

# Generation 6 Samsung Heat Pump Handover Manual



REGISTER THIS PRODUCT
ONLINE WITHIN 28 DAYS OF
COMMISSIONING

**UNITED KINGDOM / IRELAND** 



https://register-products.joule.ie

ENG-0013-15

# Commissioning, Service & Maintenance

### Commissioning

From as little as £480 Inc VAT (Only applicable to UK)

### **Annual Servicing**

All Samsung Air Source Heat Pumps supplied by Joule must be serviced annually to validate the product warranty under the terms of the EUW<sup>1</sup> agreement. Items that must be inspected annually to validate the warranty include,

- Check outdoor fan motor and lubricate if needed
- Check electrical wiring, contacts and terminals; repair as required
- Check all safety components
- Check compressor operation
- Check indoor thermostat operation
- Check defrost and heating modes (winter only)
- Check for excessive noise and vibration
- Check refrigerant charge
- Inspect air filters
- Check all safety and pressure switches
- Check motor and heaters/voltage/amperes

An annual service must be carried out by a suitable qualified engineer to validate the terms of the Joule EUW agreement.

<sup>1.</sup> EUW = Extended Warranty Period

# **Service to Validate Warranty**

| <b>Customer Name:</b> |         |  |
|-----------------------|---------|--|
| Address line 1:       |         |  |
| City:                 | Country |  |
| Post Code:            | Email   |  |

| Outdoor Unit Model:                 | Serial No:   |  |
|-------------------------------------|--------------|--|
| Engineer Name:                      | Company      |  |
| Telephone:                          | Email        |  |
| Samsung certified Service Engineer? | Course year? |  |

| Outdoor Unit             | Description  | Comment |
|--------------------------|--|---------|
| Outdoor unit             | Check for undue noise and vibration                        |         |
| Casings and panels       | Inspect for damage and clean (ph. neutral cleaner)         |         |
| Casings and panels       | Inspect for corrosion and treat as required                |         |
| Frame & mountings        | Visual Inspection adjust as required & treat any corrosion |         |
| Heat exchanger           | Inspect for damage and clean fins                          |         |
| Fan blade and motor      | Inspect for damage, tighten fixings and clean blades       |         |
| Base & drainage          | Inspect for damage, clean and check condensate drainage    |         |
| Isolator                 | Inspect and tighten all terminals                          |         |
| <b>Outdoor terminals</b> | Inspect wiring connections and tighten all terminals       |         |
| Indoor Control Kit       | Description  | Comment |
| Isolator                 | Inspect and tighten all terminals                          |         |

# **Service to Validate Warranty**

| Indoor terminals | Inspect wiring connections and tighten all |  |
|------------------|--|--|
|                  | terminals                                  |  |

| System                | Description  | Comment |
|-----------------------|--|---------|
| Wet circuit           | Check pipe work insulation, repair as required   |         |
| Wet circuit           | Clean strainers  |         |
| Wet circuit           | Remove any trapped air in the system   |         |
| Wet circuit           | Check / Charge expansion vessel  |         |
| Wet circuit           | Check system water pressure is within limits   |         |
| Wet circuit           | Check for signs of water leakage, repair as required   |         |
| Safety equipment      | Test unvented safety equipment   |         |
| Glycol and inhibitor  | Check concentration % and adjust as required, check for scale build-up or corrosion and treat as necessary |         |
| Immersion heater      | Inspect wiring connections and tighten all terminals   |         |
| Immersion heater      | Check / record setting and test for correct operation  |         |
| 2 Port Valves / 3-Way | Check for correct operation  |         |

| Operation       | Description   | Comment |
|-----------------|---|---------|
| Operation check | Check heat up performance in heating & DHW modes    |         |
| SNet Data       | Check & update firmware                             |         |
|                 | Check and record running data (Heating & DHW modes) |         |

### Standard Warranty Period And Extended Warranty Period

The warranty period starts on the date of installation as shown on the commissioning report. The standard warranty period ends 24 months later. By registering the product(s) which can be done either by yourself, or by the reseller from whom you have purchased the products (the "Reseller") within 28 days after the installation date, you will receive an additional 5 year extended limited warranty service depending on the product type which will bring the total period of coverage to 7 years from the date of installation. All of the terms set in this Statement of Limited Warranty shall apply to any extended warranty. The method of service and operating conditions will be as described in the original warranty statement provided with the Samsung Product.

