ✓

Installation – First Power Up
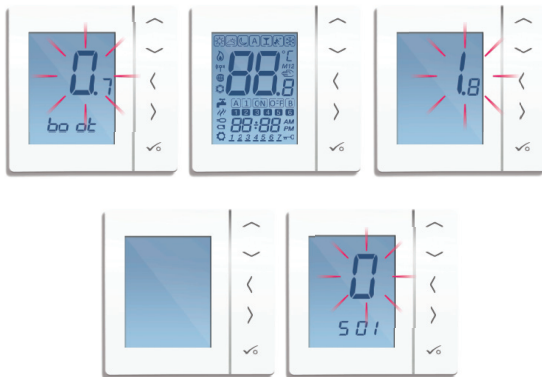
Installation - System Setup

System setup checklist

1 The Zigbee coordinator must be in pairing mode.
Before starting the pairing, make sure the light is flashing on the coordinator by holding the button for 5 seconds. For more information refer to the coordinator instruction manual.

2 The device that you intend to pair with must be ready to accept pairing.
Please refer to pages 33-45 and the relevant device installation guides.

Installation – System Parameters

You are now ready to configure the unit

using the system parameter table below.

SX	FUNCTION	SYSTEM SETTING	DEFINITION	DEFAULT
S01	System Unit Type	0	Programmable Stat (PRT)	0
		1	Digital Thermostat	
		2	HW Timer	
S02	What does unit Communicate within the iT600 system	0*	It600 Wiring Centre*	0
		1	It600 radiator valve	
		2	System Receiver set for RX2	
		3**	System Receiver set to RX1**	

*Grouping is available on the wiring centre only please refer to page 6. Additionally you must have a PRT per group for grouping to operate. Two groups are the maximum allowed per wiring centre.

** This setting is used when there is a system receiver only in the system. If there is a system receiver set to RX1 used along with wiring centre, radiator valves and system receiver set to RX2 then RX1 will communicate automatically to the thermostat connected to these other devices.

Installation - System Setup

Selecting what type of unit

Use ∧ or ∨ to select the type of unit. After selection has been made, press ✓ to confirm.

- *0* — Programmable Stat (PRT)
- *1* — Digital Thermostat
- *2* — HW Timer

5 01

Selecting what unit to pair with

Use ∧ or ∨ to select the type of unit to pair with.

- *0* — Wiring Centre. Page 33
- *1* — Radiator Valve. Page 37
- *2* — System Receiver Configured RX2. Page 41
- *3* — System Receiver Only configure RX1. Page 44

5 02

Installation - Pairing with Wiring Centre

Wiring
Centre

Checklist

1 The Zigbee coordinator must be in pairing mode.

2 Ensure the wiring centre and optional system receiver
(Configured to RX1) for remote boiler switch are powered up.
Note: The wiring centre and system receivers will automatically join
Zigbee network when powered up and the Zigbee coordinator is in pair
mode. Red LED on Wiring Centre and RX1 will go steady when the
devices have joined the Zigbee network.

3 If more than one wiring centre is in the system, establish and note the wiring
centre number by pressing the network key for 1 second. The wiring centre
number will flash.

Installation - Pairing with Wiring Centre

Use ⌃ to select the wiring centre number to pair with.

If you are using groups, use ⌃ to select group number of each group required. If unit is stand alone then please select --

Group 1

Group 1

ort

ort

t
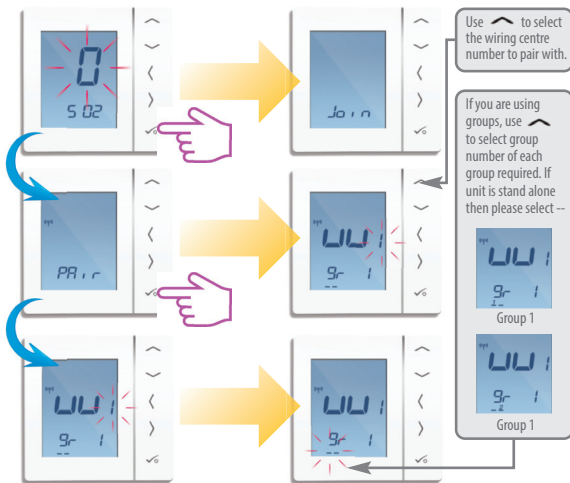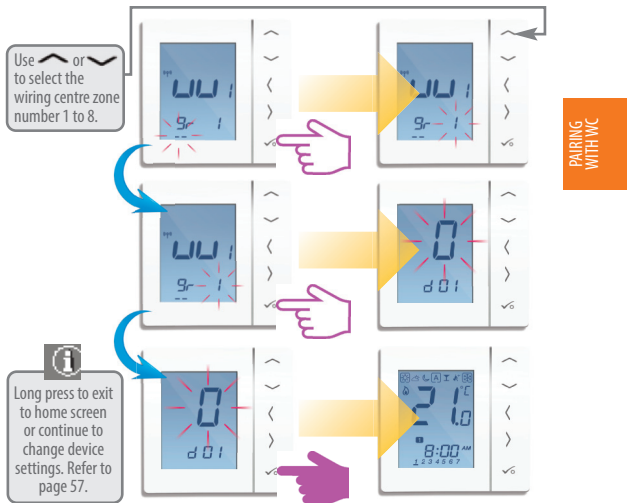
Installation - Testing the pairing with the RF WC
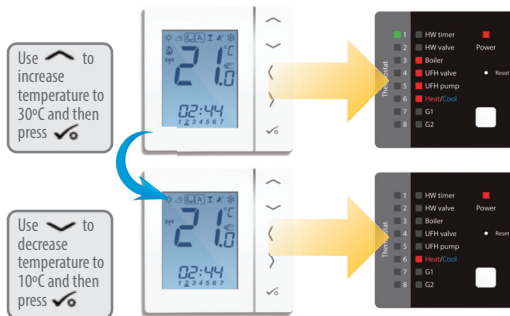
Use ∧ to increase temperature to 30ºC and then press ✓₀

Use ∨ to decrease temperature to 10ºC and then press ✓₀

ⓘ If you are using the optional system receiver configured to RX1 please check that the green light goes on when the temperature is raised and off when reduced.

