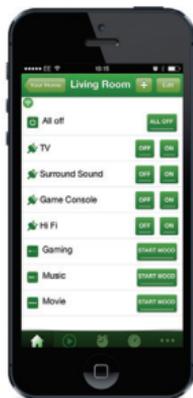


Home Thermostat

Model No. JSJSLW921

Instruction Manual



Professional Series

www.megamanuk.com/lightwaverf





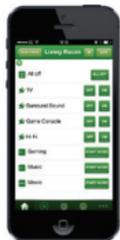
How do I get started?

The following setup guide will explain how to link the Home Thermostat to other LightwaveRF heating devices. For anything other than a basic installation, it is recommended to use the Thermostat in conjunction with the Lightwave Link & Web App. For further help and guidance visit www.lightwaverf.com or scan the QR code below.



What do I need?

The Home Thermostat does not need any tools or expertise to be installed. It is completely wireless and can be positioned anywhere in the home. It also comes with a backplate that can be screw mounted or stuck to the wall.



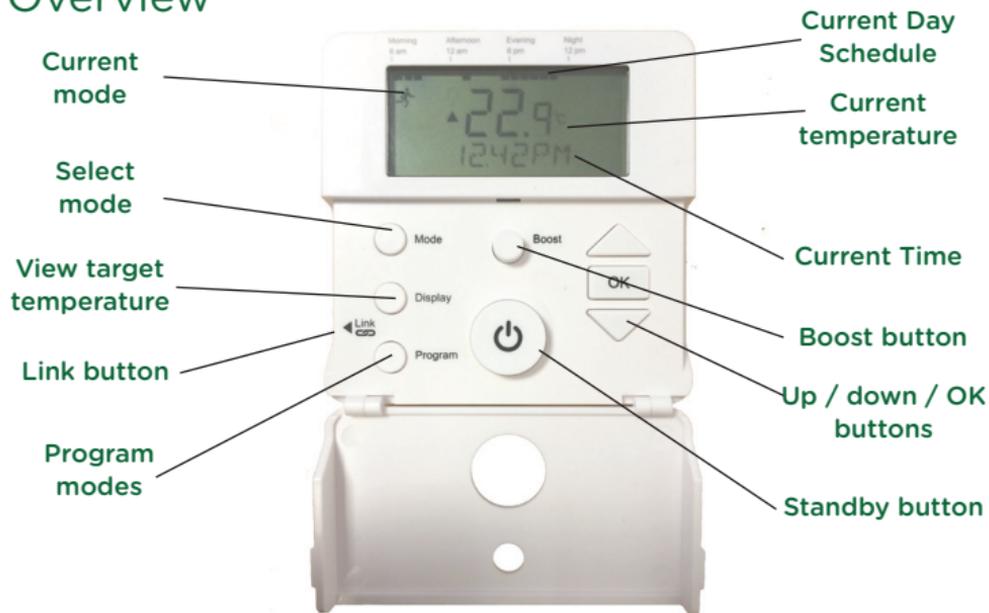
Help Video & further guidance

You can scan this QR code with your smartphone. It will take you to a video and further instructions that will help guide you through setup and installation.





Overview



IMPORTANT: Please retain these instructions for guidance on how to link other LightwaveRF Heating devices to the Home Thermostat. For App setup and additional guidance please visit www.megamanuk.com/lightwaverf



Inserting / Changing the Batteries

The Home Thermostat requires 2 x AA batteries for operation. The battery compartment can be accessed by removing the backplate. To do this, the two screws at bottom of the Thermostat need to be loosened. The backplate can be gently pulled away from the Thermostat body and slid downwards until it comes free from the hooks at the top of the device.

Wall Mounting

The backplate is designed to be wall mounted. This can be achieved by inserting suitable screws through the two mounting holes, or by using adhesive pads (not included).



Battery compartment



Device Setup

Basic Operation

This section will show you how to setup the basic functions of the Home Thermostat including setting the target temperature, modes, and creating a schedule. If you are using the Thermostat with the Lightwave Link, you can setup these functions on the App. **It is always recommended to use the Lightwave Link if anything more than a basic setup is desired.** The following section will show you how to link the Thermostat to other LightwaveRF Heating devices to integrate it into your heating system.

The Standby button

Pressing the Standby button toggles between standard 'Running' mode and 'Standby'. Holding the Standby button activates 'Away' mode.

Running mode activates the heating schedule and is the default mode of operation. Standby turns off Running mode until the next 'heating period' (see next section) and reverts to the setback temperature. Away mode also reverts to a preset setback (see setting modes), however this mode will remain active until it is manually cancelled by pressing the Standby button once again (or on the App). Holding When switching between the two modes and Standby, the target temperature for each is briefly displayed in place of the current temperature.

