

Maintenance

No regular maintenance is required for this product, apart from battery replacement (see user instructions).

Note: If a Digistat RF2, RF3 or RF3i has replaced a standard room thermostat and a programmer is also incorporated in the control system, it is suggested that the central heating (CH) channel is switched to ON/continuous/24hrs. Operation of the central heating times and temperature will be controlled by Digistat RF2, RF3 or RF3i.

Commissioning the 'Wireless System'

Standard for all models

IMPORTANT: MULTI ZONE INSTALLATIONS ONLY

If more than one 'wireless system' is fitted within the same property, ie. for controlling 2 or more zones (multi-zone) it is essential that the Digistat RF units are matched correctly to the relevant SCR. This is easily achieved by commissioning each Digistat and SCR in turn.

1. Install (see installation instructions) and turn power on to the SCR (receiver). If a separate programmer is fitted, ensure that it is switched on. The red LED should come on.
2. Push the 'override' button on the SCR once. The green LED should also come on. Check to see if the boiler and/or motorised valve are working.
3. To enter 'learn' mode push the button marked 1 followed by 2 (OVERRIDE) and hold both depressed together. The red LED should flash for 2 seconds then go out signifying the SCR is in learn mode. Release both buttons.
4. The red and green LEDs should both now be on.
5. Take the Digistat RF and hold it within sight of the SCR (no closer than one metre).
6. Slide down the right hand battery drawer of the Digistat RF, remove the plastic insulator strip and slide drawer back into place.
7. Repeat the same procedure with the left hand battery drawer. The right hand drawer procedure **must be** carried out first.
8. The Digistat RF should now display the actual room temperature, (and time at 12.00 midnight, Digistat RF2, RF3 or RF3i models). If the unit has been stored in a cold place, it may take time to warm up.
9. As soon as both battery compartments are slid back into place, the red LED on the SCR should flash for 7 seconds and then go out. The green LED may be ON or OFF depending on the room temperature at the time of commissioning.
10. If the red LED remains on, slide down both battery drawers on the Digistat RF, check the battery positions are correct, and once the display has faded, repeat steps 6 to 9.
11. Increase the 'SET' temperature on the Digistat RF by pressing the '+' button until a flame symbol appears, in the left hand segment of the display.
12. The red LED on the SCR should flash for 7 seconds. This confirms that the radio signal is being sent and received. After 7 seconds the red LED should go out and the green one come on.

13. Check to confirm that the boiler and/or motorised valves are working.
14. Decrease the 'SET' temperature on the Digistat RF by pressing the '-' button until the flame symbol disappears.
15. The red LED on the SCR should flash for 7 seconds. After 7 seconds both the red and green LEDs should be out. Check that the boiler and/or motorised valve have powered down.
16. Place the Digistat RF in the chosen operating position, (see Digistat RF location section) and repeat steps 11 to 15. Once you have confirmed the system operates correctly, fit and secure the Digistat RF to the wall (see installation instructions).

During normal operation the red LED on the SCR will flash for 7 seconds each time a radio signal is received from the Digistat RF. This will occur approximately every 5 minutes.

The green LED on the SCR denotes a call of heat (ON)

Once the system has been successfully commissioned, buttons 1 and 2 on the SCR should not be pressed simultaneously, unless a replacement Digistat RF or SCR is fitted.



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Digistat RF 'Wireless System'

Digistat RF1: Wireless Digital Thermostat

Digistat RF2: Wireless 24hr Programmable Thermostat


Digistat RF3: Wireless 7day Programmable Thermostat

Digistat RF3i: Wireless 7day Programmable Thermostat

IMPORTANT:

This product operates on a new frequency of 433 MHz and is not interchangeable with previous 418 MHz units which can be easily identified:

433 MHz = **Drayton** brand

418 MHz =  **Drayton** brand

Installation instructions

The new range of 'wireless system' controls from Drayton, give the greatest degree of siting flexibility available at the present time. The SCR (receiver) is wired into the Combi boiler or conventional system and sited in an appropriate position close to the existing wiring. The Digistat RF (transmitter) unit can then be installed in any normal operating environments within a typical 30M range from the SCR without the need for any costly or disruptive wiring. It is the ideal solution for new systems or upgrades where using a conventionally wired thermostat may prove too awkward or expensive to install or where disruption to decorations or unsightly wires are unacceptable. The radio signal transmitter used in the Digistat RF conforms to DTI standard and is licence exempt.

