

# SALUS<sup>®</sup>

CONTROLS PLC

## *iT500BM Internet Thermostat*



INSTALLER MANUAL

# 1. Product compliance & safety information

These instructions are applicable to the SALUS Controls model stated on the front cover of this manual only, and must not be used with any other make or model.

This accessory must be fitted by a competent person, and installation must comply with the guidance provided in the current IEE Wiring Regulations and current Building Regulations. Failure to comply with the requirements of these publications could lead to prosecution.



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

**When fitting batteries, do not mix old and new batteries together.  
Do not use rechargeable batteries.**

Please leave these instructions with the end user where they should be kept in a safe place for future reference.

## 2. Installation of the boiler module

### RXVBC605

Page 03 - 05



### RXWBC605

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### RXBC605

Page 10 - 11



## INTRODUCTION

The RXVBC605 is an integral plug-in RF boiler control. The RF boiler control is a direct replacement for the basic time clock or blanking plate usually supplied with the boiler. Installing the RF boiler control takes minutes. Once installed, you will benefit from all the control features of the Salus room thermostat.

## INTEGRAL RF BOILER CONTROL

The Integral RF boiler control is the RF receiving unit for your RF room thermostat. This unit uses a plug-in connection to connect directly to your boiler and provides the ON/OFF switching.

## Features

- LED status indication
- Plug-in connection to boiler
- 3 position switch
- 868 MHz communication

## Mounting the RF Integral Boiler Control to the boiler

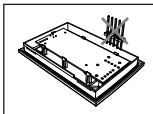
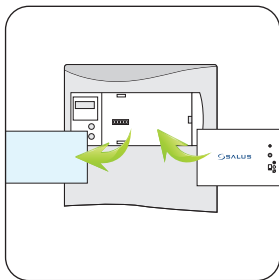
### **DANGER!**

- 24V & 230V: Do not touch electrical components or circuits
- Isolate mains electricity supply before starting any work and observe all relevant safety precautions
- Follow electro static discharge precaution
- Do not touch any visible PCB parts or components

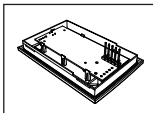


## 2. Installation of the boiler module RXVBC605

### RXVBC605 RECEIVER



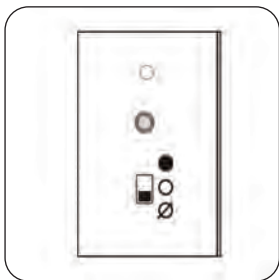
For ECOTEC post April 2012 -  
remove and discard pins.




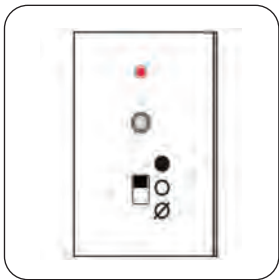
For ECOTEC models prior to  
April 2012, use as supplied.


1. Switch off the boiler at its main supply.
2. Remove cover panel or existing control.
3. Insert the integral boiler control ensuring correct location of the rear connection pins.

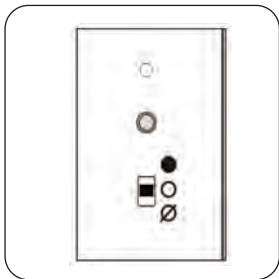
## 2. Installation of the boiler module RXVBC605



Before switching the boiler on at its mains supply, ensure the module switch is in the OFF  position.



To ensure the boiler control is connected properly, please now move the switch to ON . The boiler should now go on and the LED on your boiler control should illuminate.



Now move the switch back to AUTO .

## 2. Installation of the boiler module RXWBC605

### RXWBC605 RECEIVER

#### INTRODUCTION

The RXWBC605 comprises of an integral plug-in RF boiler control. The RF boiler control is a direct replacement for the basic time clock or blanking plate usually supplied with the boiler. Installing the RF boiler control takes minutes. Once installed, you will benefit from all the control features of the Salus thermostat.

