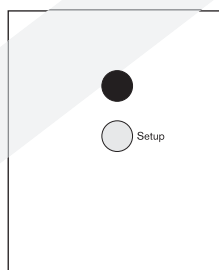
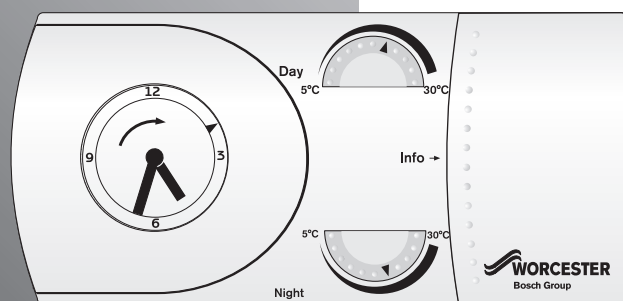


MECHANICAL RF STAT

MECHANICAL RF STAT TRANSMITTER & RECEIVER
FOR GREENSTAR HE, SiII & i JUNIOR MODELS



 **WORCESTER**
Bosch Group

INSTRUCTION MANUAL
FITTING & OPERATING INSTRUCTIONS

CONTACT INFORMATION

WORCESTER BOSCH:

TECHNICAL: 08705 266241
SERVICE: 08547 256206
SPARES: 01905 752571
LITERATURE: 01905 752556
TRAINING: 01905 752526
SALES: 01905 752640
WEBSITE: www.worcester-bosch.co.uk

MANUAL INFORMATION

PLEASE READ THESE INSTRUCTIONS CAREFULLY BEFORE STARTING

THESE INSTRUCTIONS ARE APPLICABLE TO THE WORCESTER BOSCH MODEL(S) STATED ON THE FRONT COVER OF THIS MANUAL ONLY AND MUST NOT BE USED WITH ANY OTHER MAKE OR MODEL

THE INSTRUCTIONS APPLY IN THE UK ONLY AND SHOULD BE FOLLOWED EXCEPT FOR ANY STATUTORY OBLIGATION

IF YOU ARE IN **ANY DOUBT** CONTACT WORCESTER BOSCH TECHNICAL HELPLINE




THIS ACCESSORY MUST BE FITTED BY A COMPETENT PERSON. FAILURE TO COMPLY COULD LEAD TO PROSECUTION.

LEAVE THESE INSTRUCTIONS WITH THE USER OR AT THE APPLIANCE.

ABBREVIATIONS USED IN THIS MANUAL:

RF Radio Frequency
LED Light Emitting Diode
PCB Printed Circuit Board
ms milliseconds
°C degrees Centigrade

SYMBOLS USED IN THIS MANUAL:

 Day time
 Night time
 Timer clock

CONTENTS

ACCESSORY INFORMATION

GENERAL INFORMATION	2
TECHNICAL DATA	3

INSTALLATION & COMMISSIONING

FITTING THE RECEIVER	4
TRANSMITTER LOCATION	5
TRANSMITTER CLEARANCES & FIXING	6

USER INSTRUCTIONS

TRANSMITTER SETTINGS	7
RECEIVER FUNCTIONS	8
BATTERY REPLACEMENT	9

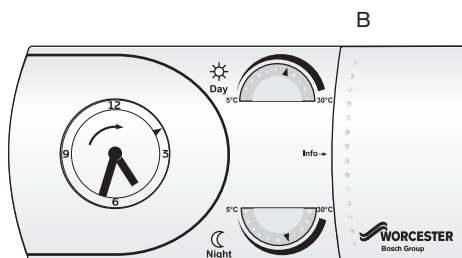
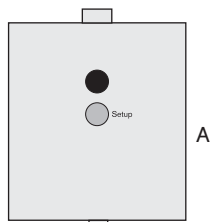
SERVICING & SPARES

