

# JouleTherm Heating System



**ENERGY EFFICIENT  
ELECTRIC HEATING**

Designed and Engineered by **EcoVolt**



# What is JouleTherm?

**JouleTherm®** is derived from the two terms - Joule and Therm, which both relate to Energy. Joule is the unit of Energy and Therm can be related to heat.

The **JouleTherm®** range of electric radiators are manufactured using the latest in thermal technologies combined with electronic thermostats for accurate control of your heating. High thermal density kaolin / ceramic heating tablets with embedded stainless steel element spirals are used as the heating source in each radiator. The radiators are made from injected Aluminium which conducts and transfers the heat from the kaolin / ceramic heating tablets onto every surface of the radiator. The design of the radiator quickly transfers this heat into the room. A built in LCD electronic thermostat then regulates the amount of energy that is required to maintain the temperature set by the customer. The result is a warm cosy radiant heat with full control to the level you desire. There are 4 models in the **JouleTherm®** range. Each model is fitted with a built in LCD Thermostat and wireless RF receiver which makes the system very easy to set up a complete central heating system.



JT9i  
900W Electric Radiator  
• Heating Rooms up to 12 m<sup>2</sup>



JT12i  
1200W Electric Radiator  
• Heating Rooms up to 15 m<sup>2</sup>



JT15i  
1500W Electric Radiator  
• Heating Rooms up to 18 m<sup>2</sup>



JT18i  
1800W Electric Radiator  
• Heating Rooms up to 24 m<sup>2</sup>

## Technical specifications of the JouleTherm Electric Radiator

Technical specifications along with the average KWh consumption of each Jouletherm radiator

- Kaolin / ceramic heating elements
- Smart built-in room sensor
- Wall mounting bracket included
- Can be controlled by JS10/2 controller
- 5 year warranty
- 100% efficient

The JouleTherm® range is available in 4 different types to suit all room sizes.

Model No.	Rating	Size (cm)	Weight (kg)	Area m <sup>2</sup>		KWh
				Poor/Good	Consumption Insulation	
JT9i	900W	58 x 60 x 8.5	9	9 / 12		0.360
JT12i	1200W	58 x 76 x 8.5	11	12 / 15		0.480
JT15i	1500W	58 x 84 x 8.5	13.2	15 / 18		0.600
JT18i	1800W	58 x 100 x 8.5	16.8	18 / 24		0.720

**Model No:** The reference used for ordering.

**Rating:** This is the initial energy consumption the radiator will use on start – up. This is not to be confused with the KWh consumption.

**Size:** The physical size and dimensions of all radiators. All fixing brackets are included with each radiator.

**Weight (kg):** The actual weight of each radiator.

**Area m<sup>2</sup>:** This is area or room size the radiator is capable of heating. The width of the room multiplied by the length of the room in metres = metres square. These figures are for rooms with a ceiling height of no more than 3 metres.

**KWh Consumption:** This is the actual energy / electricity the radiator will use over an hour when the room is at the optimal temperature of 20°C.



# Choosing the correct **JouleTherm** radiator

Sizing the correct **JouleTherm**® radiator(s) requires measuring the total area of the room or rooms in question.

Using the map, multiply your result by the factor given on the map for your region to get the heat requirement in Watts.

## Example 1:

For someone living in Armagh with a room measuring 5 metres wide by 3 metres in length the total area is 15m<sup>2</sup>. From the regional map, the factor is 105.

$$= 15\text{m}^2 \times 105 = 1,575 \text{ Watts}$$

Therefore the JT18i – 1800W **JouleTherm**® is required.

## Example 2:

For a large room in Dublin measuring 7 metres wide by 6 metres in length, the total area is 42m<sup>2</sup>. Again from the map, the factor for this region is 100.

$$= 42\text{m}^2 \times 100 = 4,200 \text{ Watts}$$

Now we must select a number of radiators to sufficiently heat the room.