When the Thermostat is working to achieve its target temperature, a flame symbol is displayed.



The Boost function

Pressing the Boost button sets a temporary target temperature 1.5 degrees above the current temperature for the duration of 1 hour. If there is a target temperature higher than the current temperature already set, pressing the boost button will match this temperature.

Pressing the button twice boosts the temperature for 2 hours, three times 4 hours, four times 8 hours, and the fifth press will cancel the boost function. An active boost function is denoted by a sun symbol on the display. It can be cancelled at any time by pressing the standby button (press twice to return to normal running mode).

Setting a target temperature

The arrow shaped buttons on the Thermostat allow you to manually change the current target temperature. Tap the up or down buttons to move the temperature in 0.5 degree increments. The new target temperature will remain active until standby mode is activated, the mode button is pressed to change modes, or the next 'heating cycle' in the running schedule is initiated (explained in next section). These actions will revert the target temperature to the current existing presets. Pressing the 'Display' button allows you to view the current target temperature.



Device Setup

Modes

Pressing the Mode button toggles between the four Thermostat modes. Each mode contains preset programmable target temperatures. When a mode is selected, the Thermostat will be set to these target temperatures until the mode is changed.

Running mode

The main Thermostat mode is 'Running'. Unlike the other modes which can only store temperatures, Running mode also allows you to create a weekly heating schedule which can change the target temperature up to 8 times per day. When the home is occupied, this mode should be constantly running.

Away & Holiday modes

Away and Holiday modes allow you to specify a temperature that you want to set the heating to whilst you are away. Holiday mode also allows you to specify the number of days that you want this to be active for.

Frost mode

This mode should be activated when the home is unoccupied for long periods. It prevents pipes from freezing by setting a minimum temperature.



Programming Running mode

- 1.** Press the 'Program' button and then press the 'OK' button when option '1' appears on the display.
- 2.** The next option screen allows you to choose which days of the week to schedule. You can set all week days to be the same, setup week then weekend days, or each day individually. Select the appropriate option by using the Arrow keys to scroll and then pressing the 'OK' button. You will need to return to the menu several times if you want to setup days individually.
- 3.** Next, the target temperature and setback temperature (on and off) need to be set for each 'heating cycle'. Once again, use the Arrow keys to scroll and OK to select a temperature.
- 4.** Once this is set, you need to choose the periods of the day that you want to be heated. Each one is referred to as a 'heating cycle' and is denoted on the display by a series of blocks corresponding to the times of day marked next to it. Set the first heating cycle by scrolling to select a start time and pressing OK. Then select an end time and press OK. Running mode allows up to 4 independent heating cycles. Each one of these needs to be set, however, if you require less than 4, simply set the on and off times for unwanted cycles to the same time which will effectively cancel them.



Setting Away, Holiday and Frost modes

- 1.** Press the 'Program' button, scroll using the Arrow keys, and then press the 'OK' button when options '3 (Away), 5 (Holiday) or 6 (Frost)' appear on the display.
- 2.** Select a target temperature by scrolling using the Arrow Keys and pressing OK when the desired temperature has been selected. This applies to all three modes.

Programming Time/Date, Constant & Offset temperatures

To set the time and date, press the Program button, scroll to option 2 using the Arrow keys, and press the OK button. Scroll to select the correct, year, month and day followed by the time, and press OK to save it.

Selecting the constant temperature option disregards the modes and schedules and simply allows the Thermostat to operate in real time. The temperature can be set using the arrow keys. Press the Standby button to cancel this feature.

Setting the offset temperature causes the Thermostat to display a current temperature that is higher or lower than the actual temperature measured. It can be raised or lowered in 1 degree increments using the arrow keys and saved by pressing the OK button.



How LightwaveRF heating devices work together

To use the Thermostat, with other LightwaveRF Heating Devices, you will need to **'link'** it. The devices that you link depends on the setup that you want to achieve.

You can create a basic setup (e.g. Home Thermostat plus TRV) by linking the devices directly (see later pages for how to do this). The most comprehensive solution is to link all heating devices to the LightwaveRF Smartphone or Web App using the **Lightwave Link**. This allows you to create an expandable zoned system that can take care of your entire home. Temperatures can be set for each room or 'heating zone', and heating can be planned week by week and room by room.

The illustration on the following page shows how different heating devices can be linked together in a whole house setup. Following this are some the most typical scenarios in which you would use the Home Thermostat. For further information and guidance please visit www.lightwaverf.com.



Lightwave Link



Web App Heating 'Planner'



Heating System Setup

Home Thermostat
(monitors house temp.)



Heating Remote
(sets house temp.)