TRANSMITTER/RECEIVER MAINTENANCE & SPARES	10
---	----

GENERAL INFORMATION

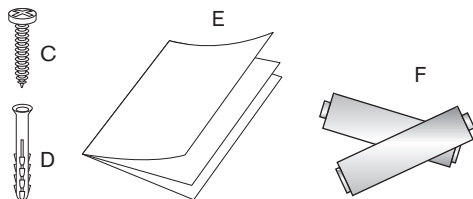
STANDARD PACKAGE:

- A - Receiver
- B - Transmitter
- C - Screws (x2)
- D - Wall Plugs (x2)
- E - Instructions
- F - Batteries (x2)



SPECIFICATIONS:

- Single channel, radio frequency central heating programmer
- Mechanical clock/timer with in-built RF Transmitter
- Built-in battery housing
- 2 AA alkaline LR6 batteries included
- Low battery warning
- RF Receiver module with LED receiver status indication and setup button
- Pre-wired with Worcester Heatronic & Eurotronic PCB connector
- Max. signal range approx. 25 - 30 metres (range may decrease according to the building wall construction).



TECHNICAL DATA

DESCRIPTION	UNITS	TRANSMITTER	RECEIVER
Dimensions	mm	H158xW75xD36.5	H91.7xW74.4xD17.5
Operating voltage	-	2xLR6/AA batteries	24v DC
Ambient temperature	°C	-5 to +45	-5 to +45
Class of protection	-	II	II
Degree of protection	IP	20	20
Accuracy	sec/day	±2.5 @ 25°C	-
Battery life	year	1 approx.	-
Shortest switching period	minutes	15	-
Temperature regulation range	°C	+5 to +30	-
Regulator	-	Electronic	-
Transistor switching capacity	mA	-	5mA @ 24 VDC
Switching contact	-	-	Open collector

Related Standards:

BS EN60730-1

BS EN60730-2-7

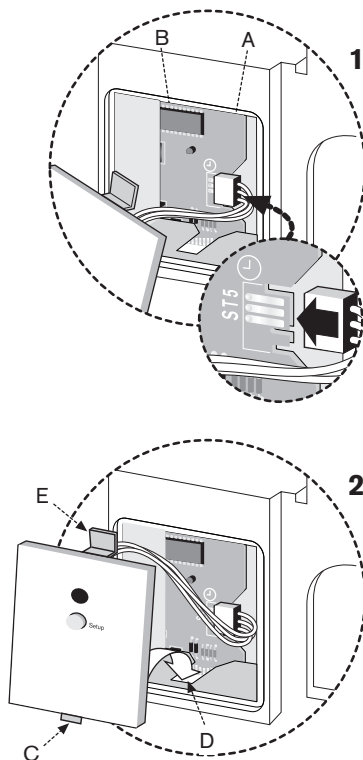
BS EN50081-1, BS EN50082-1, now superseded by standards incorporated in BS EN60730-1)

EC Directives:

Low Voltage Directive (73/23/EEC)

Electro Magnetic Compatibility Directive (89/336/EEC)

CE Marking Directive (93/68/EEC)



FITTING THE RECEIVER



DANGER - 24V & 230V: DO NOT TOUCH THE ELECTRICAL COMPONENTS OR CIRCUITS.

CAUTION: ISOLATE THE MAINS ELECTRICITY SUPPLY BEFORE STARTING ANY WORK AND OBSERVE ALL RELEVANT SAFETY PRECAUTIONS.

OBSERVE ELECTRONIC STATIC DISCHARGE PRECAUTIONS. DO NOT TO TOUCH THE PCB CIRCUITS

- ▶ Remove the programmer blanking plate or existing programmer from the boiler control panel - refer to the relevant boiler Installation and Servicing instruction manual and existing programmer instructions for details

1 Attach receiver connector (A) onto circuit board (B) at 'ST5' shown with a clock symbol

2 Locate receiver lower lug (C) into control panel slot (D) and check for trapped wires before clipping the top lug (E) of the receiver into the control panel

- ▶ Switch boiler on when completed.