ⓘ If pairing for your system is complete, please take the coordinator out of pair mode. Press for 5 seconds and light will stop flashing.

Installation - Pairing the Radiator Valve(s)

Radiator
Valves

Checklist

1 The Zigbee coordinator must be in pairing mode.

2 Ensure that the radiator valves are in pairing mode (Refer to TRV10RF manual).
A maximum of 3 radiator valves can be used with 1 thermostat. Pairing of
radiator valve. Please pair TRV's on a room by room basis.

3 If you are using the optional system receiver configured to RX1 for remote boiler
switching. Ensure this has been powered up and the red flashing LED has gone
steady.

Installation - Pairing with Radiator Valve

Press 〉 to start the pairing process.
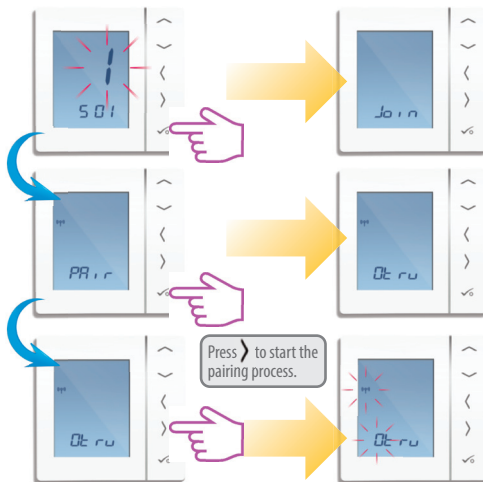
Installation - Pairing with the Radiator Valve

The pre fix number on the TRV will change as the TRV(s) pair.

Once all TRV's have paired press ✓o

Long press to exit to home screen or continue to change device settings. Refer to page 57.

PAIRING WITH TRV
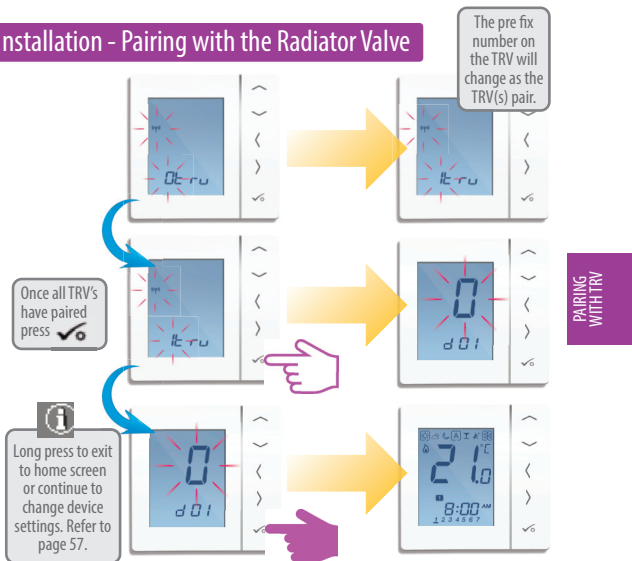
Installation - Testing RF Pairing

Use ∧ to increase temperature to 30°C and then press ✓

You should hear the valve open. Once complete, press key on radiator valve for 1 second.

Green LED OPEN

Use ∨ to decrease temperature to 10°C and then press ✓

You should hear the valve open. Once complete, press key on radiator valve for 1 second.

Red LED CLOSED

(i) If you are using the optional system receiver configured to RX1 please check that the green light goes on when the temperature is raised and off when reduced.

(i) If pairing for your system is complete, please take the coordinator out of pair mode. Press for 5 seconds and light will stop flashing.

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Installation - Pairing with System Receiver RX2

System Receiver Configured to RX2 single room receiver.

Refer to system receiver manual.

Checklist

1 The coordinator must be in pairing mode.

2 The system receiver (RX2) is powered up and the red LED is steady. Refer to RX10RF manual.

3 If you are using the optional system receiver configured to RX1 for remote boiler switching. Ensure this has been powered up and the red flashing LED has gone steady. Refer to RX10RF manual.

Installation - Pairing with System Receiver RX2

Installation - Testing Pairing with System Receiver RX2

Long press to exit to home screen or continue to change device settings. Refer to page 40.

Use ∧ to increase temperature to 30ºC and then press ✓

Green LED on

If you are using the optional system receiver configured to RX1 please check that the green light goes on when the temperature is raised and off when reduced.

Use ∨ to decrease temperature to 10ºC and then press ✓

Green LED off

If pairing for your system is complete, please take the coordinator out of pair mode. Press for 5 seconds and light will stop flashing.

PAIRING WITH RX2

Installation - Pairing with System Receiver RX1 only

Used if system receiver is used on its own.

System Receiver configured to boiler receiver RX1. Refer to system receiver manual.

Checklist

1 The coordinator must be in pairing mode.

2 The system receiver (Configured to RX1) is powered up and the red LED is steady. The system receiver will auto join the Zigbee network on power up when the Zigbee coordinator is in pairing mode.

> ℹ **This configuration option is applicable if there is only a system receiver RX1 in the system.**

Installation - Pairing with System Receiver RX1 only
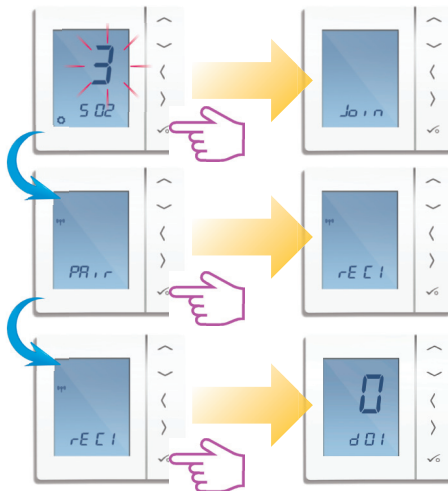
PAIRING
WITH RX1

Installation - Testing Pairing with System Receiver RX1 only

Long press to exit to home screen or continue to change device settings. Refer to page 57.

