Vivint SmartHub

Z-Wave Plus User Manual

1 Overview

The Vivint SmartHub is a Z-Wave enabled control panel capable of creating a Z-Wave network and communicating with other Z-Wave products. This manual documents the usage of SmartHub's Z-Wave capabilities.

1.1 Audience

This manual is intended for Vivint technicians, internal or external product testers, and users of the SmartHub as a standalone product. All other users are advised to contact customer support for assistance in managing their Z-Wave network with the SmartHub.

2 Regulatory Compliance

2.1 Security

Vivint SmartHub is a security enabled Z-Wave Plus product that is able to use encrypted Z-Wave Plus messages to communicate to other security enabled Z-Wave Plus products

2.2 Command Class Support

The following command classes are supported by the SmartHub:

Command Class	**Version**	**Security Level**
Association	2	Highest granted Security Class
Association group info	3	Highest granted Security Class
Multi-command	1	Highest granted Security Class
Device reset locally	1	Highest granted Security Class
ZIP	2	Highest granted Security Class
Manufacturer specific	1	Highest granted Security Class
Version	3	Highest granted Security Class
Powerlevel	1	Highest granted Security Class
Security 0	1	None
Security 2	2	None
Supervision	1	None
Transport service	2	None
Z-Wave Plus info	2	None

2.3 Interoperability

The SmartHub can be operated in any Z-Wave network with other Z-Wave certified devices from other manufacturers. All non-battery operated nodes within the network will act as repeaters regardless of vendor to increase reliability of the network.

2.4 Basic Command Class

The SmartHub can be used to send basic commands to any Z-Wave device. Note that the SmartHub itself does not do anything in response to basic commands sent to it. To send basic commands to other devices, follow these instructions from the settings tab (see Figure 1):

1. Select “Devices”
2. Enter the default installer PIN code (2203)
3. Select the device to control
4. Under “Basic Setting”, enter a number between 0 – 255 to send to the device
    a. The expected behavior of the device is product specific. Please refer to the device’s user manual to determine the expected response to this value.

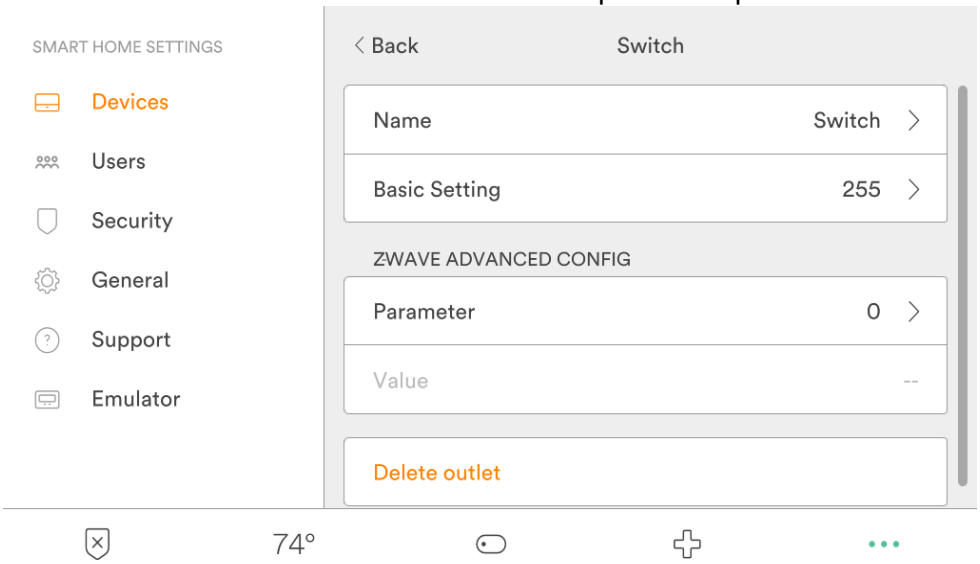

Figure 1

2.5 Configuration Parameters

For devices that support them, the SmartHub is able to modify configuration parameters on a device. This functionality is available in the device settings as shown in Figure 1.

2.6 Association Groups

The SmartHub supports the following association groups:

Group	Purpose	Command	Max. Number of Nodes
1	Lifeline	Device reset locally	232

3 Controller Functions

3.1 User Interface

All controller functions are accessed through the installer toolbox, which is hidden in the user interface. It can be accessed by touching a text area on the settings screen and then entering the installer PIN code (see Figure 2 and Figure 3).