TRANSMITTER LOCATION

1 Locate flat bladed screwdriver into slots and twist to lift top of transmitter (A) away from baseplate (B).

2 Make sure that the batteries (C) are correctly fitted to the transmitter (A).

3 Position the transmitter as close to the main living area as possible on an inside wall, approx. 1.5m (5') above the floor within max. signal range of the appliance receiver.

Keep the transmitter away from:

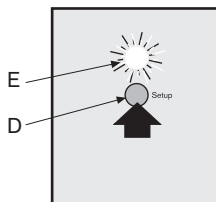
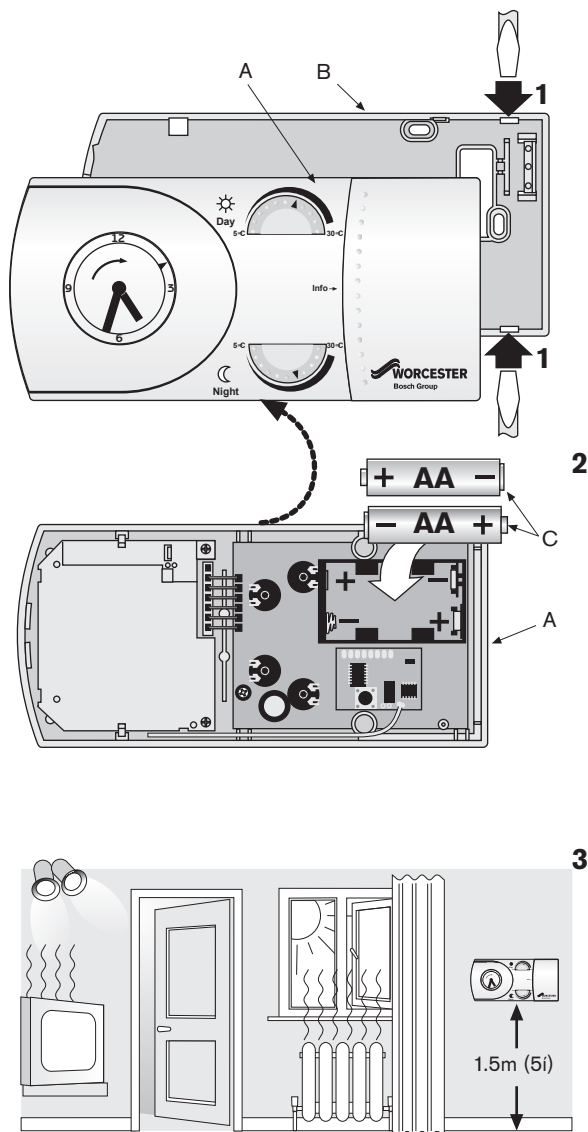
- light and heat sources
- enclosures and curtains
- direct draughts, including fans, air vents, windows and doors
- damp and condensation

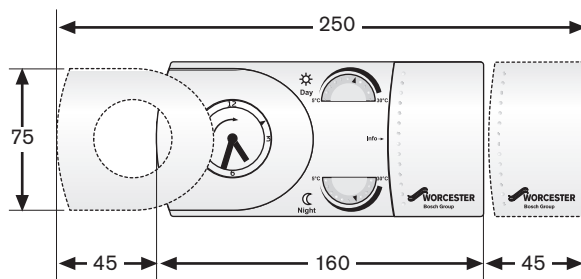
4 Press and hold button (D) down on the receiver for approx. 2 seconds until the LED (E) flashes twice and stays on

Release button, the receiver will now search for a signal for up to 2 minutes

The LED (E) on the receiver will flash twice within 200ms when a radio link has been established

Repeat procedure until a link has been established.





TRANSMITTER CLEARANCES & FIXING

TRANSMITTER CLEARANCES:

See diagram opposite for minimum area required for operation.