Use ⌃ to increase temperature to 30ºC and then press ✓

Green LED on

Use ⌄ to decrease temperature to 10ºC and then press ✓

Green LED off
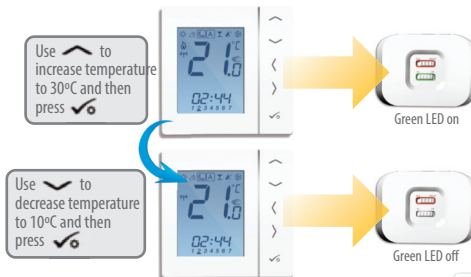
If pairing for your system is complete, please take the coordinator out of pair mode. Press for 5 seconds and light will stop flashing.

Installation - Modifying System Parameters

Unit will
follow power
up sequence
on page 29.

You are now ready
to enter or change
your system
parameters.
Refer to page 31.
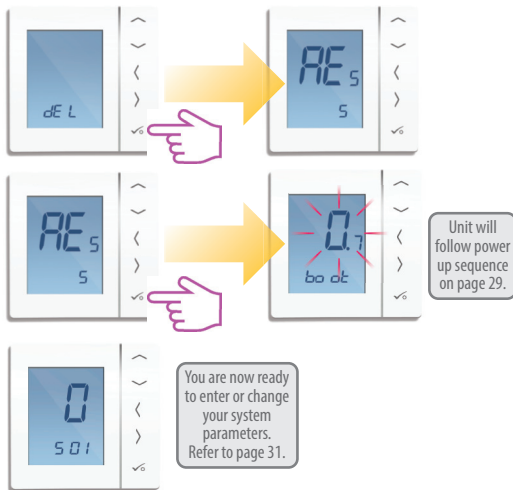
Installation - Checking System Configuration

ℹ️ To check that the complete system is communicating and has been configured correctly, you can use identify mode.

ℹ️ Using identify from the coordinator will show all products that are connected to your system.

ℹ️ Press for 1 second to activate identify mode.

ℹ️ Press again for 1 second to cancel identify. Identify mode will time out after 10 minutes.

SALUS

SALUS

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Installation - Checking System Configuration

To check that the relevant system is communicating and has been configured correctly, you can use identify mode.

Please follow step 1 on page 47. When in identify mode all receivers and the coordinator related to the individual PRT will flash.

Press tick to cancel identify. Identify mode will time out after 10 minutes.

PRT

System has no grouping

PRT   PRT   PRT   PRT   PRT

Installation - Checking System Configuration

To check that the relevant system is communicating and has been configured correctly, you can use identify mode.

Please follow step 1 on page 47. When in identify mode all receivers, group thermostats and the coordinator will flash.

Group Control Thermostat
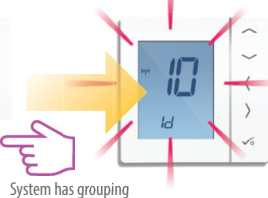
System has grouping

Press tick to cancel identify. Identify mode will time out after 10 minutes.
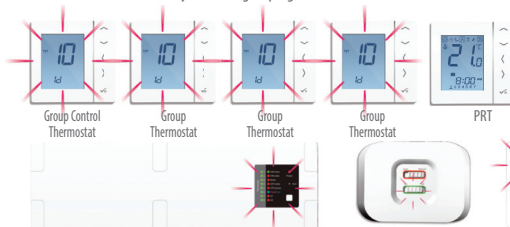
Group Control Thermostat

Group Thermostat

Group Thermostat

Group Thermostat

PRT

Installation - Checking System Configuration

To check that the relevant system is communicating and has been configured correctly, you can use identify mode.

Please follow step 1 on page 47. When in identify mode all receivers, control group thermostat and the coordinator will flash.

Press tick to cancel identify. Identify mode will time out after 10 minutes.

Group Thermostat

System has grouping

Group Control Thermostat

Group Thermostat

Group Thermostat

Group Thermostat

PRT

Installation - Checking System Configuration

To check that the complete system is communicating and has been configured correctly, you can use identify mode.

Using identify from the wiring centre will show all products that are connected to your wiring centre. Then wiring centre number will also be shown.

Press for 5 second to activate identify mode.

Press again for 1 second to cancel identify. Identify mode will time out after 10 minutes.
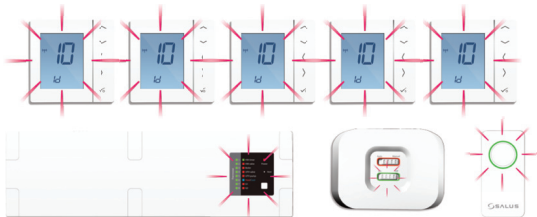
Installation - Checking System Configuration

To check that the relevant system is communicating and has been configured correctly, you can use identify mode.

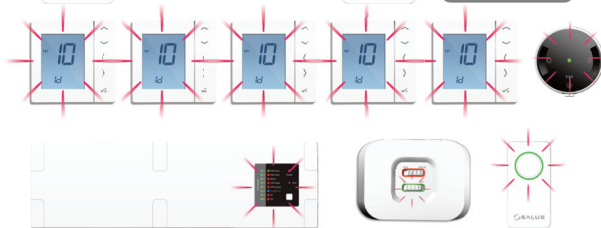Please follow step 1 on page 47. When in identify mode all radiator valves, receivers and the coordinator related to the individual PRT will flash.

PRT

System has no grouping

Press tick to cancel identify. Identify mode will time out after 10 minutes.

