

MULTIPIPE

MASTER 8-ZONE WIRING CENTRE FOR WIRELESS (SMART COMPATIBLE)

Model: 22-00013



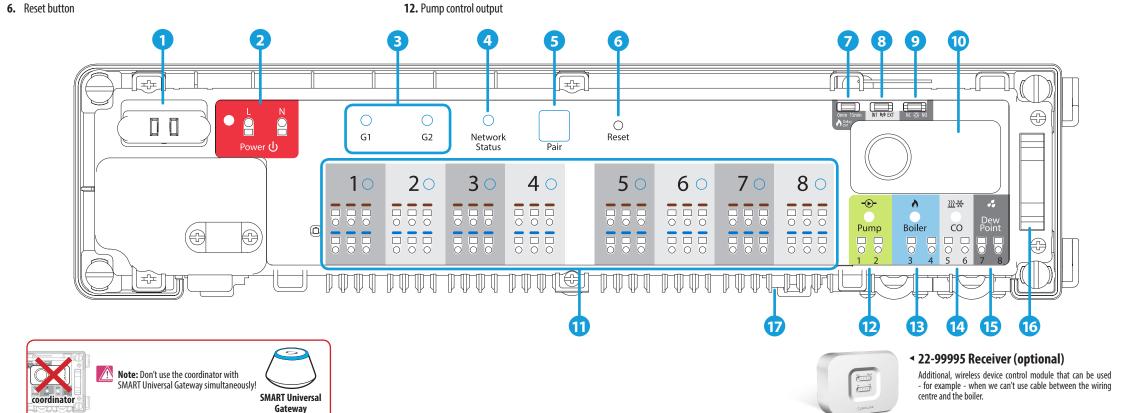
Technical

www.multipipe.co.uk

Wiring centre description

- 1. Cartridge fuse 5 x 20 mm 12 A
- 2. Power Supply
- **3.** Thermostat grouping status
- 4. Network Status diode
- 5. Pair button
- **7.** Delay jumper 8. INT/EXT antenna jumper
 - 9. NC/NO actuators jumper
 - **10.** ZigBee network coordinator
 - **11.** Terminals for actuators
 - 12. Pump control output

- **13.** Boiler control output
- 14. CO terminal
- **15.** Dew point sensor input (humidistat)
- **16.** Serial connector for the wiring centre extension
- **17.** External antenna connector



Introduction

The 22-00013 Master 8- Zone Wiring Centre for Wireless is smart compatible. In combination with wireless thermostats, the wiring centre provides comfortable and reliable heating control. It is equipped with the control outputs for the pump and boiler and has been designed to work with NC or NO actuators.

In Offline mode, communication with the wireless thermostats must be done through the co-ordinating unit, which is in the package together with the wiring centre. To work in Online mode (via the Smart Home app), the wiring centre must be connected to the SMART Universal Gateway. In one ZigBee network (Online or Offline) up to nine 22-00013 wiring centres can be connected. The wiring centre increases ZigBee network range.

Product Compliance

This product complies with the essential requirements and other relevant provisions of Directives: EMC 2014/30/EU, LVD 2014/35/EU, RED 2014/53/EU and RoHS 2011/65/EU. The full text of the EU Declaration of Conformity is available at the following internet address: www.saluslegal.com.

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.

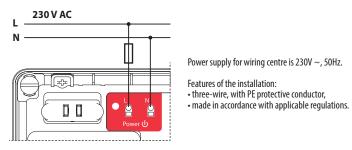
Technical Information

Power Supply	230 V AC 50 Hz
Max load	3 A
Inputs	CO terminal Dew point sensor (humidistat)
Outputs	Pump control Boiler control Terminals for actuators
Radio frequency	ZigBee 2,4 GHz
Dimensions [mm]	355x83x67

Note: Fuse replacement should be done when the wiring centre is disconnected from power supply

The mains fuse is located under the housing cover, at the main terminals and protects the wiring centre and devices powered by it. Use cartridge fuse-type $5\times 20\,\mathrm{mm}$ - nominal burn rate 12 A. To remove the fuse, lift the socket with a flat screwdriver and pull out the fuse.

2. Power Supply



3. Thermostat grouping status

This function is only available in Offline mode (together with coordinator) - it means MASTER thermostats will affect to SLAVE thermostats within specific group, which is possible only when thermostats are paired with one 22-00013 wiring centre (optional + extension) and have been assigned to gr. 1 or gr. 2.