SAFETY:

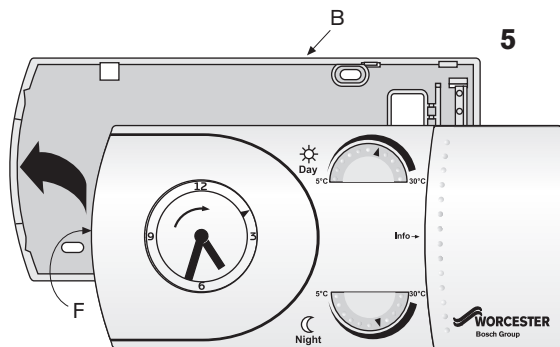
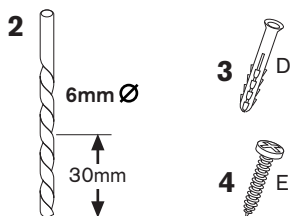
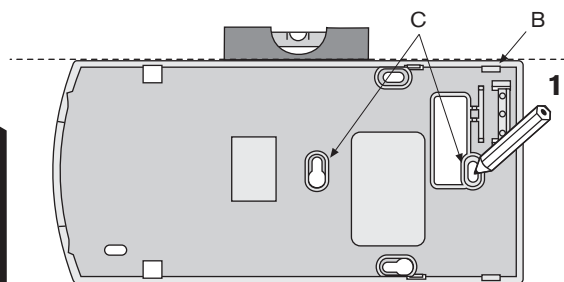
All relevant safety precautions must be undertaken. Protective clothing, footwear, gloves and safety goggles must be worn as appropriate.

TRANSMITTER FIXING:

- 1 Hold baseplate (B) level to mark securing points (C) and remove baseplate (B)

CAUTION: Ensure there are no pipes, electric cables or other hazards before drilling.

- 2 Drill holes, where marked, 30mm deep using a 6mm diameter drill bit
- 3 Push one wall plug (D) into each hole
- 4 Reposition baseplate (B), check level and secure with screws (E)
- 5 Align outer edge and internal lugs (F) of transmitter to baseplate (B) and push fit to secure



TRANSMITTER SETTINGS

INFORMATION:

Slide open panel (A) to expose quick reference user instructions (B).

SETTING THE 24 HOUR CLOCK:

- 1 Slide cover (D) off the transmitter (C).
- 2 Rotate outer ring (E) in direction of arrow (clockwise) until the clock hands and the 24 hour pointer (F) display the correct time.

Note: Do not rotate anti-clockwise or damage may occur to the unit.

SETTING HEATING TIMES:

- 3 Using the 1 to 24 hour marks on the outer ring (G) move the segments (H):

☀ inwards for daytime setting

☾ outwards for night setting

Note: each segment represents 15 minutes

SETTING HEATING TEMPERATURE:

- 4 Rotate the dials (J) to set the room temperature required:

☀ 5-30°C for daytime

☾ 5-30°C for night time

Note: each click is approx. 1°

Frost protection is automatically set at 5°C

SELECTING PROGRAMME:

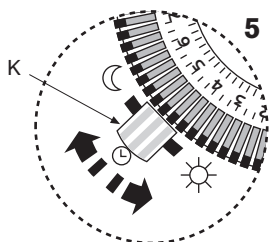
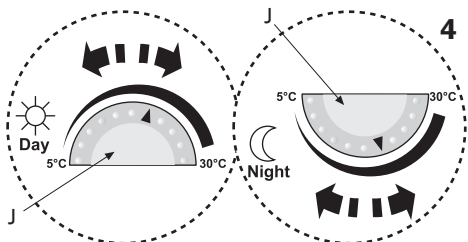
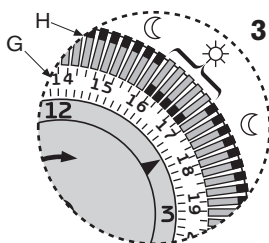
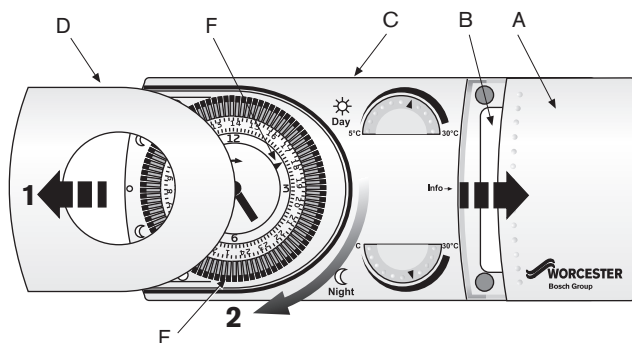
- 5 Move the selector switch (K) to set:

