

Vera Device Setup for Sensative Strips

Contents

Sensative Strips Guard (door) 2

Sensative Strips Drip (water leak, temperature, light) 4

Sensative Strips Comfort (temperature, light)..... 7

Vera Z-Wave Polling Recommendation 10

Introduction

For the three currently available Sensative Strips (Guard, Drip, Comfort), this document explains:

- How Sensative Strips are added to a Vera controller. (VeraEdge, VeraPlus, VeraSecure)
- Specific controller and device parameter settings to extend battery life as compared the default settings.

All screen captures and testing used Vera UI7, and current software releases (7.30 and 7.31) as of Feb 2020.

This information is a compilation of information gathered through communications with the documentation found on the Sensative websites <http://sensativesupport.zendesk.com/> and <https://sensative.com/strips/>, trial-and-error, Sensative Strip development team, Vera support staff, and digging through numerous posts on the <https://community.getvera.com> website.

Sensitive Strips Guard (door)

User guides:

<https://sensativesupport.zendesk.com/hc/en-us>

To pair:

1. In Vera UI7, **Devices->[+ Add Device]**, search for **Sensitive** and find **Sensitive Strips Strips-MaZw**, (or use **Generic Z-wave device**)
2. Select and click on **Next**
3. Immediately remove the magnets from the strip. This puts the strip into pairing mode. Note: If the magnets were removed prior to this step so the strip is no longer in its pairing mode, then see section below **To Reset into auto-add mode**
4. After Vera recognizes the new device, then specify Name and Room.

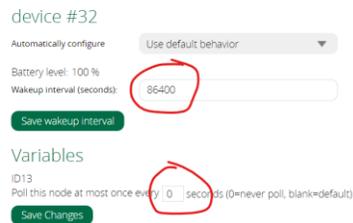
Device->Settings:

Wakeup Interval:

- Should be set at **86400** (default=86400 is once per day – no reason to change)

Variables:

- poll this node at most once every **0** seconds (0 for no polling)



- For system level settings, see the section below entitled: *Vera Z-Wave Polling Recommendation*

Device->Device Options:

Configuration settings:

- No change: **default values are acceptable.**

Param	Bytes	Value	Default	Description
1	1	1	1	Notification type (0: binary sensor, 1:notification, 2:basic)
2	1	1	1	LED indication (0:off, 1:0n)

- Device->Advanced:** No changes needed. The device type is: `urn:schemas-micasaverde-com:device:DoorSensor:1`
- Device->Logs:** No changes needed. This section queries the log file for changes to this device instance.
- Device->Notifications:** No changes needed unless a Vera-style notification is desired.
- Device->Scenes:** No changes needed. This section lists the Vera scenes referencing this device instance.

How to Reset to factory settings:

To reset Strips Guard to factory settings and to put back into auto-add mode:

<https://sensativesupport.zendesk.com/hc/en-us/articles/360001126211-How-to-reset-Strips-Guard>

1. Move magnet towards rounded edge. A short LED blink indicates success.
2. Move magnet away from the rounded edge. Wait one second.
3. Move magnet towards rounded edge. A short LED blink indicates success.
4. Move magnet away from the rounded edge. Wait one second.
5. Move magnet towards rounded edge. A short LED blink indicates success.
6. Keep magnet on for 10 seconds. Device should blink short and then long to indicate success.

How to Reset to auto-add mode:

<https://sensativesupport.zendesk.com/hc/en-us/articles/360001102172-How-to-put-your-Strips-Guard-back-in-auto-add-mode>

1. Place round magnet to round edge, place rectangular magnet to straight edge
2. Leave for 15 seconds
3. Put your gateway in add-mode
4. Remove magnets from Strip
5. 1 Long led blink = Success!
6. 0 Blinks = Try "manual-add"
7. 5 short blinks = Fail, try moving closer to the gateway and try again

Magnet position guide:

<https://sensativesupport.zendesk.com/hc/en-us/articles/360002527531-Strips-Guard-Magnet-Position-Guide>

Additional documentation

<https://sensativesupport.zendesk.com/hc/en-us>

To Test

1. After inclusion of device in a Vera controller
2. Move the magnet near the square end, and then away from the strip
3. Observe if the device state changes from Open to Closed, and back to Open.