PRT PRT PRT PRT
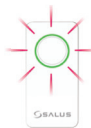
Installation - Replacing product

ⓘ Before replacing any device it must be removed from the Zigbee network.
Please ensure the Zigbee coordinator is also in pairing mode.

Deleting Wiring Centre from the network.
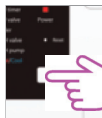
⚠ Press for 15 seconds to delete the wiring centre from the network.

⚠ All LED's will flash momentarily and then the wiring centre will be deleted from the network. All thermostats relating to the wiring centre will need to be reconfigured and paired with the new wiring centre.

ⓘ If the wiring centre cannot be deleted as above, use the method below.

46

PS ㅠㅠ

ⓘ Please follow step 1 on page 47. Select password 46.

UU

dE L

ⓘ You are now ready to install your new wiring centre.

Installation - Replacing product

Before replacing any device it must be removed from the Zigbee network. Please ensure the Zigbee coordinator is also in pairing mode.

Deleting thermostat from the network.

Please follow step 1 on page 47. Select password 48.

Your thermostat will now be deleted from the network. You are now ready to install your new thermostat. Please note password 48 can also be used to delete other devices that are offline.

Note: If replacing a thermostat connected to the wiring centre, you can use the replacement method.
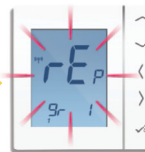
The unit previously connected to the wiring centre will be replaced.

56 VS20WRF and VS20BRF Installer Manual

Installation - Device parameters

Press all three buttons simultaneously

INSTALLATION

ⓘ
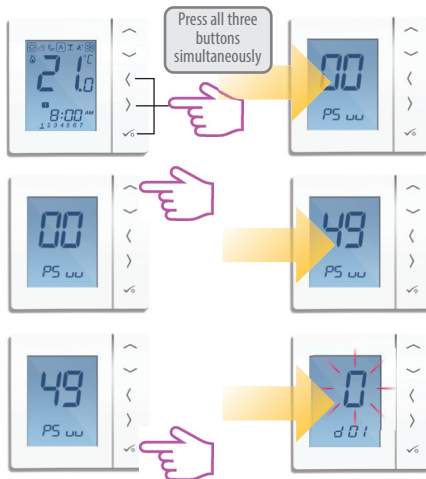
Device parameters will follow system parameters on first power up. If you need to change device parameters follow the steps below.

Please note, your system parameters will be shown first but cannot be edited in this section. To change the system parameters please refer to page 47.

Installation - Device Parameters

DX	FUNCTION	SYSTEM SETTING	DEFINITION	DEFAULT
D01	Heating Control	0	Pulse Width Modulation	0
		1	On-Off 0.5 Deg C +/- 0.25 Deg C	
		2	On-Off 1.0 Deg C +/- 0.5 Deg C	
D02	Room Temperature Offset	-3.0 to 3.0 Deg C	Temperature Offset from Measured Temperature to Compensate for any error	0 Deg C
D03	Sensor probe or Cylinder thermostat connection	0	Sensor/Cyl stat not Connected	0
		1	Sensor/Cyl stat Connected	
D04	Sensor probe used as air sensor or floor sensor	0	D03 must be set to 1 then external sensor be used as Air sensor. There will be no internal temp measurement	0
		1	D03 must be set to 1 then external sensor used for floor protection. Internal temp is measured by stat	
D05	Cooling Control	1	On-Off 0.5 Deg C +/- 0.25 Deg C	2
		2	On-Off 1.0 Deg C +/- 0.5 Deg C	
D06	Actuator type	0	NO Normally Open	1
		1	NC Normally Closed	
D07	Valve protection	0	Disable	1
		1	Enable	

Installation - Device Parameters continued

INSTALLATION

DX	FUNCTION	SYSTEM SETTING	DEFINITION	DEFAULT
D08	Frost Set point Temperature	5-17 Deg C	Required Temperature for frost protection and holiday mode	5 Deg
D09	Hour Format	0	12	1
		1	24	
D10	N/A	N/A	N/A	N/A
D11	Daylight Saving Time (DST)	0	OFF	1
		1	ON	
D12	Heating Set point Limit	5-35 Deg C	Maximum temp that can be set for heating	35 Deg C
D13	Cooling Set point Limit	5-40 Deg C	Maximum temp that can be set for Cooling	5 Deg C
D14	Floor sensor High Limit Temperature	6-45 Deg C	Output relay will be switched off when temp is reached for floor protection	27 Deg C
D15	Floor sensor Low Limit Temperature	6-45 Deg C	Output relay will be switched on when temp is reached for floor protection	10 Deg C
D16	Floor sensor Limit for cooling	6-45 Deg C	Output relay will be switched off when temp is reached for floor protection	6 Deg C

Installation - Error Codes

Error Code	Prog	Non-Prog	HW
01	Comm Connection link failure	Comm Connection link failure	Comm Connection link failure
02	Comm Connection link failure	Comm Connection link failure	Comm Connection link failure
03	Floor sensor open	Floor sensor open	-
04	Floor sensor short	Floor sensor short	-
05	Prog/Non-prog/HW thermostat lost link with Coordinator (Displayed on related Thermostat) Comm Connection link failure	Prog/Non-prog/HW thermostat lost link with Coordinator (Displayed on related Thermostat) Comm Connection link failure	HW lost link with Coordinator
06	Prog/Non-prog/HW thermostat lost link with WC (Displayed on related Thermostat)	Prog/Non-prog/HW thermostat lost link with WC (Displayed on related Thermostat)	HW lost link with WC
07	Prog/Non-prog Thermostat lost link with TRV (Displayed on related Thermostat)	Prog/Non-prog Thermostat lost link with TRV (Displayed on related Thermostat)	-
08	Prog/Non-prog Thermostat lost link with Receiver RX 1 (Displayed on related Thermostat)	Prog/Non-prog Thermostat lost link with Receiver RX 1 (Displayed on related Thermostat)	-
09	Prog/Non-prog Thermostat lost link with Receiver RX 2 (Displayed on related Thermostat)	Prog/Non-prog Thermostat lost link with Receiver RX 2 (Displayed on related Thermostat)	-

If there is more than 1 error, then on Error page, press UP to show other error codes.
e.g. Err 03 05 ===> 3 errors Error code 05 (1st one)
Press Up to show Err 03 08 ===> 3 errors Error code 08 (2nd one)
Press Up again to show Err 03 09 ===> 3 errors Error code 09 (3rd one)
Press Up again to show Err 03 05 again......
Press OK to exit Error page back to Home display.