### Warranty: Redemption Process & Details

- This promotion cannot be used in conjunction with any other promotion(s) or special bid/tender pricing
  offered by Samsung Electronics.
- 2. This offer applies to models purchased after 00:01hrs (GMT) on 1st May 2016.
- 3. Upon registration the claimant will be sent an email confirmation with notification of registration and a related reference number for the claim being registered on.
- 4. A copy of your invoice and commissioning report MUST be submitted as proof of purchase.
- 5. Proof of dispatch will not be accepted as proof of receipt.
- 6. The 7 Year Extended Warranty is not transferable and no alternative will be offered.

### Statement For Samsung

 This offer only applies to the purchase of a new (not second-hand) Samsung air conditioning Product which is sold in the UK or ROI after 1st May 2016

| Product         | Model   | Warranty Type   |
|-----------------|---------|-----------------|
| All EHS Product | various | 7 years On Site |

- For customers outside the UK & ROI please refer to the country specific warranty information that came with your product.
- 3. All Extended Warranty Redemptions must be registered online within 28 days of installation.
- 4. This Promotion is only available to end user customers who are using the products for business purposes.
- 5. Employees or agents of Samsung or their families or households or anyone professionally connected to this promotion is not eligible.
- 6. By registering for the Extended Warranty you agree to be bound by these terms and conditions.

### **Extent Of Warranty**

During the extended warranty period Samsung continues to warrant that the Samsung Product shall be free from defects in materials and workmanship. If the relevant product does not function as warranted, against defective materials or workmanship, you should contact the Joule technical department or your local sales representative.

Samsung Maintenance Parts, Supplies and Optional accessories (i.e. consumables), supplied as part of the initial Samsung Product installation and listed in the Samsung Product User Guides, is warranted against defective materials or workmanship for the first 6 months, from date of Samsung Product purchase or recommended average life volume, whichever is achieved first, but is excluded from the Extended Warranty period.

When Warranty service involves the exchange of a product or part, subject to applicable law, the item replaced becomes the property of Samsung.

The replacement item assumes the remaining warranty period of the original product.

Before you present the product(s) for On Site (IH) warranty service you must:

• Ensure that the Product is available for Warranty repair, on Site at the registered address.

### Claim(s) For Warranty Service

To obtain a Warranty service, you must:

- Contact the Joule technical department or your local sales representative.
- Provide the full product model code and serial number
- Provide proof of activated extended warranty and proof of annual maintenance contract as per the e-mail confirmation sent at the time of online warranty registration(s)
- Provide a clear fault description and carry out any diagnostics as advised
- Comply with any reasonable instructions from Samsung or an Authorised Service Centre to allow you to receive the warranty service

### Transfer Of Product

If you transfer this product to another user, warranty service may be available to that user during the remainder of the standard 24 month warranty period, but not during any extended warranty period (i.e. the extended warranty is not transferable).

### **Exclusions**

Samsung makes no representation or guarantee that the Samsung product(s) will operate uninterrupted or error free.

During the Extended Warranty Period, Samsung will only provide the Warranty in the UK and ROI.

Samsung is not responsible for paying any travel or delivery costs where the product is located outside the UK or ROI.

Services performed by Samsung in rectifying damage or defect caused as a result of any excluded conditions shall be subject to additional charges for labour, transportation and parts.

The Extended Warranty is only available if you have an ongoing maintenance contract in place with a maintenance provider approved by Samsung, under which the product(s) must be checked at least once a year by that maintenance provider.