#### INTEGRAL RF BOILER CONTROL

The Integral RF boiler control is the RF receiving unit for your thermostat. This unit uses a plug-in connection to connect directly to your boiler and provides the ON/OFF switching.

#### Features

- LED status indication
- Plug-in connection to boiler
- 3 position switch
- 868 MHz communication

#### Mounting the RF Integral Boiler Control to the boiler

#### **DANGER!**

- 24V & 230V: Do not touch electrical components or circuits
- Isolate mains electricity supply before starting any work and observe all relevant safety precautions
- Follow electro static discharge precaution
- Do not touch any visible PCB parts or components

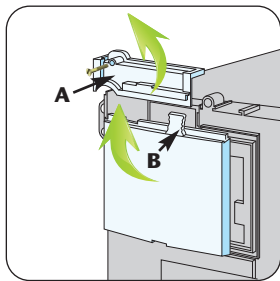


## 2. Installation of the boiler module RXWBC605

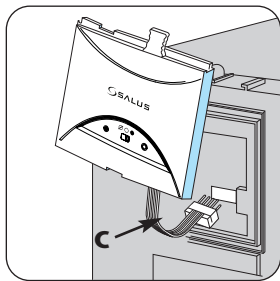
### RXWBC605 RECEIVER

#### RF Transmission

The receiving range between your thermostat and the RF Boiler Control is around 100 metres in open air, however many factors can affect the RF transmission and shorten the operating distance, e.g. shielding by thick walls, foil back plasterboard, metal objects such as filing cabinets, general RF interference, and so on. The operating range is generally around 30 metres, which is large enough for most household applications.



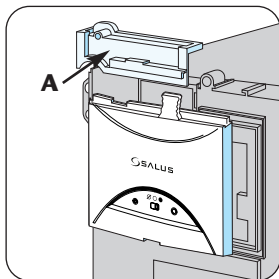
1. Switch off the boiler at its main supply. Remove the outer casing and front fascia to allow access to the main control panel.
2. Remove cover panel A upwards to remove.
3. Pull top tab B upwards, then outwards to remove blanking plate or existing control.



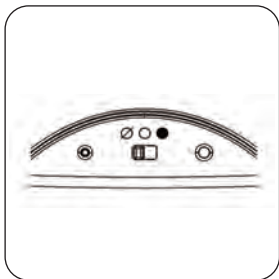
First plug in the connector block C ensuring correct orientation. Remember to ensure the block is fully connected.


## 2. Installation of the boiler module RXWBC605

### RXWBC605 RECEIVER



Now locate the boiler control's four hooks then press in and down. Replace cover panel A. Replace the front fascia and boiler's outer casing.

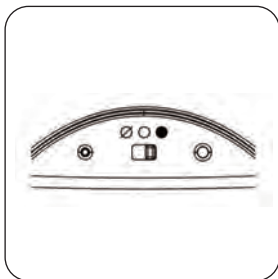


Before switching the boiler on at its mains supply, ensure the module switch is in the OFF position .

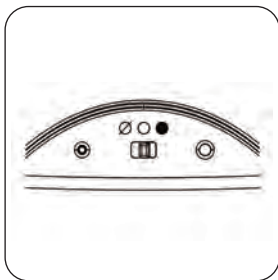


## 2. Installation of the boiler module RXWBC605

### RXWBC605 RECEIVER



To ensure the boiler control is connected properly, please now move the switch to ON ●. The boiler should now fire and the LED on the your boiler control should illuminate.



Now move the switch back to AUTO ○.

## 2. Installation of the boiler module RXBC605

### RXBC605 RECEIVER

#### INTRODUCTION

The RXBC605 comprises of an integral plug-in RF boiler control. The RF boiler control is a direct replacement for the basic time clock or blanking plate usually supplied with the boiler. Installing the RF boiler control takes minutes. Once installed, you will benefit from all the control features of the Salus thermostat.