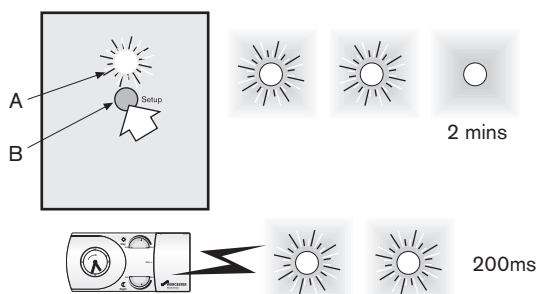
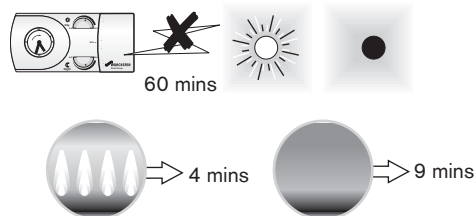
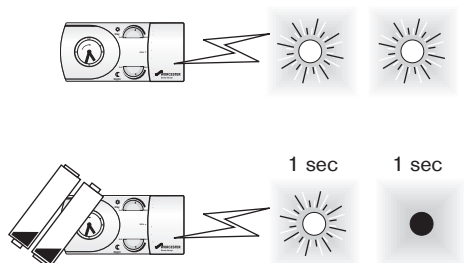
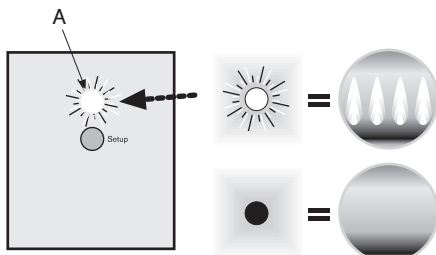
⌚ automatic (uses day/night timer & both temperature settings)

☀ day override (continuously on using day temperature setting)

☾ night override (continuously on using night temperature setting)

► Replace cover (D) when finished.





RECEIVER FUNCTIONS

NORMAL OPERATION:

- ▶ LED (A) continuously on when the boiler is on and continuously off when the boiler is off.

Note: The LED is briefly interrupted each time a signal is received.

TRANSMITTER SIGNAL RECEIVED:

- ▶ LED (A) flashes twice each time a signal is received from the transmitter

LOW BATTERY STATE:

- ▶ LED (A) flashes slowly, on for one second and off for one second
- ▶ Replace batteries as shown under 'Battery Replacement' and the receiver will revert back to normal operation