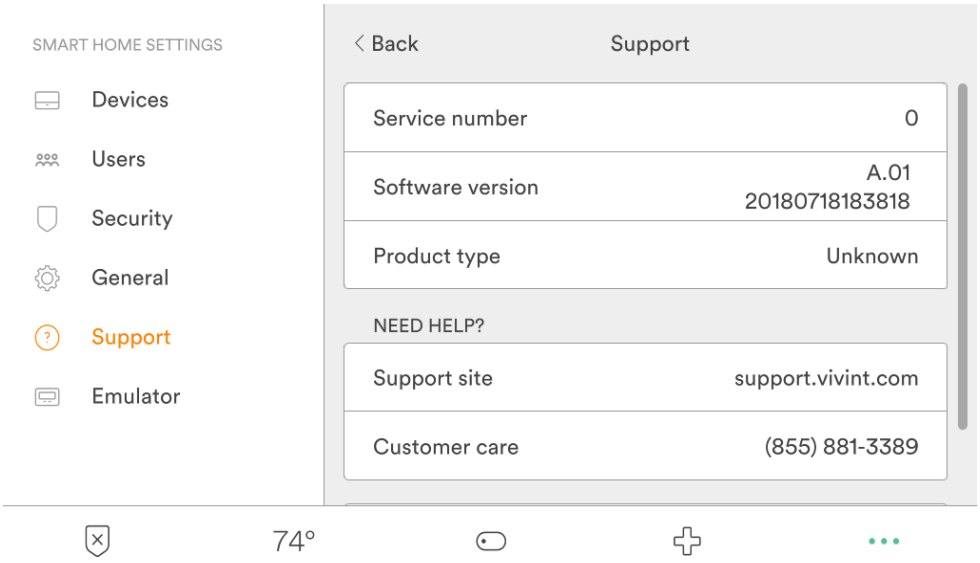

Figure 2

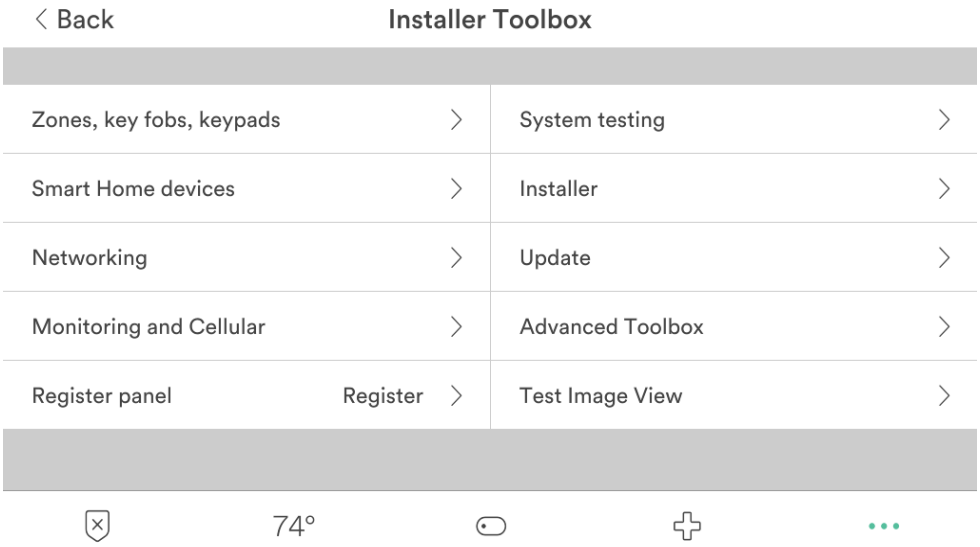

Figure 3

3.2 Device Inclusion

The SmartHub can be used to include devices in the Z-Wave network. From the settings tab, follow these instructions:

1. On the “Support” page, touch “Software version”
2. Enter the default installer PIN code (2203)
3. Select “Smart Home devices”
4. Select “Z-Wave”
5. Select “Add node”

6. When the status indicates “Ready to identify device”, follow the instructions included with the device to add it to the network
7. Follow on-screen instructions to complete the process