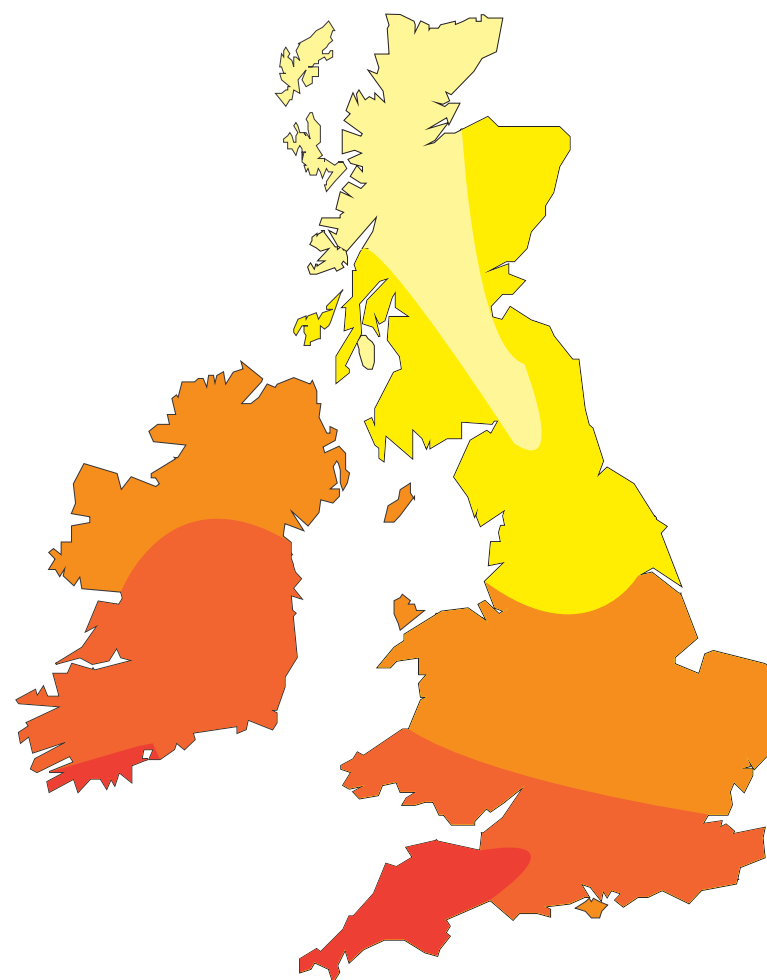
$$2 \times \text{JT18i} - 1800\text{W } \textbf{JouleTherm}^{\circledR} + 1 \times \text{JT9i} - 900\text{W } \textbf{JouleTherm}^{\circledR} = 4,500 \text{ Watts}$$






or

$$3 \times \text{JT15i} - 1500\text{W } \textbf{JouleTherm}^{\circledR} = 4,500 \text{ Watts.}$$

\* For any north facing rooms increase your result by 25% to avoid under estimating heat load required.

\*\* It is very important that you not under estimate the heat load required and that the correct radiator is chosen for the size of room. Always choose the larger wattage (power) radiator that is nearest to your calculation.



	m <sup>2</sup> x 115
	m <sup>2</sup> x 110
	m <sup>2</sup> x 105
	m <sup>2</sup> x 100
	m <sup>2</sup> x 95

The radiators required are calculated by the area of the room in m<sup>2</sup>, multiplied by factor shown in the map for the region the premises are in.