#### INTEGRAL RF BOILER CONTROL

The Integral RF boiler control is the RF receiving unit for your thermostat. This unit uses a plug-in connection to connect directly to your boiler and provides the ON/OFF switching.

#### Features

- LED status indication
- Plug-in connection to boiler
- 3 position switch
- 868 MHz communication

#### **DANGER!**

**Always isolate the AC Mains supply before opening or removing the unit from the boiler.**



## 2. Installation of the boiler module RXBC605

### RXBC605 RECEIVER

#### INSTALLING THE RF BOILER CONTROL

1. Remove the front panel from the boiler.
2. Pull out the mechanical timer.
3. Do not remove boiler loop.
4. Connect the electrical plug.
5. Push fit boiler control into housing.
6. Replace the front panel ensuring a good seal is made.
7. Power up the boiler and check the correct operation.



#### Connections:

- 1 - Neutral input
- 2 - Live input
- 3 - Common input
- 4 - Normally open output

### 3. Installation of wall bracket docking (optional)



Attach the wall mounting bracket to a suitable wall using the fittings supplied and the built-in level.



After first ensuring that the bracket is secure, clip the iT500 into place by aligning the recess on the back of the unit to the bracket and clipping into place.



Once clipped into place, ensure the unit is securely seated on the bracket.

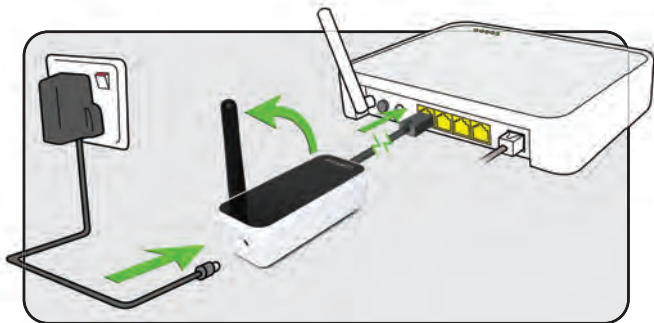
**i** For best results mount the iT500 1.5m from ground level.

## 4. Desk mount option iT500



For the desk mounted option, simply clip the clear stand supplied separately into the back of the unit.

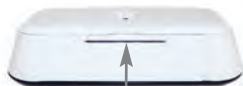
## 5. Connecting the Gateway to your existing router



Constant green light when the iT500 is connected to the SALUS Controls Server.

## 6. Inserting the batteries in the iT500 Thermostat

1



Remove the battery cover from the base of the iT500 Thermostat.

2



Make a note of the serial number printed in the base of the iT500 Thermostat.

3



With the unit face down, insert the first battery supplied into the right hand side of the base of the iT500 Thermostat.

4



Insert the second battery supplied into the left hand side of the base of the iT500 Thermostat.

## 6. Inserting the batteries in the iT500 Thermostat

5



Ensure the batteries are fitted securely in the base of the iT500 Thermostat.

6



Replace the battery cover to the base of the iT500 Thermostat.



Why not make a note of your STA number here for future reference.

S T A          -



# 7. Setting up the iT500 Thermostat

After powering up iT500 for the first time the display will go through the following sequence.




OTA\* Revision number



iT500 Software revision












The globe icon  will appear when the unit automatically connects to the internet via the SALUS iTG500 Gateway. This should take approximately 20 seconds.