Installation - Error Codes

INSTALLATION

| Error Code	Prog	Non-Prog	HW
10	WC lost link with hot water timer (Displayed on all relevant thermostats and also hot water timer)	Comm Connection link failure (Displayed on all relevant thermostats and also hot water timer)	Comm Connection link failure (Displayed on all relevant thermostats and also hot water timer)
11-18	WC lost link with zone 11=Zone 1, 12=Zone 2 etc Displayed on all connected thermostats	Comm Connection link failure 11=Zone 1, 12=Zone 2 etc Displayed on all connected thermostats	-
19	WC lost link with coordinator (Displayed on all connected thermostats and hot water timer)	WC lost link with coordinator (Displayed on all connected thermostats and hot water timer)	WC lost link with coordinator (Displayed on all connected thermostats and hot water timer)
20	WC lost link with receiver RX1 (Displayed on all connected thermostats and hot water timer)	WC lost link with receiver RX1 (Displayed on all connected thermostats and hot water timer)	WC lost link with receiver RX1 (Displayed on all connected thermostats and hot water timer)
21	TRV lost link with coordinator (Displayed on all connected thermostats)	TRV lost link with coordinator (Displayed on all connected thermostats)	-
22	TRV low battery (Displayed on all connected thermostats)	TRV low battery (Displayed on all connected thermostats)	-
23	Invalid TRV	Invalid TRV	-
24	Unit is rejected by wiring centre	Unit is rejected by wiring centre	-

Installation - Technical Detail

Model	VS10RF / VS20RF
Type	Electronic programmable room thermostat, digital room thermostat and hot water RF
Programming Modes	User selectable for 5/2, ALL and Individual day options
Program Number	1-6 Selectable
Modes	Party, Vacation, Program and Frost
Override	Permanent and temporary
Frost Protection	5ºC Adjustable
Power Source	230V AC 50Hz VS10RF - 4 x AAA VS20RF
Temperature Scale	5 to 35ºC, tolerance 0.5ºC
Heat/Cool	Global changeover using communication bus and external input to the wiring centre
Sensor	Air or floor protection. Cylinder thermostat when configured for hot water timer.
Device Parameters	See page 57
Operating Temperature	0 to 50ºC
Storage Temperature	-20 to 60ºC
Frequency	2.4HGz Zigbee

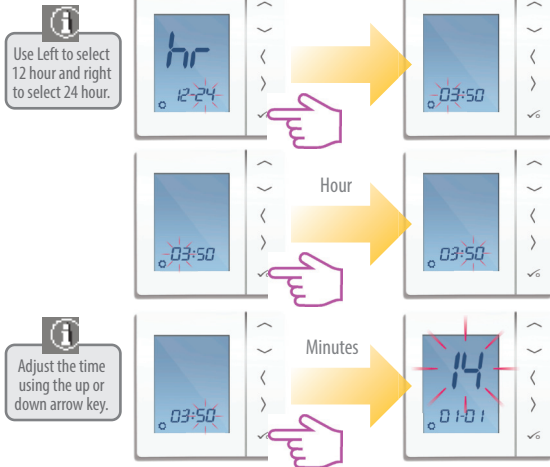# User Guide - Setting time and date
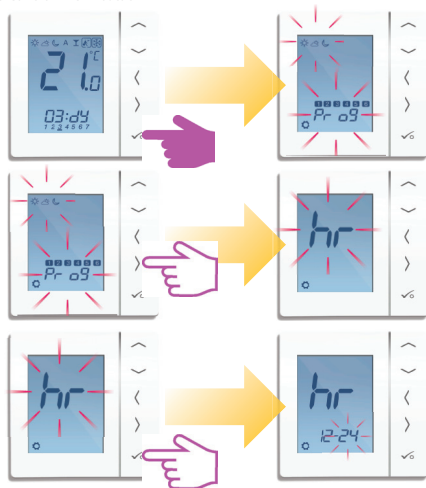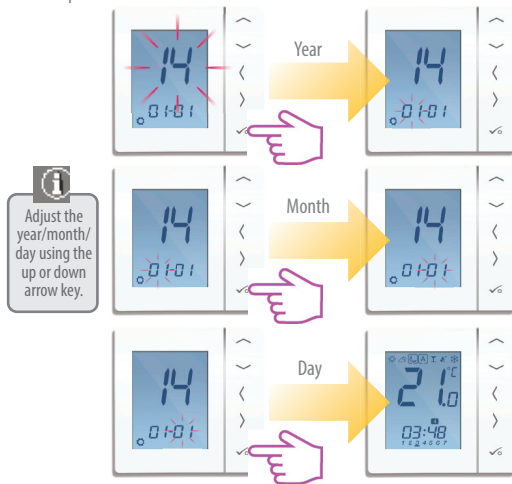
PRT and Group Control Thermostat

User Guide - Setting time and date

PRT and Group Control Thermostat

Use Left to select 12 hour and right to select 24 hour.

Adjust the time using the up or down arrow key.

Hour

Minutes

User Guide - Setting time and date

PRT and Group Control Thermostat

Year

Month

Adjust the year/month/ day using the up or down arrow key.