Lightwave App
(control any room from anywhere)



Lightwave link
(runs the show)

Boiler Switch
(turns boiler on/off)



Lounge

Room Thermostat
(controls several TRVs)



Bedroom 1



TRV
(controls radiator)

Bedroom 2



Window Trigger
(open window turns off TRV)

Example 'Heating Zones' (rooms or areas of the house)



Typical setups involving the Home Thermostat

1. (Recommended) Thermostat, Boiler Switch & Lightwave Link

The most common setup uses the Home Thermostat as an accurate temperature reference point for the Lightwave Link to control your home heating. Heating can be scheduled from the LightwaveRF App OR the Thermostat, which provides a complementary manual, wall mounted control. A Heating Remote and TRVs can also be added to provide complete control.



2. Using the Thermostat with a Boiler Switch alone

In this basic setup, the Home Thermostat schedules the heating by wirelessly controlling the LightwaveRF Boiler Switch which turns the boiler on or off. It also provides an accurate temperature reference. A Heating Remote can be linked to provide convenient control from anywhere in the house.





Heating System Setup

3. Using a Heating Remote to turn the house or radiator temperature up/down (requires linked boiler switch or TRVs)

A Heating Remote can be linked to a Home Thermostat to allow you to turn the house temperature up and down, boost the heating for a hour, or turn the Boiler on/off (if you have a Boiler Switch). If the Thermostat is linked to TRVs, the Remote can also be used to turn them up or down.



4. Using the Home Thermostat with LightwaveRF TRVs / Electric Radiator Switches

The Home Thermostat can be used to manage TRVs or Electric Switches (to control electric radiators) and run a 'heating zone'. This could be as part of a large house system taking commands from the Lightwave Link, or as a small standalone system used to program a radiator/ separately to the rest of the house.





5. Using a Window Trigger with the Thermostat to automatically turn off the Boiler, TRVs or Electric Rad Switches

A Window Trigger can be linked to a Home Thermostat. If a window is opened, any TRVs, Boiler Switches or Electric Radiator Switches that are linked to the Thermostat will automatically be turned off. When the window is closed, the devices will be turned on again.



6. Using 2 Thermostats & 2 Boiler Switches (Plus Link if desired) to manage a two zone (upstairs/downstairs) system.

If you have an existing two zone heating setup that includes a motorised valve (more common in new builds), two Home Thermostats can be used along with two Boiler Switches to control each zone separately. This can also be done on the LightwaveRF App. Refer to www.lightwaverf.com for more information about this setup.





Heating System Setup

Linking the Thermostat to LightwaveRF heating devices

To use a LightwaveRF Home Thermostat with other LightwaveRF Heating Devices, as in the setups described, you will need to 'link' them. The Thermostat can be linked to other LightwaveRF heating devices using the following method.

- 1.** Press and release the 'Link' button on the Thermostat. 'Link' should appear on the display.
- 2.** Press the Link button on the heating device you wish to link. 'Link OK' should appear to indicate that the Thermostat is linked.

To unlink a heating device from the Thermostat, press and release the Linking button and then press the Standby button. This activates 'unlinking' mode. Press the Linking button on the heating device you wish to unlink. The 'deleted' should be displayed to indicate that the devices have been unlinked.

To completely clear the memory of the Thermostat, press and release the Linking button. Then hold the Linking button until 'clear' is displayed. Finally, press and release the Linking button once more. 'Cleared' should be displayed.





Linking to Multiple Radiators in one 'heating zone' (room)

If you have a large room or area with more than one radiator, you may want to link the TRVs (or Electric Radiator Switches) to become part of the same 'heating zone' on the App and work together. You can do this simply by linking one Switch to Lightwave Link and App and then linking it to the next Switch to form a 'daisy-chain'.

You can also link a Room or Home Thermostat to the App, then to a Switch, and, finally, link the Switches together. The Thermostat will take commands from the App and relay them to the linked Switches in its 'heating zone'.

In some cases, you may also want to link a Heating Remote or Magnetic Trigger to more than one TRV / Electric Switch in the same room or 'heating zone'. This will cause all radiators to be controlled by the same device. This can be achieved in the same way: link one TRV to the Remote or Trigger, and then link that TRV to the next. A single Heating Remote or Magnetic Trigger can also be linked to multiple TRVs by linking it to a Thermostat that, in turn, controls the TRVs or Electric Switches in that room.

IMPORTANT: LightwaveRF Thermostats can link to a limited number of heating devices. If this limit is exceeded and an extra device linked, the link to the former device will be overwritten. More devices can be added by linking them to the Lightwave Link and App. It is always recommended to use the Lightwave Link if anything more than a basic setup is desired.