**i**

\* Over The Air operated software

## 8. LCD Overview


LCD ICONS	DESCRIPTION	FUNCTION
1 2 3 4 5 6 7	Day of the week	Displays the number of the day of the week. 1 being Monday
88 <sup>°</sup> <sub>B</sub>	Temperature indicator	Displays set or measured temperature
88:88	Clock display	Displays time
1 2 3 4 5 6	Program number indicator	Displays the number of the active (selected) program
	Heat mode indicator	Indicates heating output is turned on*
	Heat indicator	Indicates heating zone
	Hot water mode indicator	Indicates hot water output is turned on*
	RF signal indicator	Indicates the unit is transmitting a wireless signal to the iT500RX or is receiving the signal from the iT300*
	Touch lock indicator	Indicates touch lock is activated
	Battery status	Indicates battery is low
	Holiday indicator	Indicates holiday operation mode is selected
	Internet indicator	Indicates connection to iTG500 and SALUS server
AUTO	AUTO indicator	Automatic program mode
OFF	OFF indicator	Off mode
	Setting indicator	Manual override or settings mode

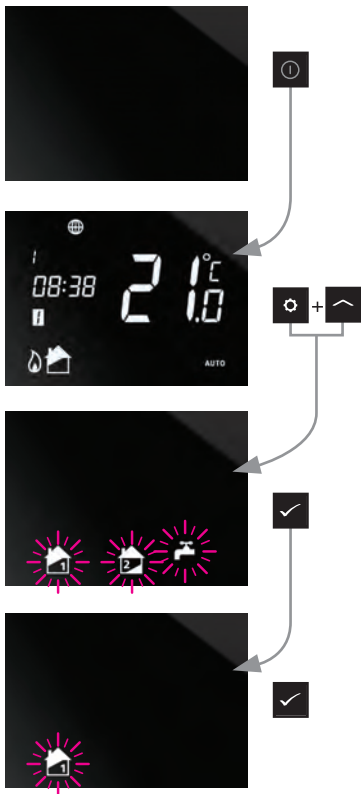
## System configuration - iT500 time zone\* and DST



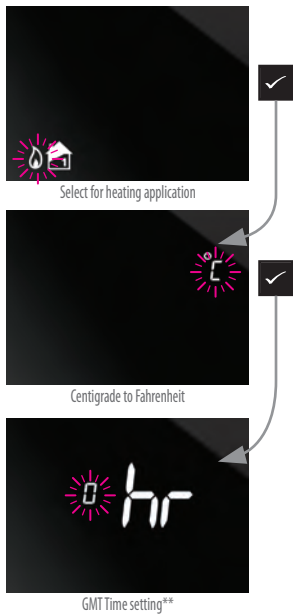
\* If the iT500 is to be used in the UK, then there is no need to enter system configuration setup, please proceed to bottom of page 17.



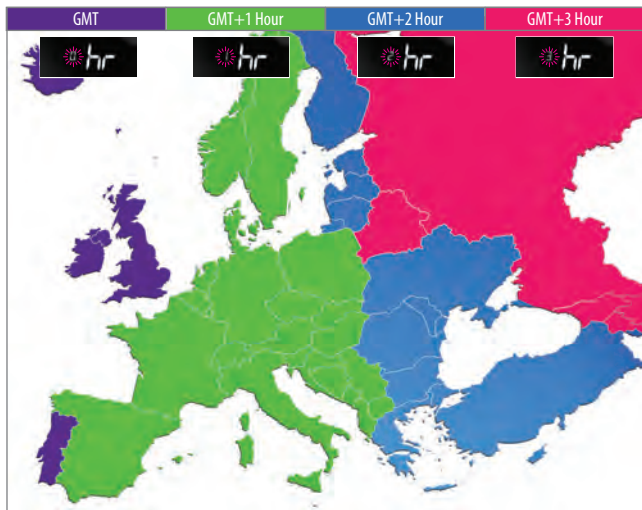
At any time press and hold  for 5 seconds to return to the home screen.