Sensative Strips Drip (water leak, temperature, light)

User guides:

<https://sensativesupport.zendesk.com/hc/en-us>

To pair:

1. In Vera UI7, **Devices->[+ Add Device]**, search for **Sensative** and find **Sensative Strips Strips-MaZw**, (or use **Generic Z-wave device**)
2. Select and click on **Next**
3. Immediately remove the magnets from the strip. This puts the strip into pairing mode. Note: If the magnets had been removed prior to this step so the strip is no longer in its pairing mode, then
 - a) Slide magnet from middle to round end
 - b) Watch for LED to blink
 - c) Now move magnet away from end and back toward the middle of the strip
 - d) Repeat 2 more times. A fourth blink indicates a wakeup occurred
4. After Vera recognizes the new device, then specify Name and Room. (In this example, assume "Name" is set to **"LK-Sink"** and "Room" is set to "Kitchen".)
5. Manage the child devices: Since Vera does not know how to handle a Drip strip, it will attempt to create generic devices. At this point there will be 4 devices created by Vera:
 - a) **LK-Sink** (the name specified in above step 4)
 - b) **_Temperature Sensor**
 - c) **_Light Sensor**
 - d) **_GET_LANG(generic_sensor,sensor)**
6. Now rename the default named devices. For example,
 - a) Select the **_Temperature Sensor** device and rename to **LK-Sink-Temp**
 - b) Select the **_Light Sensor** device and rename to **LK-Sink-Light**
 - c) Select the **_GET_LANG(generic_sensor,sensor)** device and rename to **LK-Sink-generic**
7. Hide the **LK-Sink-generic** device
 - a) Select the **LK-Sink-generic** device
 - b) Go to the tab, **Devices->Advanced->Params**, and find the "id" field. (Make note of the integer value in this field. In this example, assume the value is **36**.)
 - c) Under **Apps > Develop Apps > Test Luup Code**, type in the command,


```
luup.attr_set("invisible","1",_DeviceID)
```

 where **_DeviceID** equals the device ID we noted from step 7.b above.
 In this example, the Luup code with device id=36 is:


```
luup.attr_set("invisible","1",36)
```
 - d) Reload the Luup engine through the **Settings > Z-wave settings>Advanced> Reload Engine**
 - e) Press GO, then reload browser w/ <ctrl>+F5
 - f) Go to **Devices**, and the LK-Sink-Generic device should not be displayed.
8. Now select the parent device (in this example **"LK-Sink"**) and set the device settings as described below.

Device->Settings:

In this section the device wakeup interval and the controller polling frequency are specified.

These two settings are adjusted to maximize battery life while still getting accurate and timely sensor value reports. The strips implement an internal algorithm for temperature and light level reporting that depends on a minimum amount of change over a reasonable time period. (See details on the Sensative website.) Since the device autonomously reports new sensor values, and this behavior is independent of either the wakeup interval or the polling frequency, battery life can be extended by reducing the frequency of these setting.

The purpose of the wakeup interval is to report battery level during long periods of no change in the sensor value. As battery levels change infrequently, a wakeup interval of once a day is enough for most applications.