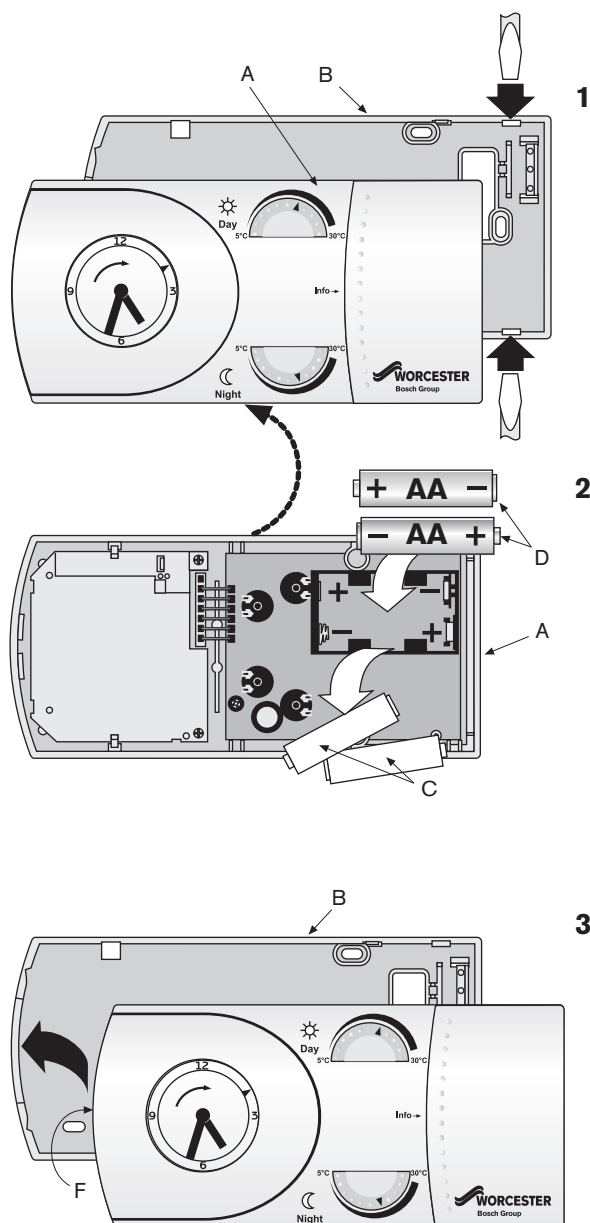
EMERGENCY MODE:

- ▶ If a signal is not received for 60 minutes LED (A) will flash rapidly on and off and the boiler will be continuously switched on for 4 minutes and off for 9 minutes
- ▶ When a signal is received the receiver will revert back to normal operation

PROGRAMMING MODE:

- ▶ Press and hold button (B) down on the receiver for approx. 2 seconds until the LED (A) flashes twice and stays on
- ▶ Release button, the receiver will now search for a signal from the transmitter for up to 2 minutes
- ▶ The LED (A) on the receiver will flash twice, within 200ms, when a radio link has been established.

BATTERY REPLACEMENT



1 Locate flat bladed screwdriver into slots and twist to lift top of transmitter (A) away from baseplate (B).

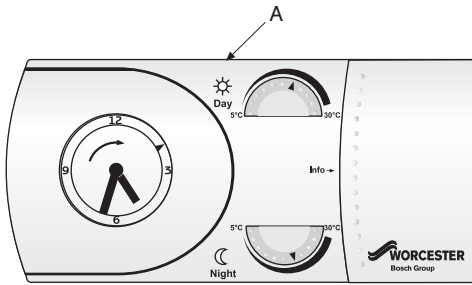
2 Remove existing batteries (C) and dispose of safely, do not touch the circuits inside the transmitter

Replace batteries with the same type (D) and check they are correctly fitted to the transmitter (A)

Do not use rechargeable batteries

3 Align outer edge and internal lugs (F) of transmitter to baseplate (B) and push fit to secure

TRANSMITTER/RECEIVER MAINTENANCE & SPARES

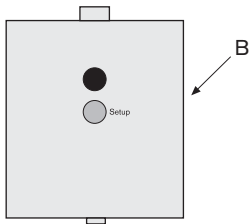


TRANSMITTER MAINTENANCE:

- ▶ Wipe outer casing (A) with a clean dry cloth, do not use polish or detergents
- ▶ Do not touch any circuits inside the transmitter

RECEIVER MAINTENANCE:

- ▶ The receiver unit (B) requires no maintenance



SPARE PARTS:

TRANSMITTER (A):

Part Number: 8716-106-191

RECEIVER (B):

Part Number: 8716-106-192