3.3 Device Exclusion

The SmartHub can be used to exclude devices from the Z-Wave network. From the settings tab, follow these instructions:

1. On the “Support” page, touch “Software version”
2. Enter the default installer PIN code (2203)
3. Select “Smart Home devices”
4. Select “Z-Wave”
5. Select “Remove node”
6. When the status indicates “Ready to identify device”, follow the instructions included with the device to remove it from the network

3.4 Network Replication

The SmartHub can be used to replicate Z-Wave network information. It can either send or receive network information to or from another controller. To send network information, simply add the second controller to the SmartHub network. Follow the instructions in 3.2 to accomplish this. To receive network information, the SmartHub can be included into the second controllers network. Follow the instructions accompanying the second controller and refer to 3.5 to enter learn mode to accomplish this.

3.5 Learn Mode

The SmartHub can be included as a second controller in another network by entering learn mode. To be included into another network, first follow the instructions accompanying the controller device to enter inclusion mode. Then to enter learn mode follow these instructions from the settings tab:

1. On the “Support” page, touch “Software version”
2. Enter the default installer PIN code (2203)
3. Select “Smart Home devices”
4. Select “Z-Wave”
5. Select “Advanced Z-Wave”
6. Select “Learn controller”
7. Follow the on-screen instructions to complete the operation

4 Device Control

4.1 Door Locks

The SmartHub is able to control door locks. It is also able to assign users to door locks that have a keypad. Lock state is controllable from the security tab (see Figure 4) while user assignment is done from the settings tab.

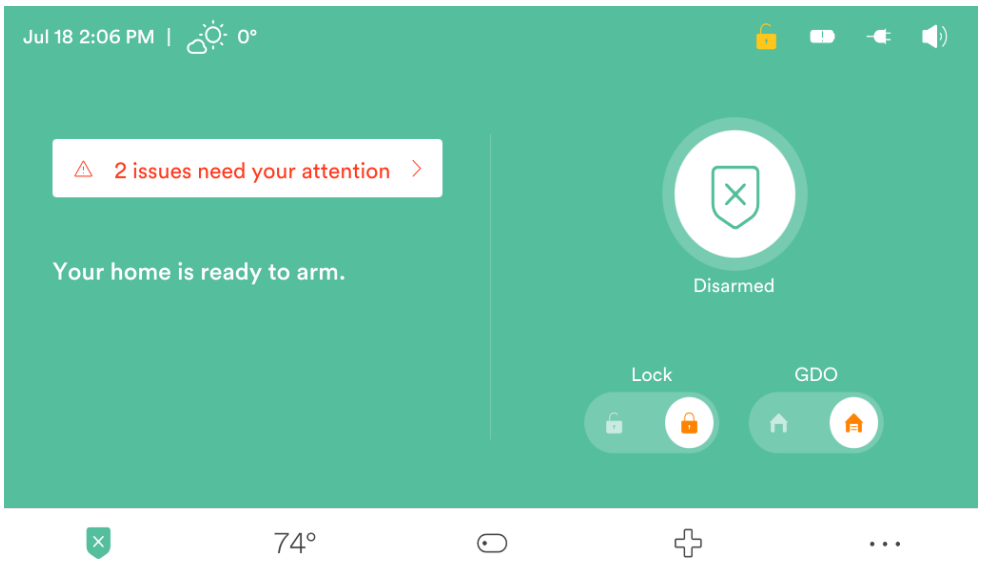

Figure 4

4.2 Thermostats

The SmartHub is able to control thermostat devices. It can change setpoints, modes, fan mode, and display the ambient temperature. This is done from the thermostat tab (see Figure 5).