## System configuration - iT500 time zone\* and DST



# 9. European Time Zones



UK  
IRELAND  
PORTUGAL  
ICELAND\*

AUSTRIA  
POLAND  
GERMANY  
CZECH  
SPAIN  
FRANCE  
ITALY  
SWITZERLAND

LUXEMBOURG  
HOLLAND  
BELGIUM  
DENMARK  
SWEDEN  
NORWAY  
MALTA  
CROATIA  
SERBIA  
BOSNIA  
SLOVENIA

ESTONIA  
TURKEY  
CYPRUS  
GREECE  
ROMANIA  
RUSSIA  
UKRAINE

BULGARIA  
LITHUANIA  
BELARUS\*  
FINLAND  
MOLDOVA  
LATVIA

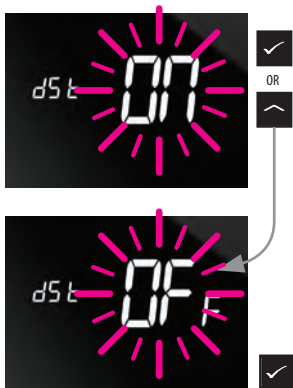
RUSSIA\*



The countries marked with \* do not observe Daylight Saving Time

With DST (daylight saving time) ON will automatically change your time from summer to winter.

On is default

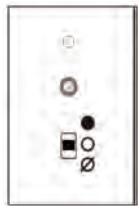


## 10. Pairing the iT500 with boiler modules



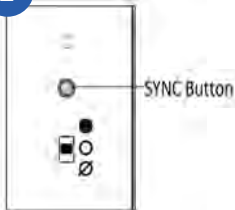
## 10. Pairing your RXVBC605

1



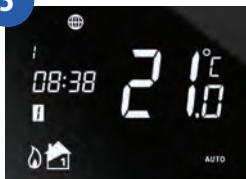
Ensure the switch on the RF integral boiler module is in the AUTO 

2

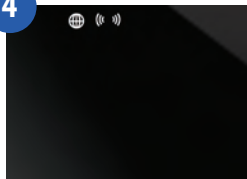


Gently press and hold the SYNC button with a blunt object. After 3 seconds the Boiler Control LED will flash once every second to indicate it is ready to pair and ready to receive a signal from the thermostat\*.

3



4



## 10. Pairing your RXVBC605

5



i

When the RXVBC605 Receiver and the iT500 Thermostat have paired then the LED on the RXVBC605 will go out. Press  OR  to return to the home screen.

## 10. User controls for your RXVBC605

### USER CONTROLS

#### Integral RF Boiler Control

A. LED This will be on when the thermostat is demanding heat.

B. Mode Switch

ON – Boiler will be on continuous

AUTO – will follow instructions from the thermostat

OFF – Boiler is off

C. SYNC Button - This is used only for pairing the RF communications.

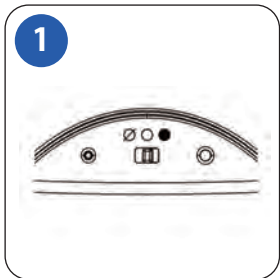
6





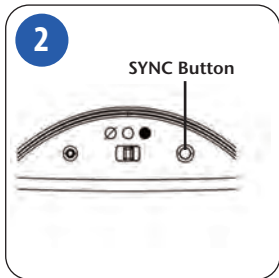
## 10. Pairing your RXWBC605

1



Ensure the switch on the RF integral boiler module is in the AUTO 

2

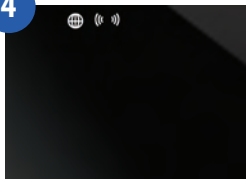


Gently press and hold the SYNC button with a blunt object. After 3 seconds the Boiler Control LED will flash once every second to indicate it is ready to pair and ready to receive a signal from the thermostat\*.

3

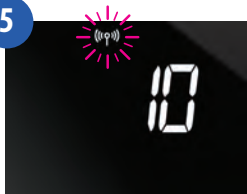


4



## 10. Pairing your RXWBC605

5



i

When the RXWBC605 Receiver and the iT500 Thermostat have paired then the LED on the RXWBC605 will go out. Press  OR  to return to the home screen.

