

# Horstmann HRT4 in Vera

## Inclusion

You need to execute the following Steps to get the HRT4 included into VERA successfully. This setup works from firmware version 1.1.1338. In case you have a older firmware, visit the webpage [micasaverde.com/vera2](http://micasaverde.com/vera2) for an update.

1. Turn VERA into inclusion mode by either pressing the Z-Wave button for 2 seconds or using the WEB UIs function. The VERA Console will show „Add new Devices now“
2. Turn the DIP switch No 1 of HRT4 into ON-position (On Default all dip switches are off)
3. Turn the Wheel on HRT 4 until you see „L“ on the display ( L Stands for LEARN mode)
4. Push The Wheel to include the device. L will flash and turn into „LP“ and you will see some message on the VERA console
5. Stop the Inclusion mode on VERA by short pressing the Z-Wave button. You will now see the message „Server Busy“ on VERAs console
6. After the VERA has done the initial configuration, you will see the new thermostat widget on the dashboard. It is marked with the message „Wakeup to Configure“.
7. Turn the wheel of the HRT4 until you see „n“. Hit the wheel. This should trigger the configuration of the HRT by VERA and the warning message disappears. After this Step the widget is complete but does not show any meaningful values
8. Turn the DIP-switch back into normal mode, remove the batteries for 5 seconds and reinsert the batteries. Now the widget will show the same set-point and the same ambient temperature as the LCD display. (Reminder: Pushing the Wheel toggles the LCD display between „SET“ and „ROOM“, means set-point temperature and room temperature.

Now you can set the temperature on the VERA widget and it will be shown in the LCD display of the HRT after the next wakeup (max 30 minutes). Likewise you can turn the wheel to change local setup temperature and this change will be displayed in the VERA widget.

It is recommended to reduce the wakeup interval from 1800 in order to get a more granular heating control.

## Usage from VERA

Vera shows all Thermostats with a generic widget that allows to control cooling set-point, heating mode (heating is on of off) and the heating set point.

For the Horstmann HRT 4 only the heating set-point is relevant and the other control functions shall be ignored.

On the right hand side you see the room temperature of the device as reported during the last wakeup of the device.

On the right hand side you see the heating set-point. Clicking on this set-point will change the set-point temperature. Please be aware that this change will only be effective after the next wakeup.

## **Controlling Scenario**

The basic idea of the HRT 4 is to control a on/off switch that turns the central heating system on and off. The HRT4 will send on/off messages at the selected cycle rate in proportion to the difference of the measured temperature to the set temperature. The integral term will adjust the on times to reduce the temperature error to zero. In order to allow this setup the on/off switch needs to be included with VERA first. (if the on/off switch is included by the HRT 4 prior to the inclusion of HRT4 by VERA this connection will get lost!) After successful integration the association to the on/off switch need to be established in the HRT 4 (Click on the wrench in the corner of the widget, go to device options tab, add association group 1 or 2 (depending in your have a standard on/switch controlled by Binary Switch command [use association group 1] or a special – Horstmann- switching device controlled by Thermostat Mode commands [use association group 2] ). It does not harm if you add the switch into both groups.

Don't forget to save the settings on the dashboards SAVE button. After the next wakeup of the HRT4 this setting is active and the HRT4 will start to control the heat. VERA will be used to define the target set-points only. With this setup the heating control will even continue to work when VERA is offline.