Warranty Service is not available to you if the product you present is:

- Defaced
- Altered
- Damaged beyond repair, or
- In need of a repair not included in Warranty service. (e.g Periodic Maintenance, consumable replacement
  and the repair or replacement of parts due to normal wear and tear) transportation damage, or any other
  damage caused by external factors (i.e. not damage caused by issues inherent in the manufacturing of the
  product)
- Does not match Product Model and serial number details as registered for Warranty service

To the maximum extent permitted by law, warranty service does not include repair of failures caused by:

- Modification or attachments
- Accidents or misuse
- Unsuitable physical or operating environment
- Third party products, generic or refilled e.g. maintenance units or replacement parts
- Maintenance by anyone other than Joule or a Joule authorised service provider.
- Operation of a product beyond the limit of its duty cycle or Product specifications
- Products, components, parts, material, software, or interfaces not furnished by Samsung

Neither Samsung nor its third party suppliers or resellers make any other warranty, guarantee, or condition of any kind, whether express, implied, legal or statutory, with respect to the product(s), and to the extent permitted by applicable law, specifically disclaim any implied, legal or statutory warranties or conditions or merchantability, fitness for a particular, general or normal purpose, satisfactory quality, durability and warranties against latent defects.

### General Terms Of Promotion

- These terms and conditions are governed by English law and come under the English courts shall have exclusive jurisdiction to settle and resolve any dispute which may arise in connection with the validity, effect, interpretation and/or performance of these terms.
- 2. By registering for the extended warranty you agree to be bound by these terms and conditions.
- The Promoter shall have the right, where necessary, to undertake all such action as is reasonable to protect itself against fraudulent or invalid claim(s) including, without limitation, to require further verification as to

the identity, and other relevant details of an entrant or claimant and/or the verification as to their qualifying purchase.

- 4. The Promoter shall not be liable for any interruption to this promotion whether due to force majeure or other factors beyond the Promoter's control.
- The Promoter reserves the right, acting reasonably and in accordance with all relevant legislation and codes of practice, to vary the terms and conditions of this Promotion.
- Promoter: Samsung Electronics (UK) Ltd, Samsung House, 1000 Hillswood Drive, Chertsey, Surrey, KT16 OPS. (Please do not send any Warranty applications to this address - they will not be registered for Warranty promotion)

### Joule Cyclone

The **JOULE Cyclone** stainless steel vessel carries a fully transferable 25-year guarantee against faulty materials or manufacture provided that:

- It has been installed in the United Kingdom or the Republic of Ireland as per the instructions provided in
  the installation manual provided with the cylinder and in accordance with all of the relevant standards,
  regulations and codes of practice in force at the time.
- It has not been modified in any way, other than by |OULE
- It has not been misused, tampered with or subjected to neglect.
- The system is fed from the public mains water supply.
- It has only been used for the storage of potable water.
- It has not been subjected to frost damage.
- The unit has been serviced annually.
- The Service Log Book has been completed after each annual service.
- The warranty card is filled in and a copy is sent by email to warranty@joule.ie

### **Exclusions**

The guarantee does not cover cylinders affected by the following;

- The effects of scale build up on the cylinder.
- Any labour charges associated with replacing the unit or its parts.
- Any consequential losses caused by the failure or malfunction of the unit.

Please note that invoices for servicing may be requested to prove that the unit has been serviced annually.

### Unvented Kit & Other Components

The expansion vessel and cold water controls supplied with JOULE models carry a 1-year guarantee. All other components that are fitted to, or supplied, with the unit carry a 1-year guarantee.

