



2 Way Boiler & Pump Control

Features:

- Supplied ready to operate
- Replaces “Switched Live Cables”
- Quick and Simple to Install
- Up to 5Km range line of sight.
- Up to 1Km range in buildings
- Simple Screw Terminal Connections
- Operates from 230Vac
- Spread Spectrum RF Modulation
- Weatherproof IP68 Enclosures
- RED Compliant and FCC Certified
- High Quality UK manufacture



Description

MAINSLINK-PRO removes the need to lay all “Switched Live Cables” between the Boiler and the wiring Centre. It provides a bi-directional two way 230Va switching RF link.

MAINSLINK-PRO consists of two identical units. One unit is installed by the boiler and the other within the wiring Centre.

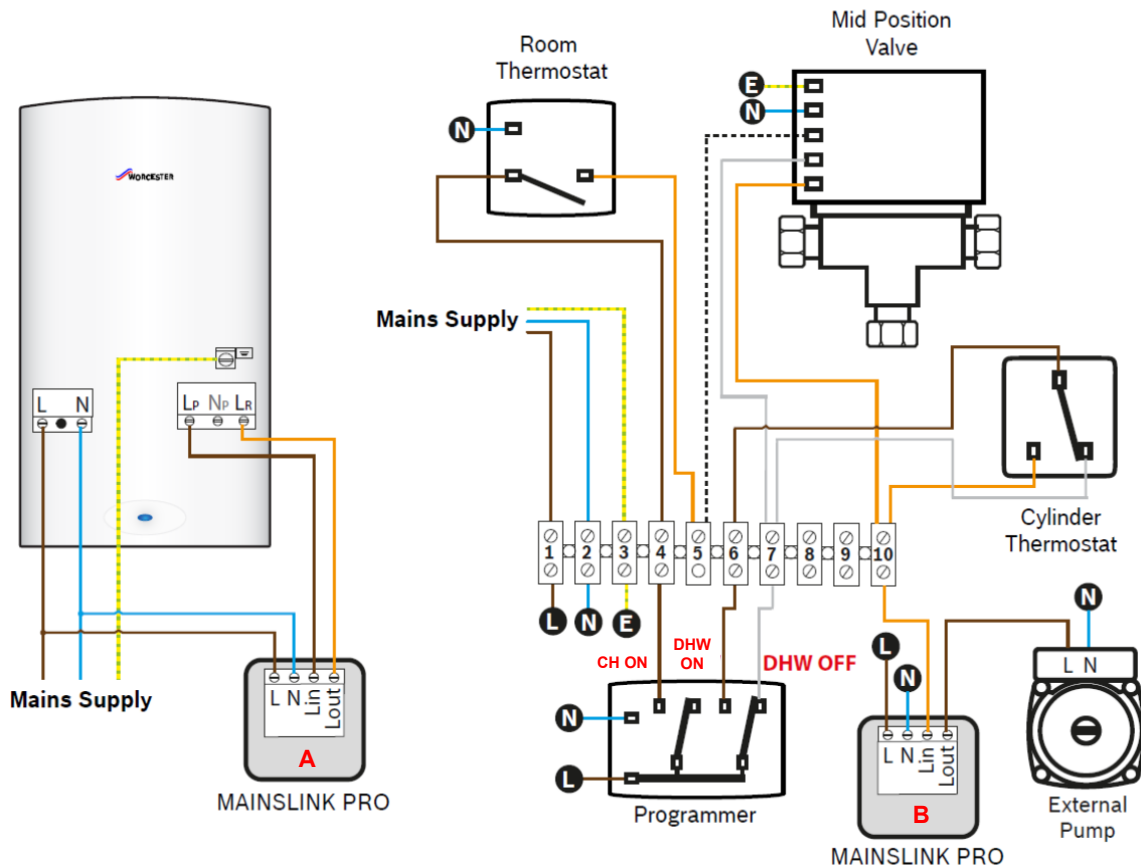
Each unit has a ‘Live In’, and a ‘Live Out’ screw terminal. When the ‘Live in’ is ‘LIVE’ at one unit it sends an RF signal to the other unit which switches its ‘Live out’ ‘LIVE’, and vice versa, MAINSLINK-PRO utilises the RF Solutions state of the art RF-LoRa Spread Spectrum Frequency Modulation transceiver design to achieve a the highest performance / Range available from any Radio System.

Ordering Information

Part Number	Description
MAINSLINK-PRO	System consisting Pair of Transceiver units



Application example: WORCESTER-BOSCH Boiler Installation



This system provides two functions, Switching of the Pump from the boiler and Switching of the Boiler from the wiring Centre.

Connections at the Boiler

The boiler output to the Pump is connected to the MAINSLINK-PRO A, (Lin).

The boiler switching input is connected to the MAINSLINK-PRO A (Lout).

It is recommended to use a single switch fuse spur to supply the Boiler and MAINSLINK together. (so that both appliances are isolated together)

Connections at the Wiring Centre

The thermostats switching output to switch the boiler is connected to the MAINSLINK-PRO B (Lin).

The Pump is connected to the MAINSLINK-PRO B (Lout).