Digistat RF technical data

Power supply:	Four type AA 1.5V alkaline cells (supplied)
Sensing element:	Electronic
Radio signal range:	30M typically. The range may be affected by the composition/density and number of walls between the Digistat RF and SCR
Radio frequency:	433 MHz
Security encoding:	4096 different signal recognition codes
Ambient temperature:	Operating 0°C to 45°C / Storage -20°C to 50°C
Temperature range:	5°C to 30°C set in 1°C steps / 16°C to 30°C selectable
Differential:	<0.6°C at 4°C per hour
Switch cycle rate:	>8 mins typically
Battery life:	2 years typical
Wiring:	No wiring required
Maintenance:	No user maintenance should be attempted apart from battery replacement
Conforms to:	DTI MPT 1340 (licence exempt)

Digistat SCR (receiver) technical data

Power supply:	230VAC 50Hz
Switch type:	SPDT (voltage free) relay
Switch rating:	2(1) 230VAC or 23V AC/DC
Wiring:	Designed for fixed wiring only, to comply with current IEE regulations
Reception frequency:	433 MHz

Conforms to the essential requirements of the following directives:

89/336/EEC	Electromagnetic compatibility
73/23/EEC	Electrical equipment designed for use within certain voltage limits



Installation instructions

Read all installation and commissioning instructions before proceeding. Do not switch on until ready to commission.

Digistat SCR (receiver)

WARNING: ISOLATE MAINS SUPPLY BEFORE FITTING THE DIGISTAT SCR (RECEIVER).

The system wiring must be able to be fully disconnected from the mains supply by a switch incorporated in the fixed wiring having a contact separation of at least 3mm on both poles. Fused at 3A.

Any electrical wiring should be carried out by a competent person, to conform to current IEE regulations.

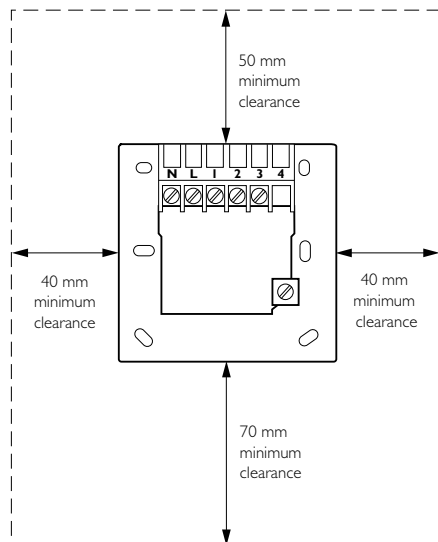
Location

The Digistat SCR (receiver) should be mounted in a convenient position, close to the Combi boiler or central heating system wiring centre. (Care should be taken not to mount the SCR in a position where it is surrounded by metal objects or mains voltage cable, as this may interfere with the radio signal.)

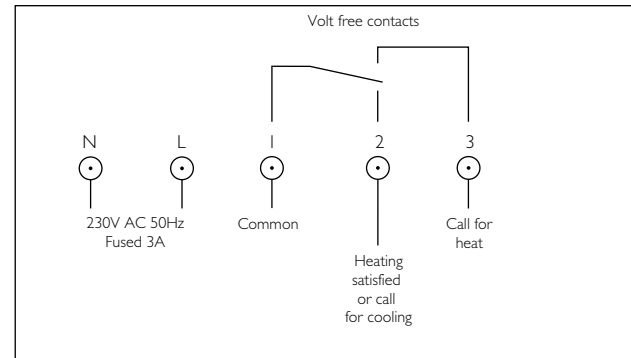
Fixing (minimum wall plate clearances shown)

1. Loosen the securing screws, remove the wallplate, and if surface wiring is to be used, snap out the cable entry strip on the bottom edge of the wallplate with a pair of pliers.
2. Fix the wallplate, terminals at the top, either direct onto a flat wall using wall plugs and No 6 x 1" wood screws or on a flush mounting single conduit box using M3.5 x 14 screws. Minimum wallplate clearances are shown.
3. Complete the wiring to the SCR wallplate in accordance with the relevant diagram, to comply with current IEE regulations.
4. Plug the SCR onto the wallplate and tighten the securing screws.

