

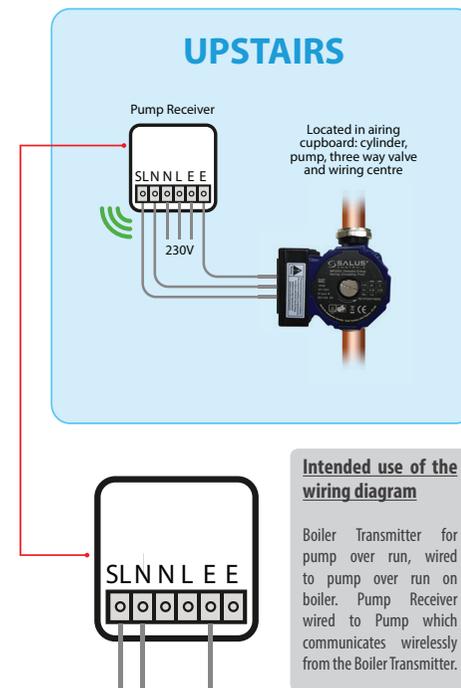
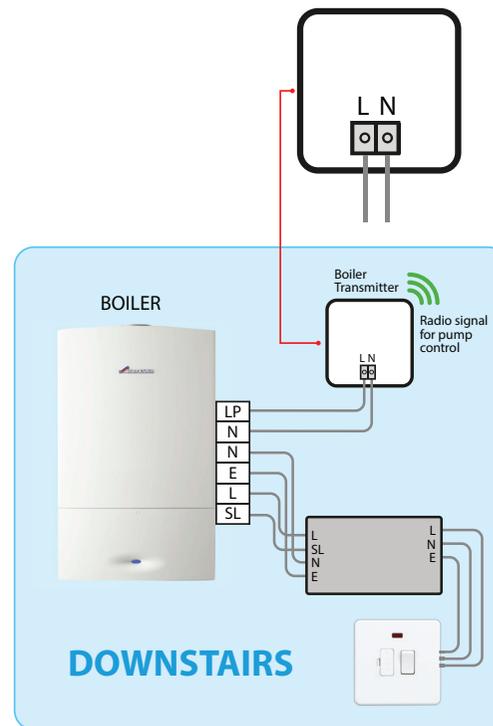


mains switch



Boiler Transmitter

Pump Receiver



Introduction

mains switch is an RF solution to switch ON or OFF a Heating Ventilation and Air Conditioning (HVAC) pump under direct control from the boiler.

Utility

The pump is not normally located close to the boiler, in which case a mains cable must be run from the boiler to the pump. Using mains switch eradicates the need for cabling.

Components

mains switch consists of two units:
1. The Boiler Transmitter
2. The Pump Receiver
Also included are two mounting brackets for each unit.

Product Compliance

This product complies with the essential requirements and other relevant provisions of Directives 2014/53/EU and 2011/65/EU.

Safety Information

Use in accordance with the regulations. Indoor use only. Keep your device completely dry. Disconnect your device before cleaning it with a dry cloth. This accessory 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 relevant standards could lead to prosecution.

RF Communication

868.0-868.6MHz; <13dBm

Range:
- approximately 100 meters in open space
- typical indoor range: 35 meters (depends on the indoor structure)

Pairing Code

The Boiler Transmitter and the Pump Receiver will share one unique factory pre-matched 3-byte pairing code. The number of combinations (16,777,216) ensures no adjoining units should share the same pairing code.



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The Boiler Transmitter



The Boiler Transmitter is connected to the boiler which both powers the unit and detects the presence of the 230VAC pump signal output from the boiler.

Terminals

Please wire the Boiler Transmitter in accordance with the wiring diagram below:

L	Live
N	Neutral

Temporary power backup:

The Boiler Transmitter uses a super capacitor to backup power in order to transmit an OFF command twice at 5 second intervals, when it detects the boiler output off.

Device Function

Normal Mode

The Boiler Transmitter keeps detecting the 230VAC input.

When 230VAC is detected, an RF ON signal is transmitted to the RF Pump Receiver and repeated every 5 seconds.

When power is removed from the Boiler Transmitter, a temporary power backup (Super Capacitor) will be used to transmit an OFF command twice at 5 second intervals.

Pairing Mode

The Boiler Transmitter keeps broadcasting pairing code every 5 seconds until 60 second timeout.

Button Operation & LED Indicator

Button operation	LED State	Description
Press the button 3 times within 1 second	Orange Flash	When the user presses the transmitter button 3 times within 1 second, the transmitter will send the pairing information at 5 second intervals for one minute. The transmitter LED will flash orange (red/green ON) at 0.5Hz for one minute.
N/A	Green On	The LED will be lit green when the unit is powered.
N/A	Red On	The LED will be lit red for 1 minute when the unit is powered off.

The Pump Receiver



The Pump Receiver keeps listening for the RF ON/OFF signal. The pump will be switched ON when an RF ON signal is received. The Pump Receiver will switch off the pump upon receiving an OFF command or if an ON command is not received within 21 seconds.

Terminals

Please wire the Pump Receiver in accordance with the wiring diagram below:

SL	Switch Live out
N	Neutral out
N	Neutral input
L	Live Input
E	Earth
E	Earth

Device Function

Normal Mode

The Pump Receiver keeps listening for the RF ON/OFF signal. The Pump will be switched ON when an RF ON signal is received.

Once switched ON the Pump Receiver will switch OFF the pump upon receipt of an OFF command or if an ON command is not received within 21 seconds (RF Watch Dog).

Pairing Mode

The Pump Receiver keeps listening for the pairing code until the pairing code is received or it will time out after 60 seconds.

The received pairing code will replace the pre-attached pairing code.

Button Operation & LED Indicator

Button operation	LED State	Description
Press the button 3 times within 1 second	Orange Flash	When the user presses the receiver button 3 times within 1 second, the LED of the receiver will flash orange (red/green ON) at 0.5Hz for 1 minute waiting for pairing information from the transmitter.
N/A	Green On	The LED will be lit green when the unit is powered and the pump is switched ON.
N/A	Red On	The LED will be lit red when the unit is powered and the pump is switched OFF.