Note: Within one group there may be only one MASTER thermostat (programmable) and the rest must be SLAVE thermostats (non-programmable).

How it works: If all thermostats of a given group will operate in automatic mode, then each of the thermostats in a given group will work in the same way as the MASTER of this group. For example, if the MASTER thermostat of Group 1 according to it's programmed schedule maintains a comfort mode - all SLAVE type thermostats from Group 1 will also maintain the comfort mode (the temperature is set individually for every thermostat). Similarly, if the MASTER thermostat is set to Party or Holiday mode - SLAVE thermostats in his group will also work in

The grouping function is optional - thermostats do not have to be grouped, they can operate independently.

4. Network Status diode

LFD diode statuses:

- (LED diode is blinking) - it means wiring centre is not connected to the network, but it is ready for pairing with the coordinator of the ZigBee network or the SMART Universal Gateway

 $\hbox{-} (LED \, is \, steady \, lit) \hbox{--} it \, means \, wiring \, centre \, is \, added \, to \, the \, ZigBee \, network \, and \, paired \, with \, coordinator \, and \, paired \, with \, coo$ or SMART Universal Gateway

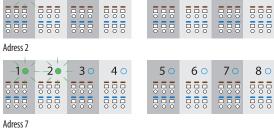
5. Pair button

Functions of the Pair button:



- Checking the address of the wiring centre in the Zigbee network. To check the address of the wiring centre in the ZigBee network (when using more than one) press the Pair button. The wiring centre number is indicated by the number of LEDs at the zones:

Adress 1 1 - 20 30 40 50 60 70 80



-10	20	_3 _	4 -		5 6	6	7 -7	_ 8 c
5 5 5 T	55 t						555	
000	000	888		0		000	888	000

Address 9 is indicated by lighting up 8 LEDs of all the zones and the Network



- The wiring centre reset (this function is described in detail on the second page of the manual).

6. Reset button

O refresh the data, after moving jumpers 7, 8 or 9.

The Reset button does not remove the wiring centre from the ZigBee network.

7. Delay jumper



Boiler off delay time.

Note: Pump (Pump output) and boiler (Boiler output) always starts 3 minutes after receiving the heating signal from any thermostats paired with wiring centre. Pump stops after 3 minutes, when the last thermostat stops sending demand for heat, while the heat source (Boiler) will turn off after the time set with the jumper.

Jumper position change must be refreshed in the memory by pressing the Reset button (short press).

8. INT/EXT antenna jumper



There is an option to connect the external antenna to the wiring centre. If you use an additional antenna, place the jumper in the EXT position.

Jumper position change must be refreshed in the memory by pressing the Reset button (short press).

9. NC/NO actuators jumper



Select the type of the thermoelectric actuator connected to the wiring centre: NC - actuator normally closed

NO – actuator normally opened

Jumper position change must be refreshed in the memory by pressing the Reset

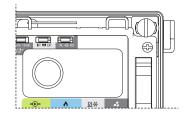








10. ZigBee network coordinator



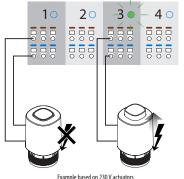
The ZigBee network coordination unit is used for Offline mode and it's included with the wiring centre. The device enables wireless control of all devices installed in one network. Within one network can be connected max 9 wiring centres. It means that if in the network there are more than one wiring centres, you can use one coordinator and put the remaining ones in a safe place.



Note: Do not use the coordinator with SMART Universal Gateway simultaneously.

11. Terminals for actuators

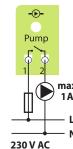
Wires of the thermoelectric actuators should be plugged into the self-locking connectors in the appropriate zones. You can connect 3 actuators directly to one zone. The current load of one zone is adapted to operate with up to 6 thermoelectric actuators with a power of 2 Watts. If there is a need to connect more than 6 actuators please use an additional relay to relieve the output of the zone.



6 0 7 0 8 0

Note: On the actuator contacts, there s voltage 230 V AC during their work.

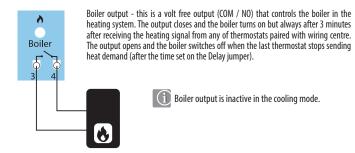
12. Pump control output



Pump output - this is a volt free output (COM / NO) that controls the circulation pump in the heating / cooling system. The output closes (pump starts) always after 3 minutes after receiving the heating / cooling signal from any of thermostats paired with wiring centre. The output opens (pump stops) after 3 minutes, when the last thermostat stops sending heat / cold demand.