SCR wallplate clearances



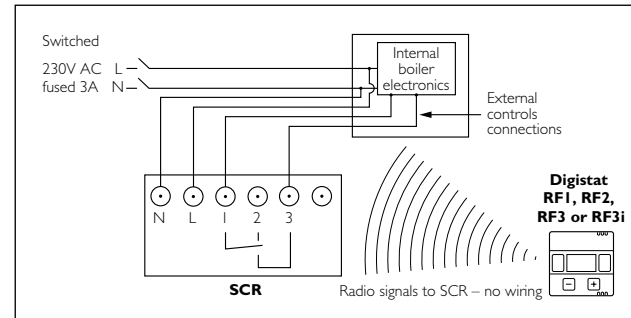
Electrical wiring SCR



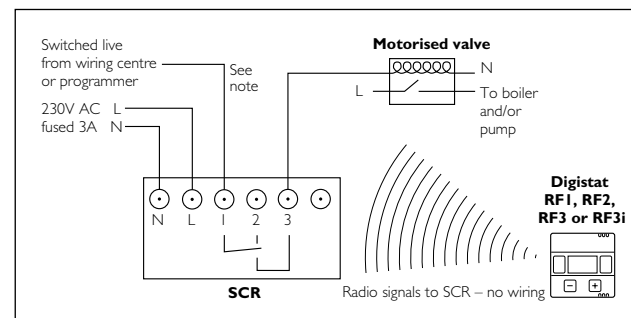
This product is double insulated and does not require an earth connection.

The SCR should be wired to the Combi boiler or central heating wiring using the correct type of cable or flex. The SCR should be wired in to replace hard wired room or programmable thermostats shown on the system or boiler wiring diagrams. Always check other manufacturers instructions for compatibility.

Combi boiler basic wiring layout



Zone control basic wiring layout



Note: If the Digistat RF2, RF3 or RF3i is used without a separate programmer, or the programmer is set to cont/on/24hrs it would be acceptable to link 'L' to '1', provided the output voltage required is 230VAC.

Digistat RF1, 2 or 3 (transmitters)

WARNING: ISOLATE MAINS SUPPLY BEFORE REMOVING ANY EXISTING THERMOSTATS

Important

The RF1, RF2, RF3 and RF3i are battery powered wireless units, using radio signal technology and DO NOT require any electrical connections. If they are being used to replace an existing hard wired thermostat, the wiring to the old thermostat must be made electrically safe and isolated, as it is no longer required.

Location

Care should be taken to mount the Digistat RF in a position which is not subject to direct sunlight or draughts. Preferably it should be mounted on an inside wall, about 1.5M (5ft) above the floor, in a position where it can respond to room temperature but away from the direct influence of radiators or other appliances giving off heat. Minimum wall plate clearances are shown. BEFORE fixing the wallplate, carry out the commissioning procedure and check that your chosen location is suitable for transmitting radio signals to the SCR (receiver). In some cases, an alternative location may need to be selected for the Digistat RF (transmitter) because the radio signal range can be affected by the composition/density and number of walls between the Digistat RF and SCR.

Fixing

1. Loosen the securing screw on the bottom of the Digistat RF and remove the wallplate.
2. Fix the wallplate with securing screw at bottom directly onto a flat wall. The wall plugs and screws provided **must** be used, *failure to do so may invalidate your warranty*. Minimum wallplate clearances are shown.
3. Note: The Digistat RF comes preset with a temperature range of 5°C to 30°C. If you wish to select the optional range of 16°C to 30°C remove the selector pin at the rear of the unit.
4. Plug the Digistat RF onto the wallplate and tighten the securing screw. DO NOT remove the plastic insulating strips from the battery drawers until you are ready to carry out commissioning.

Digistat RF wallplate