### Standard Warranty Period And Extended Warranty Period

- 1. The warranty period starts on the date of installation as shown on the commissioning report. The standard warranty period ends 24 months later. By registering the product(s) which can be done either by yourself, or by the reseller from whom you have purchased the products (the "Reseller") within 28 days after the installation date, you will receive an additional 5 year ex- tended warranty which will bring the total period of coverage to 7 years from the date of installation. All of the terms set in this Statement of Limited Warranty shall apply to any extended warranty. The method of service and operating conditions will be as described in the original warranty statement provided with the Samsung Product.
- 2. Note all heat pumps commissioned by Joule are registered for extended warranty automatically. Proof of extended warranty is in the form of Joule commissioning certificate.
- 3. All Samsung Air Source Heat Pumps supplied by Joule must be serviced annually to maintain the product warranty under the terms of the EUW agreement.

### Claim(s) For Warranty Service

To obtain a Warranty service, you must:

- Contact the Joule Support hotline on 016237080 (ROI)
- Provide the full product model code and serial number
- Provide proof of commissioning and proof of annual maintenance
- Provide a clear fault description and carry out any diagnostics as advised
- Comply with any reasonable instructions from Joule or an Authorised Service Centre to allow you to receive the warranty service

### **Joule Cyclone**

The JOULE Cyclone stainless steel vessel carries a fully transferable 25-year guarantee against faulty materials or manufacture provided that:

- It has been installed in the United Kingdom or the Republic of Ireland as per the instructions provided in the installation manual provided with the cylinder and in accordance with all of the relevant standards, regulations and codes of practice in force at the time.
- It has not been modified in any way, other than by OULE
- It has not been misused, tampered with or subjected to neglect.
- The system is fed from the public mains water supply.
- It has only been used for the storage of potable water.
- It has not been subjected to frost damage.
- The unit has been serviced annually.
- The Service Log Book has been completed after each annual service.
- The warranty card is filled in and a copy is sent by email to warranty@joule.ie

### **Exclusions**

The guarantee does not cover cylinders affected by the following;

- The effects of scale build up on the cylinder.
- Any labour charges associated with replacing the unit or its parts.
- Any consequential losses caused by the failure or malfunction of the unit.
- Please note that invoices for servicing may be requested to prove that the unit has been serviced annually.

### **Unvented Kit & Other Components**

The expansion vessel and cold water controls supplied with JOULE models carry a 1-year guarantee. All other components that are fitted to, or supplied, with the unit carry a 1-year guarantee.

### **System Operation**

### **Heating Control**

There should be room thermostat installed if you have radiators and possibly multiple room stats if you have underfloor heating. See thermostat handover document for information on thermostats. The heating is controlled by these thermostats. Please do not use the Samsung Controller to control your heating.

When a thermostat calls for heat, the heat pump system starts up, it will take time to get up to temperature. It is not instant. Within 10 minutes you should feel the radiators to warm up. If desired, you can adjust room temperature at the thermostat, but it is not recommended to turn off room thermostats.

To get the best from your heat pump it is recommended to keep room stats at as close to constant temperature as possible. Do not turn stats off or turn down too low. If leaving the house and you wish to drop the temperature in the house it is recommended to adjust stats by a max of 2 degrees below the standard set point.

During summer if heat is not wanted and you wish to maximize solar gains, turn down room stats to 16 degrees. If radiators are installed, you can adjust temperature in each room via thermostatic radiator Valves.

### Weather Compensation

The Heat Pump has built in weather compensation meaning the outdoor temperature dictates the Flow temperature to the radiators. The colder the outdoor temperature the warmer the rads will get and vice versa. This function is automatic and is designed to increase efficiency and reduce running costs.

### Hot Water Control

On the right-hand side of the controller's home screen, you should see DHW – Set – 48deg – Standard. This means hot water function is turned on and the controller is monitoring cylinder temperature. The system is commissioned to maintain water temperature between 43 and 48 all the time. The hot water cylinder has priority over rest of the heating system. If the cylinder temperature drops 5 degrees below the set point, the unit will automatically switch on to heat the hot water cylinder. Once set point temperature is achieved the unit switch back to heating the house if necessary.