Day

User Guide - Understanding Temperature Levels Heating

PRT, Group Control Thermostat and Group Thermostat

Highest Temperature typically used for early morning and early evening. **Typically 21 Deg C**

Mid Temperature typically used for times of day when you are active around the home **Typically 19 Deg C**

Lower Temperature typically used for unoccupied or sleep times. **Typically 17 Deg C for UFH or 15 Deg C for radiators**

Frost Temperature typically used for Periods of long absence or holidays. **Typically 5 Deg**

Your thermostat comes preset for the above temperatures. These can be adjusted please see page 71

User Guide - Understanding Temperature Levels Cooling

PRT, Group Control Thermostat and Group Thermostat

Cooling is only available if your system supports this and the relevant configurations and connections have been made to the unit.

Occupied Temperature. Typically 22ºC

Unoccupied Temperature Typically 40ºC
This avoids cooling being active when the property is unoccupied.
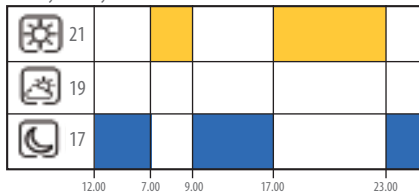
Evening Temperature Typically 24ºC

Your thermostat comes preset for the above temperatures.
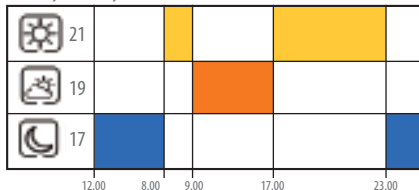These can be adjusted please see page 71

USER GUIDE

User Guide - Default Heating Schedule

PRT and Group Control Thermostat

Monday to Friday

	12.00	7.00	9.00	17.00	23.00
☼ 21					
19					
☾ 17					

Saturday to Sunday

	12.00	8.00	9.00	17.00	23.00
☼ 21					
19					
☾ 17					

> ⓘ If using grouping, the schedule from the group control thermostat will be applied to group members.

User Guide - Default Cooling Schedule

PRT and Group Control Thermostat

Monday to Friday

Saturday to Sunday

If using grouping, the schedule from the group control thermostat will be applied to group members.

User Guide - Graphics Key

Press once

xx → Press x amount of times

Hold for five seconds

Flashing
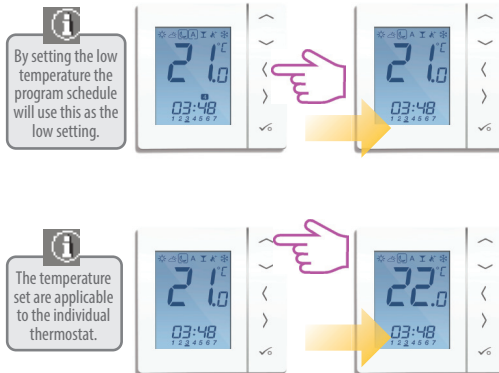
Short press to back up ‹

Short press to save and
long press to save and exit ✓○

User Guide - Setting required temp levels

PRT, Group Control Thermostat and Group Thermostat

Setting the low temperature

By setting the low temperature the program schedule will use this as the low setting.

The temperature set are applicable to the individual thermostat.

User Guide - Setting required temp levels

PRT, Group Control Thermostat and Group Thermostat

> By setting the low temperature the programs will use this as the low setting.

Repeat for

Move back to **A** once temperature levels have been chosen.

> The temperature set are applicable to the individual thermostat.
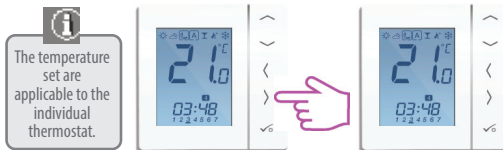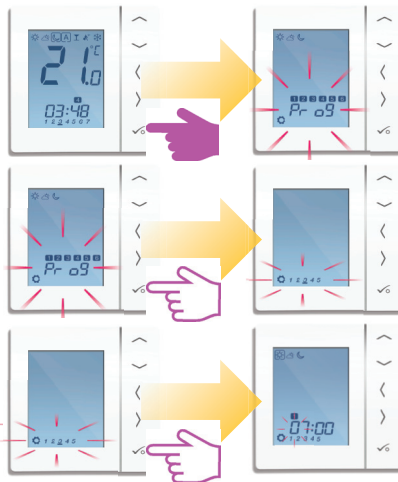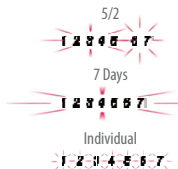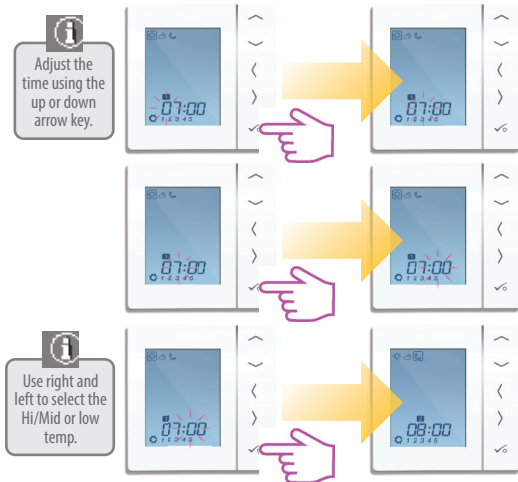
User Guide – Setting the Temperature Schedule

If using grouping, the schedule from the group control thermostat will be applied to group members.

Use right and left to select the day of the programs.

5/2

7 Days

Individual

User Guide – Setting the Temperature Schedule

Adjust the time using the up or down arrow key.

Use right and left to select the Hi/Mid or low temp.

User Guide – Setting the Temperature Schedule

Repeat through to program 4.
If you require a 5th or 6th program enter
a time and select your temperature

☀ ⛅ 🌙

To remove a program out set the time to --:--.