Heating System Setup

Linking to the LightwaveRF App

If you intend to use the LightwaveRF App or Web App to control the Home Thermostat, you will need the 'Lightwave Link'. This allows LightwaveRF heating devices to be linked to and controlled by a smartphone, tablet or PC. The Thermostat can be linked to the App using the following method.

- 1.** Follow the in-App setup instructions to setup the Lightwave Link and App. Access the 'Heating' Page and follow the instructions regarding how to add a device.
- 2.** Press and release the 'Link' button on the Thermostat ('link' will appear on the display).
- 3.** Send the linking command from the App (the in-App instructions will explain how to do this). 'Link OK' will appear on the display to indicate a successful link.





Using the Home Thermostat with the LightwaveRF App

IMPORTANT: For full instructions on how to use the Home Thermostat with the LightwaveRF App follow the in-App help or visit www.lightwaverf.com.

The main use of the Home Thermostat, if linked to the LightwaveRF App and Web App, is as an accurate temperature reference. You can still the schedule heating and select modes using the Thermostat, however, it may be more convenient to do this from the App or Web App on your smartphone/tablet. The Thermostat now acts as a convenient manual control to complement the App.

Importantly, the Thermostat and App work together: when you change the mode or schedule on the Thermostat or the App, it will automatically appear on the other device.





Creative Ideas for LightwaveRF Heating



1. (Intermediate): Remote control of the boiler

Required: Home Thermostat, Boiler Switch, Heating Remote

It is really comfortable and convenient to be able to have direct control over the house temperature without having to get up and alter the thermostat or boiler. This can be achieved using the LightwaveRF Home Thermostat, Boiler Switch and Heating Remote. You can turn the temperature up and down, boost the heating for an hour or simply turn it on/off. Use the Remote to control the Home Thermostat from the comfort of the sofa, and this will, in turn, carry the commands to the Boiler Switch.



2. (Intermediate): Smartphone Control from anywhere

Required: Home Thermostat, Lightwave Link, Boiler Switch

Installing a LightwaveRF Boiler Switch and linking it to a Lightwave Link and Home Thermostat allows you to control your home heating from anywhere using a smartphone or tablet. If you are staying late at work, you can turn off the heating so as not to waste energy, or turn it on in advance if coming back late on a cold night. If you are away on holiday in the winter, turn on the heating to a low level to make sure that the house does not get cold and damp. This simple installation can save you a significant amount of energy.



Creative Ideas for LightwaveRF Heating



3. (Advanced): Zoned Heating

Required: Home Thermostat, Link, Boiler Switch, TRVs

With the LightwaveRF App and the **Lightwave Link** you can create an expandable zoned system that can take care of your entire home. Temperatures can be set for each room or 'heating zone', and heating can be planned week by week and room by room. If you have electric radiators, you can still achieve this by connecting them to Electric Switches. You can also link wet radiators AND electric radiators and schedule them together for a totally integrated heating system!



Problem: The Thermostat will not consistently operate remotely.

Solution: The Remote/Thermostat/Lightwave Link may be encountering interference or may be at the edge of its reliable range of operation. First, ensure that there are no large pieces of metal or bodies of water in the path of the transmission. If the problem persists, try moving the Controller/Link closer to the Socket.

Problem: TRVs / Electric Switches / 'unlink' themselves from the Thermostat after linking other devices to it.

Solution: There is a limited number of devices that the Thermostat and other LightwaveRF heating devices can link to. If this is exceeded, previous devices will lose their connections. Note also that if linking several devices of the same type, they must be 'daisy chained' together (see previous instructions).



Q. Do I need to use a Thermostat with every TRV installed?

A. No. The TRV has in-built temperature sensing; however, using a Room Thermostat will slightly improve the accuracy of the temperature monitored, as it is removed from the heat of the radiator.

Q. Should I use a Room or Home Thermostat with the TRV?

A. It is possible to use either of these Thermostats to control more than one TRV in the same room or 'heating zone'. The Room Thermostat, however, is the simplest and most attractive way to do this as it is purpose designed for the task.

Q. Can I link more than one TRV or Electric Switch to a Thermostat?

A. Yes. Please refer to www.lightwaverf.com for current device limits.

Q. Is it legal for me to install a LightwaveRF Thermostat myself?

A. Yes, LightwaveRF products are fully legal to install in your own home.

Q. How long do the batteries last?

A. This can vary, but a minimum of one year can be expected with normal use.

Q. How do I know if the batteries need replacing?

A. The display will report that batteries are low. The App should also report that battery levels are running low.



Specification

RF frequency: 868 MHz

Batteries: 2 x 1.5V (AA)

Warranty: 2 year standard warranty



MEGAMAN[®]

2 Quadrant Park
Mundells
Welwyn Garden City
Herts
AL7 1FS
01707 386035

www.megamanuk.com/lightwaverf