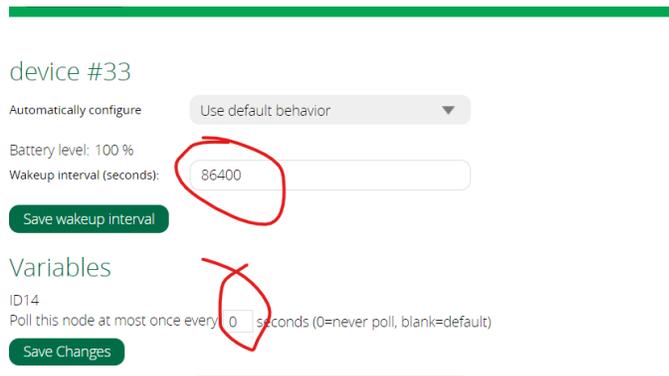
The purpose of the controller polling frequency is to get the sensor values on sensors that don't always report new values; however, this device reports these sensor values as they change, the controller polling of the device can be turned off. For system level settings that will disable the Z-Wave network "nightly heal", see the section below entitled: *Vera Z-Wave Polling Recommendation*.

Wakeup Interval:

- Wakeup interval: **86400** seconds (24 hrs) (default=1800 (30 min))

Variables:

- Disable polling by setting: **poll this node at most once every 0** seconds (0 for no polling)



Device->Advanced:

- Select the **Params** tab and change the parameters per the table below:

Params	Old value	New Value
device_Type	urn:schemas-micasaverde-com:device:GenericSensor:1	urn:schemas-micasaverde-com:device:FloodSensor:1
device_file	D_GenericSensor1.xml	D_FloodSensor1.xml
subcategory_num	0	2
device_json	D_GenericSensor1.json	D_FloodSensor1.json

- Reload the Luup engine through the **Settings-> Z-wave settings->Advanced-> Reload Engine**
- Remove cache and reload web page by pressing **<CTRL>+F5** in your browser (on Windows and using either the Google Chrome or IE Explorer browsers)

Device->Device Options:

Configuration settings:

- **If scenes depend only on water leak detection (not based on temperature or light)**, then adjust params 4 & 9. Leave all others at their defaults.

Param	Bytes	Value	Default	Description
2	1		1	LED Alarm event reporting (0=off, 1=on)
3	1		1	Temp and Light reporting frequency (1=normal, 2=frequent)
4	1	0	1	Temperature reporting (0=off, 1=on)
5	1		0	Temperature units (0=C, 1=F)
6	1		0	Temp Alarms (0=off, 1=on)
7	1		60	High temp alarm (-20 to 60) 60
8	1		-20	Low temp alarm (-20 to 60) 60
9	1	0	1	Light reporting (0=off, 1=on, 2: only when Param 10 & 11 passed)
10	4		40000	High ambient light (3-64000)
11	4		5000	Low ambient light (1-42000)
12	1		1	Leakage alarm (0=off, 1=on)
13	1		10	Leakage alarm level (1-100; 1=almost dry, 100=wet)
14	1		0	Moisture reporting period (0-120 hrs, 0=off)

Device->Logs: No changes needed. This section queries the log file for changes to this device instance.
 Device->Notifications: No changes needed unless a Vera-style notification is desired.
 Device->Scenes: No changes needed. This section lists the Vera scenes referencing this device instance.

How to manually wake-up Strip

<https://sensativesupport.zendesk.com/hc/en-us/articles/360004075812-Manual-Wake-up-for-Strips-Drip>

1. Holding square magnet on edge, move it towards the rounded edge until 1 LED blink
2. Move magnet between logo and rounded edge slowly 2 times
3. Remove magnet: 1 LED blink indicates wake up was successful
4. 5 short LED blinks = fail (try reset)

How to reset Strip

<https://sensativesupport.zendesk.com/hc/en-us/articles/360001100932-How-to-reset-your-Strips-Drip>

1. Holding square magnet on edge, place it 2cm from the rounded edge for 2 seconds. 1 short LED blink
2. Move between logo and the round edge 2 times
3. On the second pass, leave the magnet here for 10 seconds and wait for long LED blink

How to exclude/remove Strip from Vera Controller

<https://sensativesupport.zendesk.com/hc/en-us/articles/360001100792-How-to-exclude-remove-Strips-Drip>

1. Set your controller to Remove Mode
2. Move the magnet towards the rounded edge until 1 LED blink
3. Move magnet between logo and rounded edge slowly 2 times
4. Remove magnet : 1 LED blink indicates remove processes has started
5. 5 short blinks = Fail (try reset)

Additional documentation

<https://sensativesupport.zendesk.com/hc/en-us>

To Test

1. Set up leak detection notification for the drip sensor parent
2. Place hand on bottom of sensor area for 15 sec
3. If notification sent, then all is working as expected.