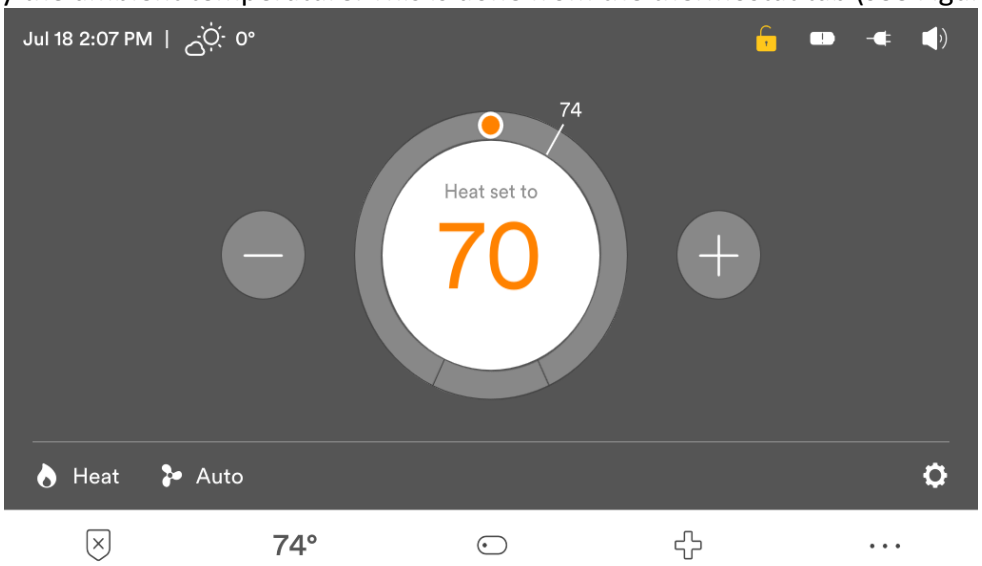

Figure 5

4.3 Garage Door Controllers

The SmartHub is able to controller barrier operator devices (i.e. garage door controllers). This is done from the security tab (see Figure 4).

4.4 Switches and Dimmers

The SmartHub is able to control Z-Wave switches and dimmers. To do this, a switch or dimmer device my be added to the network (see 3.2). All switches and dimmers will be controllable from the switches tab (see Figure 6).

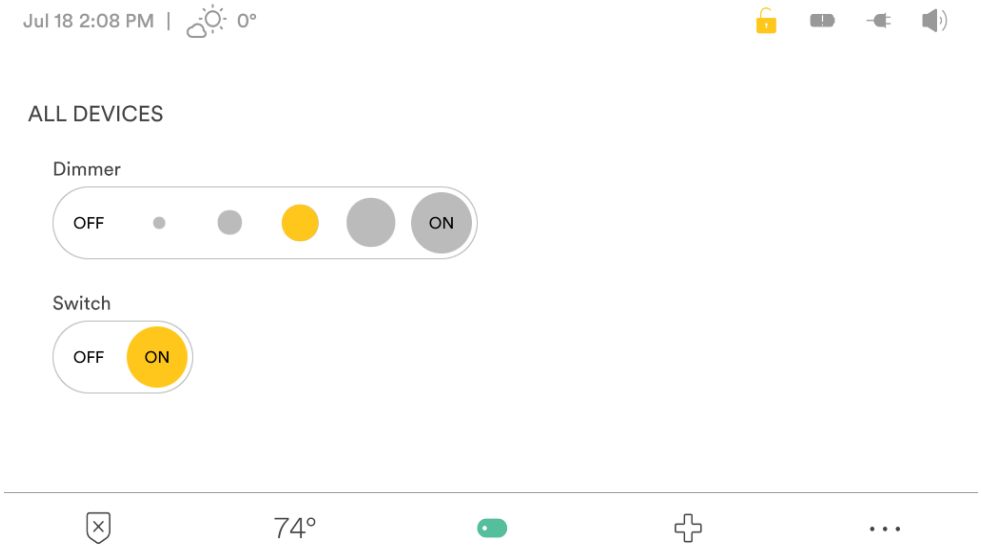

Figure 6

5 Other Functions

5.1 Factory Default Reset

The SmartHub's Z-Wave network can be reset to a default state, removing all Z-Wave devices in the process. Please use this procedure only when the network primary controller is missing or otherwise inoperable. To do this, follow these instructions from the settings tab:

1. On the "Support" page, touch "Software version"
2. Enter the default installer PIN code (2203)
3. Select "Smart Home devices"
4. Select "Z-Wave"
5. Select "Reset controller"
6. Follow the on-screen instructions to complete the operation

5.2 Viewing Node Information

The SmartHub can display detailed information about all Z-Wave nodes in the network including firmware versions, manufacturer specific information, battery level, listen status, association status, etc (see Figure 7). To view this information, follow these instructions from the settings tab:

1. On the "Support" page, touch "Software version"
2. Enter the default installer PIN code (2203)
3. Select "Smart Home devices"
4. Select "Z-Wave"

