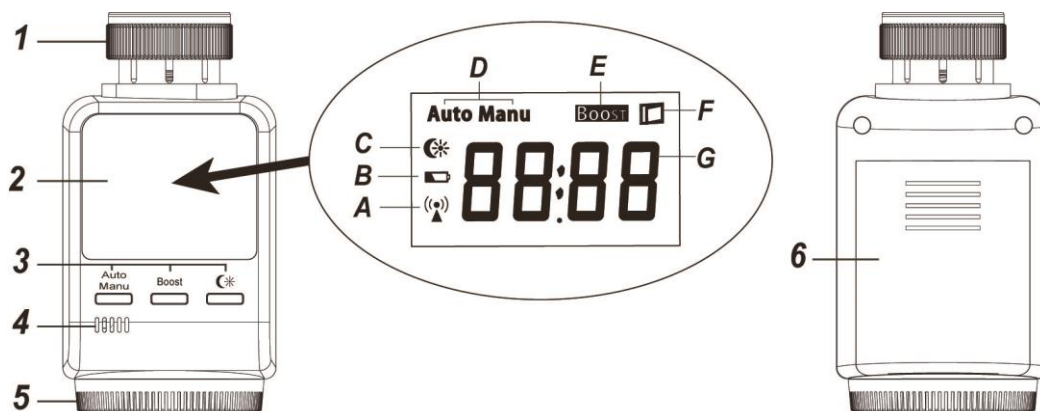


# Wireless Thermostatic Radiator Valve (TRV-S1)



## Parts Description

### 1. Valve Cap

### 2. LCD Screen

- A. ON: Device is learnt in and wirelessly connected with panel.  
 OFF: Device is either not learnt in, or has lost connection with panel.
- B. Low Battery Indicator
- C. On: Device set to default night temperature 17 °C.  
 Flash: Valve closing  
 On: Device set to default day temperature 21 °C.  
 Flash: Valve opening.
- D. Auto / Manual mode
- E. Boost mode indicator
- F. Open Window
- G. **Setpoint** / Status Indication  
**InS**: When device is powered on.  
**AdA**: Device motor working  
**F1/F3**: Valve Jammed  
**F2**: Device not installed on valve.

### 3. Function Buttons

- Auto/Manual: Toggle between Auto and Manual mode.
- Boost: Speed up heating
- : Toggle between default Day / Night temperature.

### 4. Temperature Sensor / Status Indication

### 5. Control Knob

Turn to adjust temperature.

### 6. Battery Compartment

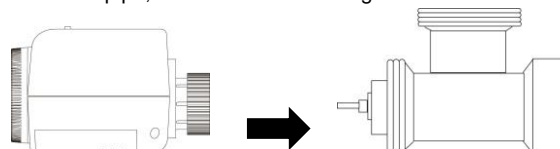
## Package Content

- 1 x Radiator Valve
- 2 x 1.5V AA Alkaline batteries.

## Learning & Installation

1. Remove the battery cover to insert batteries.
2. The device will power on. The LCD screen will display "InS" and flash icon. The valve will turn to full open.

3. Refer to your Control Panel manual to put panel into learning mode.
4. Press and hold the central "Boost" button for about 10 seconds and release when the LCD screen displays "888" Wait a few seconds.
5. Refer to panel manual to complete the learning process.
6. Wait for the icon to stop flashing, then install the device onto the pipe, turn the valve nut to tighten.



7. Press the Auto/Manual button, the LCD will display "AdA" and icon will flash. The valve will turn to full close.
8. Wait for the valve to finish turning and complete installation.

## Operation

### Temperature Adjustment

Toggle between Auto and Manual mode by pressing the Auto/Manual button.

### Manual Control

Turn the knob at bottom of device to control temperature setpoint. between 5°C to 30°C. Setting temperature to over 30°C will set the device to ON. Setting temperature below 5°C will set the device to OFF.

**ON**: When turned to ON, the valve will be opened completely after 1 minute. This function is used to preserve battery life during summer, when heating is not required. Do NOT use this function in winter when heater is activated, otherwise the room temperature will rise without control.

**OFF**: When turn to OFF, the valve will be closed completely after 1 minute. This function is used when heater is activated but heating is not required in a room with no occupants.

### Remote Control

Use the Home Automation function Blaupunkt Home Connect server or Secure4Home smartphone application to adjust temperature setpoint. You can also program Schedule setting via remote control function:

Schedule Setting: Up to 5 schedules can be programmed for every weekday with Mode, Setpoint and Start time.

### Schedule Control:

Normal - The Radiator Valve will execute programmed schedule setting accordingly.

No Schedule – The Radiator Valve will not execute any set schedule until it is set to Normal again.

### Boost Button

The Boost button is used when you want to heat the room quickly. Press the button is activated Boost function for 5 minutes. During the 5-minute period the device will open the valve further to increase heating efficiency. The Boost time period will countdown on the LCD screen, you may press the Boost button again to cancel Boost function.

### **Day/Night Temperature**

The device has default day temperature setpoint of 21°C and night temperature of 17°C. Press the ☾☀ button to toggle between default day or night temperature.

### **Setpoint Offset**

The device is usually installed at the corner of the room and near the heating pipe. As a result its temperature reading may deviate from room temperature at center of room. Use the Setpoint Offset function to compensate the deviation.

To calculate setpoint offset, simply subtract room temperature with device temperature.

For example: If device temperature is 20°C and room temperature is 18°C, then setpoint offset =  $18 - 20 = -2^{\circ}\text{C}$ .

After setpoint offset is applied, the device will operate according to adjusted temperature.

For example: If device temperature reading is 20°C, setpoint offset is -2°C, the device will operate using 18°C as actual reference.

To program Setpoint Offset:

1. Press and hold the ☾☓ button for 3 seconds to enter offset adjustment.
2. Rotate the Control Knob to desired offset temperature.
3. Press any key to finish and exit offset adjustment.

You may adjust Setpoint Offset remotely using the server and app.

### **Open Window Detection.**

If the device detects rapid temperature drops. It will assume the room window has been opened and will activate Open Window function by partly closing the valve to for 15 minutes to avoid unnecessary energy waste. The LCD will display ☐ icon. After 15 minutes, the device will return to normal operation.

### **Anti-frosting and Anti-calcification**

Anti-frosting: When frosting hazard is detected, the device will automatically open the valve for hot water to flow in order to maintain the temperature and to prevent further frosting.

Anti-calcification: The device opens and closes the valve weekly to prevent calcification. During the process the LCD screen will display CAL.

### **Lockdown**

The device may disable all button and control knob function by pressing and holding both Auto / Manual and ☾☓ buttons for 3 seconds. When locked down, ☾☓ icon will be displayed. To return to normal operation, press and hold both buttons for 3 seconds again.

### **Battery**

The device uses two AA Alkaline 1.5V batteries as power source. It also features low battery detection function to notify the Control Panel when battery voltage is low.

### **Battery Saving Guideline**

The device is wirelessly connected with the Control Panel at all time. When the device loses connection with the Control Panel, it will actively search for the Control Panel, which will consume extra power and greatly reduces battery life. In order to avoid unnecessary power consumption, please follow the guidelines below:

1. Ensure the Control Panel is powered on before inserting batteries. Always learn in the device immediately after inserting batteries.
2. Ensure the Control Panel is powered on and within signal range when the device is powered on.

3. When you removed the device from the Control Panel, make sure to remove the batteries from the device too.

## **Specification**

### **Environmental Condition**

-10°C to 40°C, relative humidity 85% non-condensing.

### **Radio**

2.4GHz