Operation

When the wiring centre commands the Boiler ON MAINSLINK-PRO B (Lin) is switched is Live then MAINSLINK-PRO A Lout will automatically switch a LIVE signal to turn the boiler on.

When the Boiler switches the Pump drive ON MAINSLINK-PRO, (Lin) "A" is switched Live then MAINSLINK-PRO B Lout will automatically switch the pump on.



Warnings :

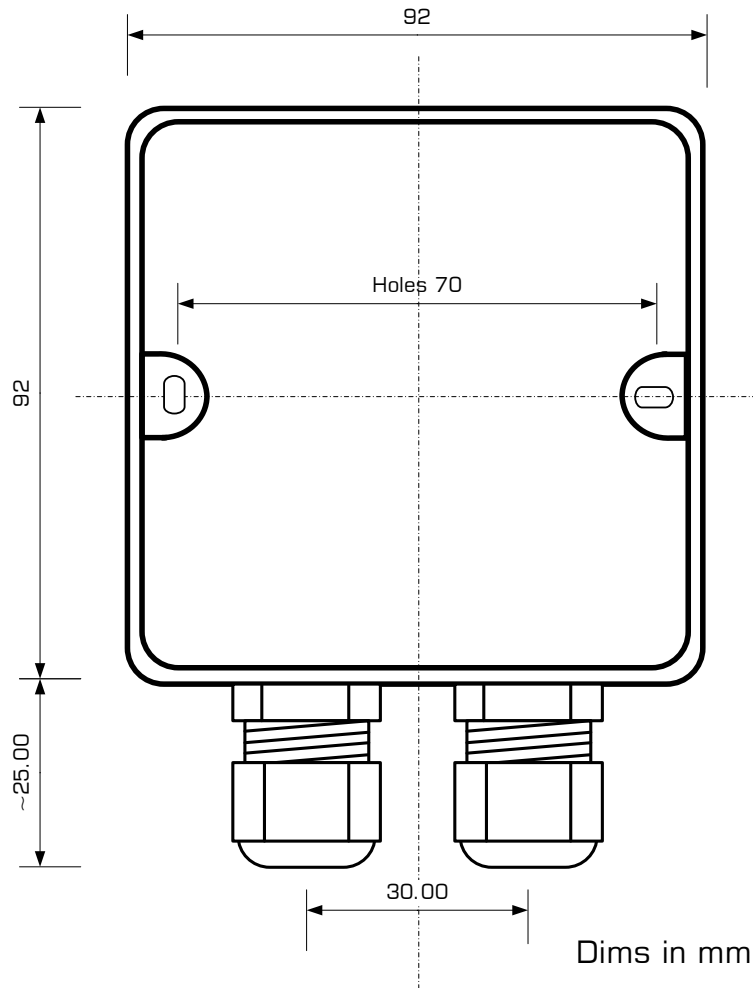
- Product is not independently isolated, ISOLATE the mains electricity supply before removing the cover and observe any relevant safety precautions. Maintenance to the product that involves removal of the cover should only be carried out by a competent person or qualified electrician.
- F2 Fuse rating is 4A (T) 250 H (Ceramic). Replace fuse with same type and rating.
- Relay is rated at 10A peak, and 5A constant.
- Product must be connected to a switch fused (spur/supply) or BS 1363 Plug. It is recommended a single Fuse Spur is used to supply the Boiler and MAINSLINK-PRO jointly so that they are isolated together.

MAINSLINK-PRO



Dimensions and Wall mounting information:

MAINSLINK-PRO is a professional use product and should only be installed by a competent person. The product must be FIXED to the wall (EN60950 4.1).



Technical Specification:

Dimensions: 92 x 92 x 59mm

Electrical Characteristics	Min	Typical	Max	Units
Supply Voltage TX/RX:	220	230	250	Vac
Operating Frequency*		869.50		MHz
RF Output power			+20	dBm
Bandwidth (Spreading Factor)		60		KHz
Maximum switching load (RX)		1000		W
Time delay from Tx Transmit to Rx Relay operation:				Secs
Mode 3		3		
Mode 7		4		

Product Revision History

The below shows the product Development / Improvements that have been made to the product through the product Lifecycle.

MAINSLINK-PRO REVISION CHANGE HISTORY			
Date	Eng Change	New Revision	Product Change / Improvement
18/10/18	ECN314	2	Update to firmware to prevent lockup when pairing in Mode7. Using Mode 7 only the length of RF packet is >2secs, if, when in LEARN mode both MAINSLINK-PRO transmit at the same time then they can both be in the position of waiting for a response. New f/w randomly sets one as master on initial RF signal, then only one response is received removing the rf competition.
12/2/19	ECN319	3	If the input (RX signal) immediately coincides with an output (TX signal) in vary rare cases (two reported) the RF transceiver has locked up, this is a fix to this issue.
1/9/19	ECN331	3	Addition of LEDs on Front panel for visual indication or operation. The enclosure is now waterproof to IP68.

Revision Identification

The product part number and revision of build can be viewed on the white label on the outside of the enclosure and also on the Circuit board assembly.

Simplified Declaration of Conformity (RED)

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ROHS Directive 2011/65/EU and amendment 2015/863/EU

Specifies certain limits for hazardous substances.

WEEE Directive 2012/19/EU

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