13. Boiler control output



14. CO terminal (input)



Opened CO input contacts (Changeover) means that whole system works in the heating mode. Short circuit at the input CO will automatically switch the whole system to cooling mode (wiring centre and paired thermostats).

CO terminal	Diode	Mode		
Opened contacts	_ ← Red	<u>}}}</u> Heating		
Closed contacts	- Blue	*¾ Cooling		

15. Dew point sensor input (humidistat)

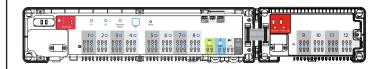


Dew point sensor input is active only in cooling mode (with closed CO

Shorting the contacts at the dew point sensor input (too high humidity) causes switching off all zones in the wiring centre and Pump control outputs.

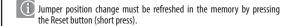
16. Serial connector for the wiring centre extension

It is used for communication between the 22-00013 wiring centre and the extension module. The extension module increases functionality and expands support up to 12 zones.



17. External antenna connector

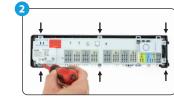
The external antenna connector is located underneath the wiring centre under zones 7 and 8. After connecting an additional antenna, place the jumper in the EXT position.



MOUNTING



Remove the top cover of the wiring centre.



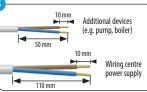
When wall mounting, unscrew the main part of the housing (see picture). When mounting on the DIN rail tilt the hooks on the back of the housing.



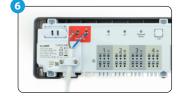
Attach the back of the wiring centre to the wall.



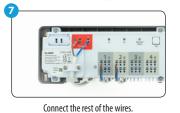
to the back of the housing.



Remove the appropriate section of insulation from the wires.

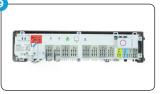


Connect the power cord.





Remove the coordinator if you use the SMART Universal Gateway



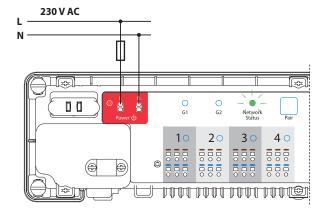
Make sure that all the wires are properly connected then connect the power cord to the 230 V AC power supply - red LED diode will light up.

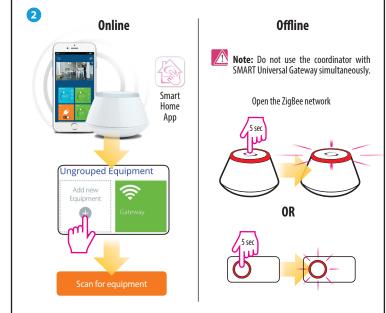


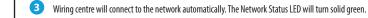
After finishing installation mount the top cover of wiring centre.

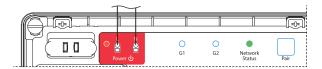
INSTALLATION

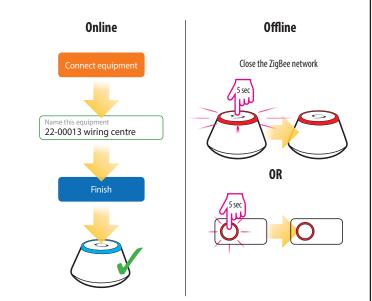
1 Connect the wiring centre to the 230 V AC power supply. The Network Status LED will blink.







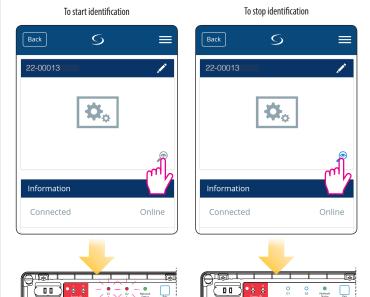




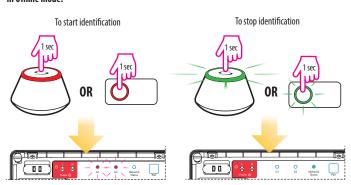
Identification of the wiring centre

To identify the wiring centre in the ZigBee network, follow the steps below:

In Online mode (using the Smart Home app):



In Offline mode:



To restore the factory settings, press and hold the Pair button for 15 seconds. G1 and G2 diodes will turn red

Note: If you restore the factory settings of the wiring centre, all paired devices will be removed from the ZigBee network - you will have to synchronize them again.