Sensitive Strips Comfort (temperature, light)

User guides:

<https://sensativesupport.zendesk.com/hc/en-us>

<https://sensativesupport.zendesk.com/hc/en-us/sections/360000269071-Troubleshooting-Set-up-for-Strips-Comfort->

To pair:

1. In Vera UI7, **Devices->[+ Add Device]**, search for **Sensitive** and find **Sensitive Strips Strips-MaZw**, (or use **Generic Z-wave device**)
2. Select and click on **Next**
3. Immediately remove the magnets from the strip. This puts the strip into pairing mode. Note: If the magnets had been removed prior to this step so the strip is no longer in its pairing mode, then
 - a) Slide magnet from middle to round end
 - b) Watch for LED to blink
 - c) Now move magnet away from end and back toward the middle of the strip
 - d) Repeat 2 more times. A fourth blink indicates a wakeup occurred
4. After Vera recognizes the new device, then specify Name and Room. (In this example, assume "Name" is set to "**Comf-Den**" and "Room" is set to "Den".)
5. Manage the child devices: Since Vera does not know how to handle a Comfort strip, it will attempt to create generic devices. At this point there will be 4 devices created by Vera:
 - **Comf-Den** (the name specified in the above step 4)
 - **_Temperature Sensor**
 - **_Light Sensor**
 - **_GET_LANG(generic_sensor,sensor)**
6. Now rename the default named devices. For example,
 - Select the **_Temperature Sensor** device and rename to **Comf-Den-Temp**
 - Select the **_Light Sensor** device and rename to **Comf-Den-Light**
 - Select the **_GET_LANG(generic_sensor,sensor)** device and rename to **Comf-Den-generic**
7. Hide the **Comf-Den-generic** device
 - a) Select the **Comf-Den-generic** device
 - b) Go to the tab, **Devices->Advanced->Params**, and find the "id" field. (Make note of the integer value in this field. In this example, assume the value is **36**.)
 - c) Under **Apps > Develop Apps > Test Luup Code**, type in the command,


```
luup.attr_set("invisible","1",_DeviceID)
```

 where **_DeviceID** equals the device ID we noted from step 7.b above.
 In this example, the Luup code with device id=36 is:


```
luup.attr_set("invisible","1",36)
```
 - d) Reload the Luup engine through the **Settings > Z-wave settings>Advanced> Reload Engine**
 - e) Press GO, then reload browser w/ <ctrl>+F5
 - f) Go to **Devices**, and the LK-Sink-Generic device should not be displayed.
8. Now select the parent device (in this example "**Comf-Den**") and set the device settings as described below.

Device->Settings:

In this section the device wakeup interval and the controller polling frequency are specified.

These two settings are adjusted to maximize battery life while still getting accurate and timely sensor value reports. The strips implement an internal algorithm for temperature and light level reporting that depends on a minimum amount of change over a reasonable time period. (See details on the Sensitive website.) Since the device autonomously reports new sensor values, and this behavior is independent of either the wakeup interval or the polling frequency, battery life can be extended by reducing the frequency of these setting.

The main purpose of the wakeup interval is to report battery level during long periods of no change in the sensor value. As battery levels change infrequently, a wakeup interval of once a day is enough for most applications.