When you set the ☀ ⛅ 🌙 temperature the schedule will respond
to those temperatures see page 71 on how to change ☀ ⛅ 🌙

User Guide - Temporary Override

PRT, Group Control Thermostat and Group Thermostat

Use the up or down arrow key to view your program set temperature.

The temporary override is applicable to the thermostat being changed only.

Temporary override allows you to increase the temperature or decrease it to the desired setting until it reverts back on the next program time.

Use the up or down arrow key to adjust the temperature to the setting you desire.

User Guide - Temporary Override

PRT, Group Control Thermostat and Group Thermostat

Confirm the temporary set temperature.
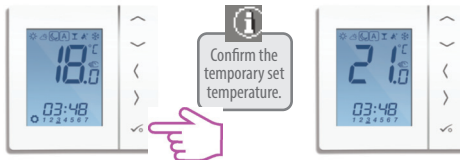
To cancel temporary override press ⟨ or ⟩
See below.

User Guide - Permanent Override

PRT and Group Control Thermostat
Setting permanent low temperature

Move
from

To

Use the up or
down arrow key
to view your set
temperature.
See page 71.
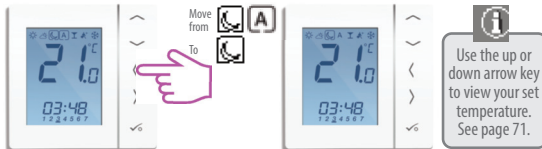
Permanent override in a control group thermostat
will also affect the group thermostats unless they
are removed from the group. See page 64.

Repeat for

if required

To cancel permanent override select [A]
See below.

To adjust your
permanent override
temperature, follow
the steps on page 71.
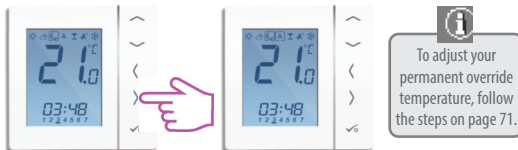
User Guide - Party Mode

PRT and Group Control Thermostat

The party mode is an option that enables 🎛 temperature for a period of time you select up to 9hr 50min.

Party Mode set in a Control Group Thermostat will also affect group thermostats unless they are removed from the group. See page 64.

Use the right arrow to select the party mode.

Use the up arrow to select the hr/min.

Press tick to confirm and it will start to count down .

User Guide - Holiday Mode
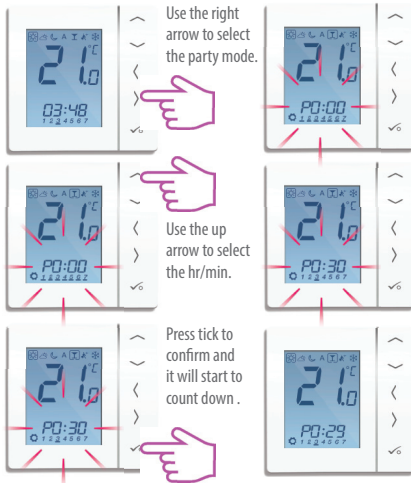
Use the right arrow to select the holiday mode.

Holiday set in a Control Group Thermostat will also affect group thermostats unless they are removed from the group. See page 82.

Use the up arrow to select how many days to be off for .

Press tick to confirm and it will start the holiday count down.
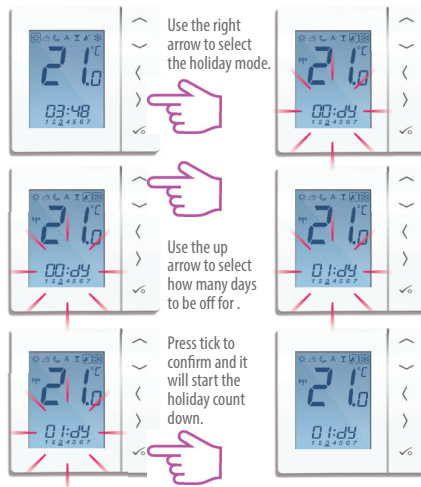
User Guide - Frost Protection

Use the right arrow to select the frost mode.

Frost protection set in a Control Group Thermostat will also affect group thermostats unless they are removed from the group.
See page 82.

Use the up arrow to select the frost protection temperature.

Press tick to confirm the temperature that has been set to.

VS20WRF and VS20BRF Installer Manual **81**
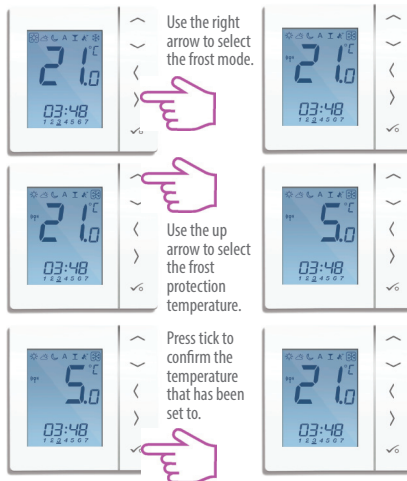
User Guide - Group Thermostat Overview

When a group thermostat is in [A] it will follow the mode status of the group control thermostat.

When a group thermostat is in [A] and the group control thermostat is in [I] or [⚡] then the group thermostat will follow this mode. [I] or [⚡] will be displayed.

The group thermostat has now left the group and is in permanent ☾ To adjust the set temperature, please refer to page 71.

The group thermostat has now left the group and is in permanent ⛱ To adjust the set temperature, please refer to page 71.

User Guide - Group Thermostat Overview

The group thermostat has now left the group and is in permanent ❄️ To adjust the set temperature, please refer to page 71.

The group thermostat has now left the group and is in permanent ❄️ To adjust the set temperature, please refer to page 71.

The group thermostat has been returned to **A** it will follow the mode status of the group control thermostat.