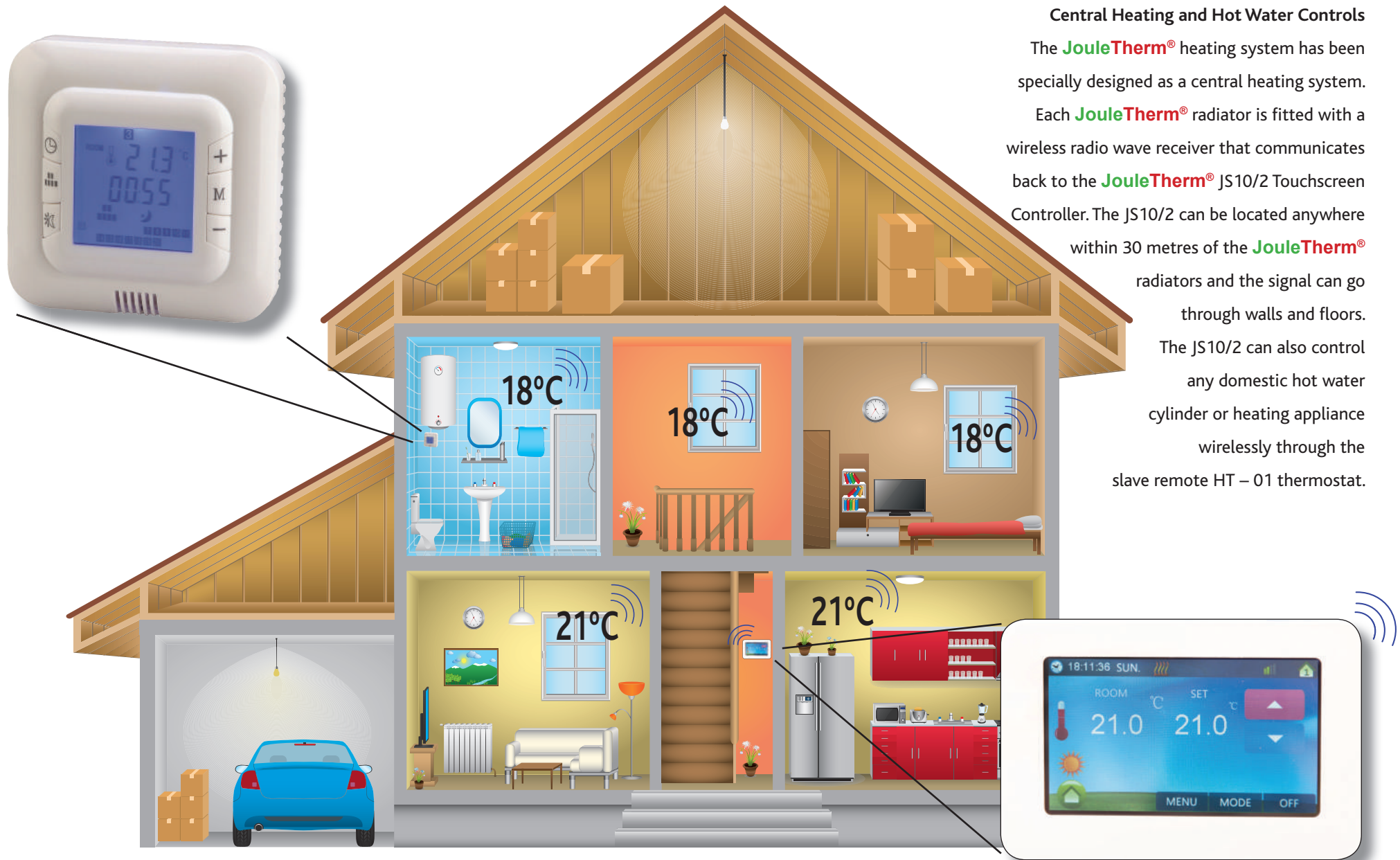


## Features of the JouleTherm Electric Radiator



- Doesn't require pipes, tanks, gas or oil to operate
- Full 5 year warranty with every radiator
- Low capital installation costs
- Warm comfortable radiant heat
- Fully controlled heating system
- Perfect solution to outdated storage heaters
- 100% efficient
- Class 2 appliance and comes with a 13A BS plugtop
- Can be used as a full heating system or stand alone
- Can supplement existing wet systems to heat those hard to heat rooms
- Can be centrally controlled via the wireless – JS10/2 controller
- Can avail of economy heating tariffs and night rate electricity tariffs
- In house trained service engineers for customer service related issues

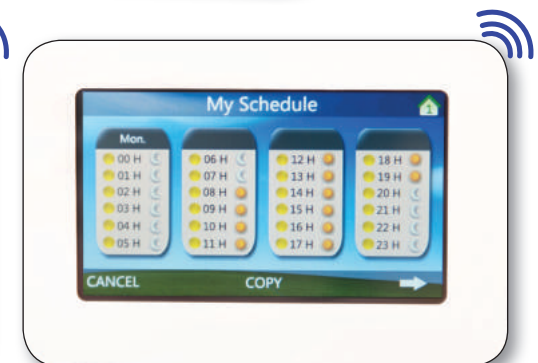
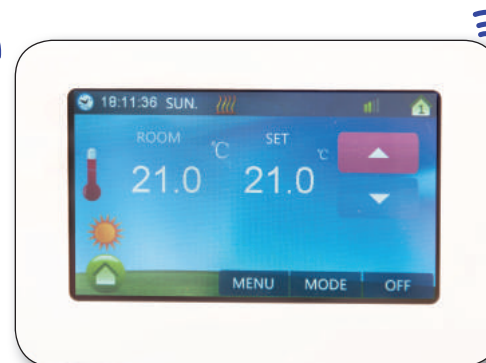
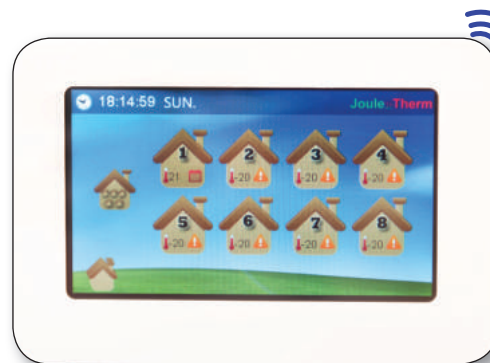
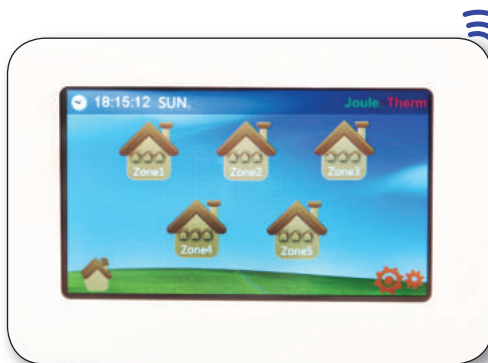
## Features of the JouleTherm Touchscreen Controller



## Features of the JouleTherm Touchscreen Controller

- User friendly controls
- Multiple heating zones
- Temperature and time control per zone
- Up to 40 radiators can be controlled from one central location
- Powerful signal strength that can go through walls and ceilings
- Pilot wire system
- Can fit onto a standard single electrical flush socket box

The JS10/2 controller can be placed central like the downstairs hall sending radiowaves out to each heater in each room.





# JouleTherm

Modern day heating for modern day living