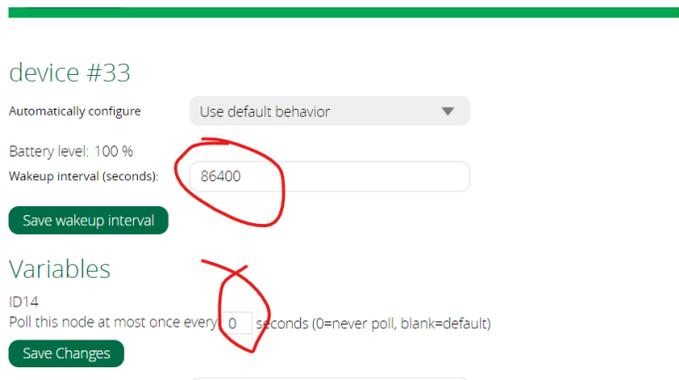
The purpose of the controller polling frequency is to get the sensor values on sensors that don't always report new values; however, this device reports these sensor values as they change, the controller polling of the device can be turned off. For system level settings that will disable the Z-Wave network "nightly heal", see the section below entitled: *Vera Z-Wave Polling Recommendation*.

Wakeup Interval:

- Wakeup interval: **86400** seconds (24 hrs) (default=1800 (30 min))

Variables:

- Disable polling by setting: **poll this node at most once every 0** seconds (0 for no polling)



Device->Device Options:

Configuration settings:

- For scenes that depend on only temperature values, turn off LUX sensor reporting. (Set param #9 to 0.)
- Conversely, if only light sensing is needed, then turn off temperature sensing. (Set param #4 to 0.)
- Vera displays the temperature in F, so leave the default (C).
- The table below shows **the settings when only temperature reporting is of interest.**

Param	Bytes	Val	Default	Description
2	1		1	LED Alarm event reporting (0=off, 1=on)
3	1		1	Temp and Light reporting frequency (1=normal, 2=frequent)
4	1	1	1	Temperature reporting (0=off, 1=on)
5	1		0	Temperature units (0=C, 1=F)
6	1		0	Temp Alarms (0=off, 1=on)
7	1		60	High temp alarm (-20 to 60) 60
8	1		-20	Low temp alarm (-20 to 60) 60
9	1	0	1	Light reporting (0=off, 1=on, 2: only when Param 10 & 11 passed)
10	4		40000	High ambient light (3-64000)
11	4		5000	Low ambient light (1-42000)
12	1		0	Leakage alarm (0=off, 1=on)
13	1		10	Leakage alarm level (1-100; 1=almost dry, 100=wet)
14	1		0	Moisture reporting period (0-120 hrs, 0=off)

Device->Advanced: No changes needed. The device type is: urn:schemas-micasaverde-com:device:GenericSensor:1
 Device->Logs: No changes needed. This section queries the log file for changes to this device instance.

Device->Notifications: No changes needed unless a Vera-style notification is desired.

Device->Scenes: No changes needed. This section lists the Vera scenes referencing this device instance.

How to manually wake-up Strip

<https://sensativesupport.zendesk.com/hc/en-us/articles/360004073592-Manual-Wake-up-for-Strips-Comfort>

1. Holding square magnet on edge, move from center to the rounded 3 times (3 LED blinks)
2. Wait a few seconds
3. 1 LED blink indicates wake up was successful
4. 5 short LED blinks = fail (try reset)

How to reset Strip

<https://sensativesupport.zendesk.com/hc/en-us/articles/360001125231-How-to-reset-your-Strips-Comfort>

1. Holding square magnet on edge, place it 2cm from the rounded edge for 2 seconds. 1 short LED blink
2. Move between logo and the round edge 2 times
3. On the second pass, leave the magnet here for 10 seconds and wait for long LED blink

(Note: May also be able to electrically short the two metal prongs on the square edge)

How to exclude/remove Strip from Vera Controller

<https://sensativesupport.zendesk.com/hc/en-us/articles/360001102532-How-to-exclude-remove-Strips-Comfort->

1. Set your controller to Remove Mode
2. Move the magnet towards the rounded edge until 1 LED blink
3. Move magnet between logo and rounded edge slowly 2 times
4. Remove magnet : 1 LED blink indicates remove processes has started
5. 5 short blinks = Fail (try reset)