If the hot water cylinder drops dramatically in temperature due to a bath or consecutive showers and you need hot water quickly then you have the option of using the Forced mode on the controller. Press the right arrow so that the DHW box is highlighted in blue. Then press the ok button. Now you can scroll down until Forced is highlighted and then press ok. This will run the heat pump and the immersion together to heat the hot water cylinder. You must make sure to turn off this Forced function when not required and return to Standard operation.



The controller is programmed to perform a legionella disinfection of the cylinder every Tuesday morning at 3am. This program will force the heat pump and immersion to heat the cylinder to 60 degrees.

If going away on holidays you can press the Economic mode or turn off the hot water function to save energy in heating water. Make sure to change the controller back to Standard operation on your return.

### General Advice

The heat pump comes with a Samsung controller which is usually mounted on the front of the cylinder. This controller is for commissioning and fault diagnosing of the system only and should not be used to control heating.

In normal operation the controller will show on the left-hand side of display Zone – Set – 0.0 – Heat and on the right hand side of the display DHW – Set – 48deg – Standard. If there is a fault in the system, an error code will appear on the screen starting with the letter E for example E911. The power button light will start flashing. A service engineer will want to know this Error number to help diagnose the issue.

Avoid turning the heat pump and controller off at the power supply especially in cold weather. If the unit is off in cold weather, it cannot protect itself from freezing and warranty will be at risk.

If the unit is in standby mode and the outdoor temperature is cold, the primary circulating pump will come for a couple minutes to prevent freezing. In extreme cold weather the circulating pump will run continuously to prevent freezing.

### **Controller Operation**

Controller in Standard Heating & Hot Water Operation:



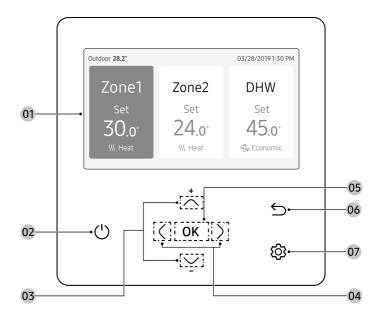
Controller with Fault/Error:



An Error code starting with "E" will appear and the power button will flash. If this happens take note of error code and contact your installer/service engineer for further assistance.

## **Samsung Controller**

### Overview of the Samsung Controller Initial Start Up



| Location | Function   |
|----------|--|
| 1        | Operation status display - Displays the operation/function settings and statuses.      |
| 2        | Operation On/Off button (LED display) - Turns the Air to Water Heat Pump power On/Off  |
| 3        | <b>Up/Down button -</b> Moves between items vertically or changes the set temperature. |
| 4        | Left/Right button - Moves between items horizontally or changes the item value.        |
| 5        | OK button - Saves your new settings.   |
| 6        | Save & Return button - Saves your new settings and returns to the previous step.       |
| 7        | Option button - Selects the detailed setting function.                                 |

### Turning on Heating and DHW

- 1. Use the arrow to ensure you are on the front Screen
- 2. Use the right and left arrows to high light the function to turn on.
- 3. To turn on DHW, use the right arrow so DHW function is highlighted
- 4. Once highlighted push the power button and DHW should display.
- 5. To set temperature Push ok button whilst DHW is highlighted
- 6. Use up and down arrows to set water temperature
- 7. Push OK button to set power mode, this should be set for Standard.
- 8. Use up and down to select Standard and push OK.
- 9. Once complete push  $\stackrel{\longleftarrow}{\longrightarrow}$  to return to front Screen

### To set heating to ON

- 1. Use left and right arrows to highlight Zone
- 2. Push power button to enable heating
- 3. Screen display will show 0.0
- 4. Push the OK button to enter heating info
- 5. From here you can see flow temps
- 6. Use the to exit this screen.
- 7. 0.0 must be on for the heat pump to detect run signals from the heating system.

# **Notes**

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