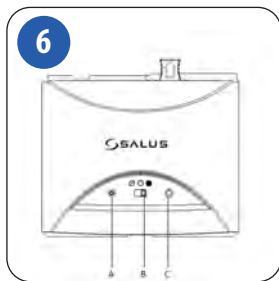
## 10. User controls for your RXWBC605

### USER CONTROLS

#### Integral RF Boiler Control

- A. LED - This LED will be on when the thermostat is demanding heat.
- B. Mode Switch ON – Boiler will be on continuous AUTO – will follow time and temperature program in the transmitter OFF – Boiler is off.
- C. SYNC Button - This is used only for pairing the RF communications.

6



## 10. Pairing your RXBC605

1



MANUAL

AUTO

Ensure the switch on the RF integral boiler module is in the AUTO 

2



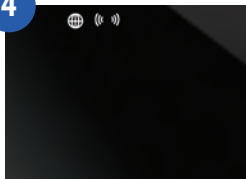
SYNC Button

Gently press and hold the SYNC button with a blunt object. After 3 seconds the Boiler Control LED will flash once every second to indicate it is ready to pair and ready to receive a signal from the thermostat\*.

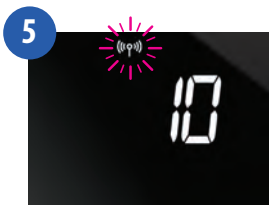
3




4



## 10. Pairing your RXBC605



When the RXBC605 Receiver and the iT500 Thermostat have paired then the LED on the RXBC605 will go out. Press  OR  to return to the home screen.

# 11. Registering and operating your iT500 online

1



Go to the SALUS controls website. [www.salus-controls.com](http://www.salus-controls.com) and select your relevant country

2



Click on the register iT500 icon on the left hand side of your country's website

# 11. Registering and operating your iT500 online

3



Click on REGISTER

4



Fill in the online form and click REGISTER

# 11. Registering and operating your iT500 online

5



The above screen will show and a confirmation email will be sent to you

6



You will receive a confirmation email. Click on the link to complete your registration

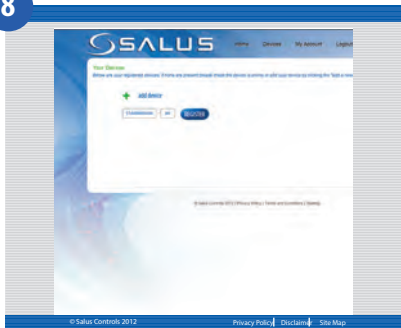
7



Now use your username and password to log in

# 11. Registering and operating your iT500 online

8



Enter the iT500 STA number (Please refer to page 8). Then press REGISTER

9



Your iT500 will appear as above and is now ready to be controlled or viewed via your PC or Smartphone. Just click on the iT500 icon on your PC



## 12. Download Smartphone App

Once you have registered your iT500 online you can also download the smartphone App from the iPhone App Store or the Android App Store depending on which kind of Smartphone you are using. Find the iT500 App on the App Store and click download. The App will automatically download to your Smartphone, and once downloaded you can begin controlling your iT500 Thermostat.

[www.salus-controls.com](http://www.salus-controls.com) ————— Go to the salus-controls.com website.



————— Click on the relevant App Store icon.



————— Find the SALUS iT500 App and click download.

# 13. Adding or renaming the iT500 in your device list



Enter your user ID and password. Press **LOG IN**



When you first open the iT500 App your iT500 will appear in the device list and you can begin controlling it with your Smartphone.



If you add more than 1 iT500 to your device list, you may wish to rename the iT500 to "DOWNSTAIRS" for example. Click on **RENAME** and enter a new name.



If you forget your password, follow the on screen instructions.



For full information on PC and Smartphone operation please refer to the user manual.

## 14. 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 two 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: .....

Installation Date: .....

Engineers Name: .....

Engineers Signature: .....

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