Additional documentation

<https://sensativesupport.zendesk.com/hc/en-us>

<https://sensativesupport.zendesk.com/hc/en-us/articles/360004942392-How-often-does-Strips-Comfort-report-temperature->

<https://sensativesupport.zendesk.com/hc/en-us/articles/360005297452-How-often-is-Strips-Comfort-reporting-ambient-light->

To Test

See if the temperature and/or Lux values are displayed and change. (more than 2F temp change needed)

Vera Z-Wave Polling Recommendation

Unfortunately, disabling polling on a device does not stop all the device polling. By default, Vera does a “nightly heal” of the Z-Wave network. This “nightly heal” will poll all devices and can take a very long time as it waits for battery powered devices to respond. Fortunately, starting in Vera FW 7.30 (and likely future releases), “nightly heal” can be turned off.

The detailed explanation of why/how “nightly heal” should be turned off can be found on the community website in a posting titled “Zwave Network on Vera Explained”. (<https://community.getvera.com/t/zwave-network-on-vera-explained/210661/71>)

To turn off nightly heal:

The Z-Wave network nightly heal, can be turned off using the following Lua code:

```
luup.attr_set("EnableNightlyHeal",0,0)
```

To run the Lua code, follow these steps

1. In UI7, select: **Apps->Develop apps**
2. Select **Test LUUP code (Lua)**
3. Copy paste the one line of Lua code shown above
4. Hit go and wait for code was run successfully dialogue

Alternatively, consider creating a manually triggered scene that executes this Lua code to make it readily available in the future. For example, the screen capture below is of a scene that runs this single line of Lua code. A special room named “Admin” was created to store this and similar system administration related scenes.

The screenshot shows the 'Edit Scene' interface in Vera UI7. On the left is a navigation menu with 'Scenes' selected. The main area is titled 'Edit "Disable Nightly Zwave Ntwk Heal"'. It features a 'Help for scene creation' button and a 'Back to Scene List' button. The scene is configured in three steps:

- Step 1: Select a Trigger**: A 'Manually triggered scene' option is selected.
- Step 2: Device Actions**: No actions are currently listed.
- Step 3: Finish the Scene**: This section is highlighted in green and contains:
 - 'This scene runs...' section with 'When I am in any mode' selected.
 - 'When this scene runs...' section.
 - 'Notify these users' section.
 - 'Also, execute the following Luup code:' section with the code `luup.attr_set("EnableNightlyHeal",0,0)` entered.
 - 'Advanced Editor' section.
 - 'Select Room' section with a dropdown menu showing 'Admin' selected.
 - 'Name Your Scene' section with the name 'Disable Nightly Zwave Ntwk Heal' entered.

A 'Finish' button is located at the bottom right of the form.

Disable polling of all battery-powered devices

If you have a Z-Wave network with many battery-powered devices, consider disabling polling on all battery-powered devices to extend battery life. Instead of manually selecting each device in UI7, consider running the Lua code below to find all battery powered devices and turn off polling for each device. (This script was written by the author of the “Zwave Network on Vera Explained” thread with the link provided at the beginning of this section.)

Use the steps previously shown to run the Lua code, or create a manually triggered scene that runs the Lua code. The following Lua code disables polling of all battery-powered devices

```
for k, v in pairs(luup.devices) do
  local var= luup.variable_get("urn:micasaverde-com:serviceId:ZWaveDevice1", "PollSettings",k)
  local bat = luup.variable_get("urn:micasaverde-com:serviceId:HaDevice1", "BatteryLevel",k)
  if var ~= nil and v.device_num_parent== 1 and bat == nil then
    if var ~= 0 then
      luup.variable_set("urn:micasaverde-com:serviceId:ZWaveDevice1", "PollSettings", "0", k)
      luup.variable_set("urn:micasaverde-com:serviceId:ZWaveDevice1", "PollNoReply", "0", k)
    end
  end
end
end
```