5. Select “View all nodes”

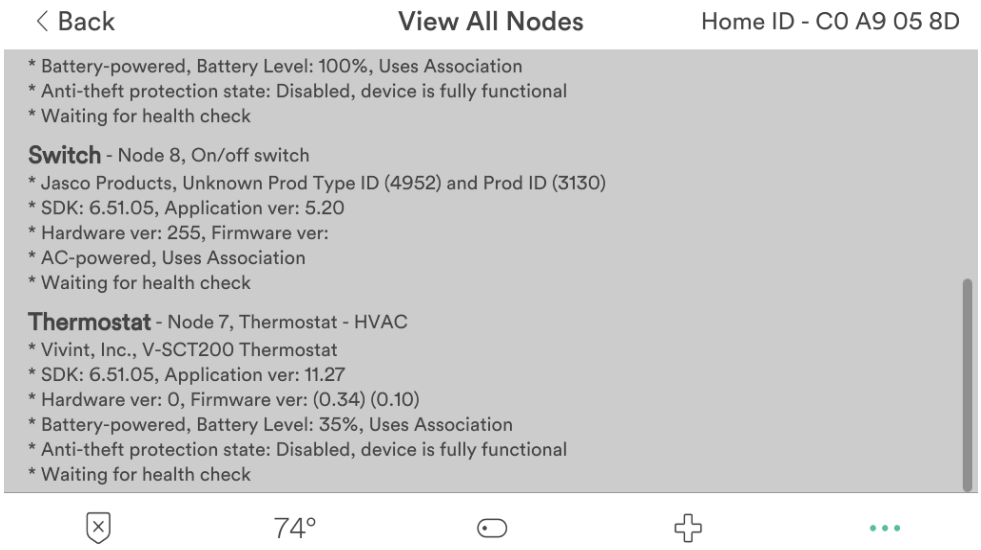

Figure 7

5.3 Network Rediscovery and Health Check

The SmartHub is able to run a Z-Wave network health check which includes self healing functionality (see Figure 8). A health check can be a lengthy operation, depending on the number of devices in the network. To run a health check, follow these instructions from the settings tab:

1. On the “Support” page, touch “Software version”
2. Enter the default installer PIN code (2203)
3. Select “Smart Home devices”
4. Select “Z-Wave”
5. Select “Health check”
6. Run the health check by selecting “Check”

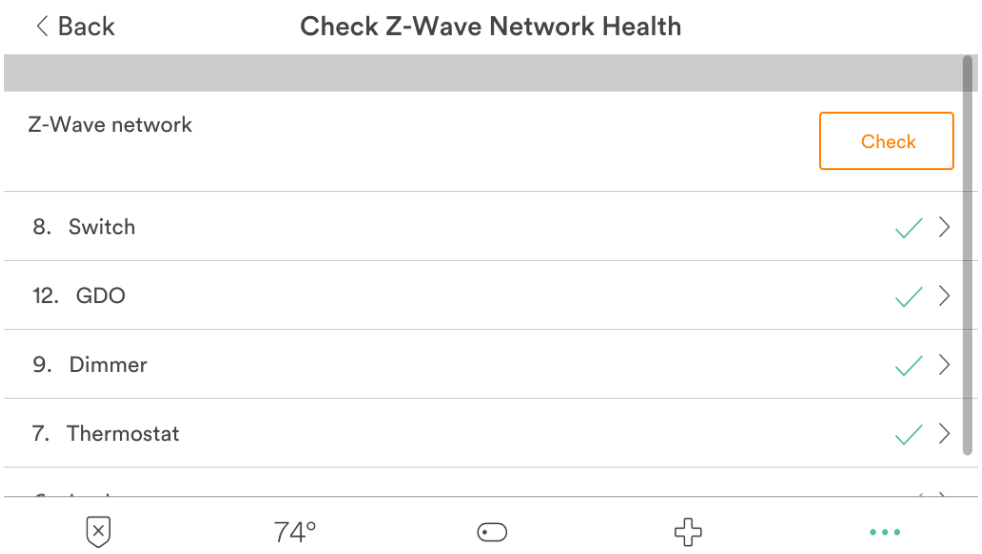
Back
Check Z-Wave Network Health
Z-Wave network
Check
8. Switch
12. GDO
9. Dimmer
7. Thermostat
74°

Figure 8