User Guide - Hot Water (Optional) Mode Selection

Mode selection

Hot water will be
on once per day.
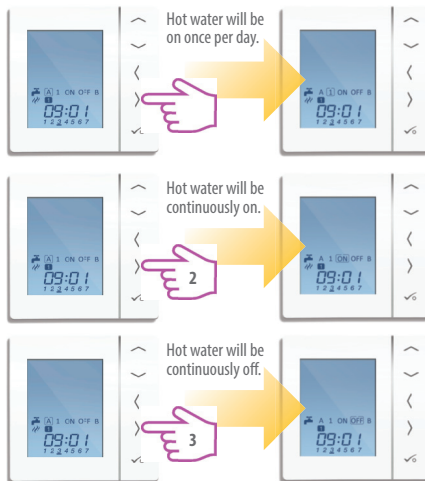
When Ⓐ is selected, the hot water timer will follow the program schedule. See page 86.

Hot water will be
continuously on.

Hot water will
follow Holiday
mode from the
group control
thermostat.
will be
displayed.

Hot water will be
continuously off.

User Guide - Hot Water Boost
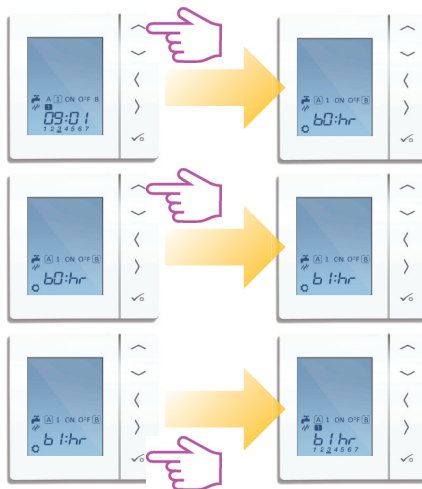
User Guide - Default Hot Water Schedule

Your hot water timer comes preset with the times below.
These can be adjusted. See next page.

Monday to Friday
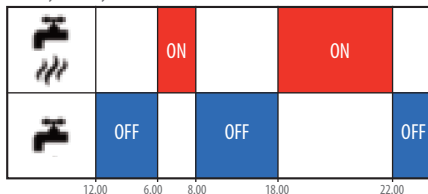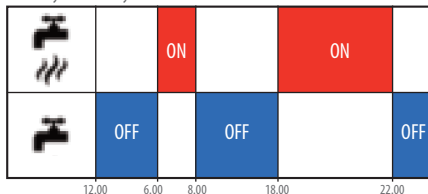
		ON		ON	
	OFF		OFF		OFF

12.00   6.00   8.00   18.00   22.00

Saturday and Sunday

		ON		ON	
	OFF		OFF		OFF

12.00   6.00   8.00   18.00   22.00

User Guide - Setting Hot Water Times

5/2

7 Days

Individual

User Guide - Setting Hot Water Times

Repeat these steps for programs 2 3

User Guide - Setting Hot Water Times

Repeat these steps for programs

Installer Notes

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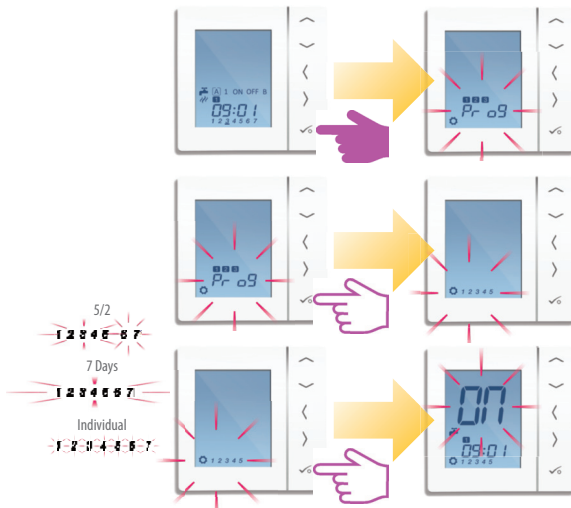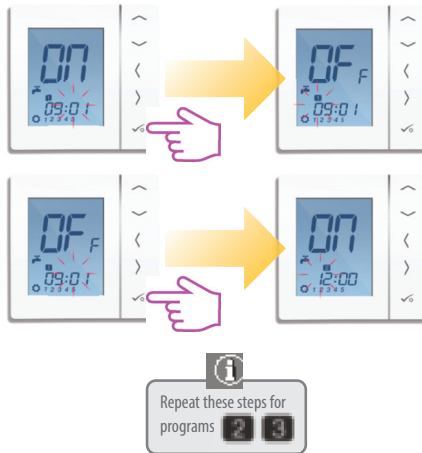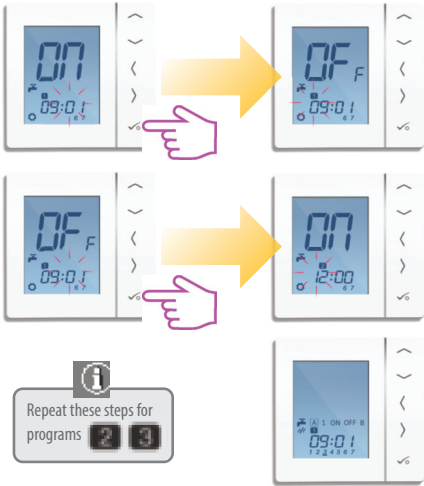
Warranty

SALUS Controls warrants that this product will be free from any defect in materials or workmanship, and shall perform in accordance with its specification, for a period of five years from the date of installation. SALUS Controls sole liability for breach of this warranty will be (at its option) to repair or replace the defective product.

Customer Name: ....

Customer Address: ....

.... Post Code: ....

Tel No: .... Email: ....

Engineers Company: ....

Tel No: .... Email: ....

Instalation Date: ....

Engineers Name: ....

Engineers Signature: ....

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For PDF Installation guide please go to www.salus-controls.com

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