



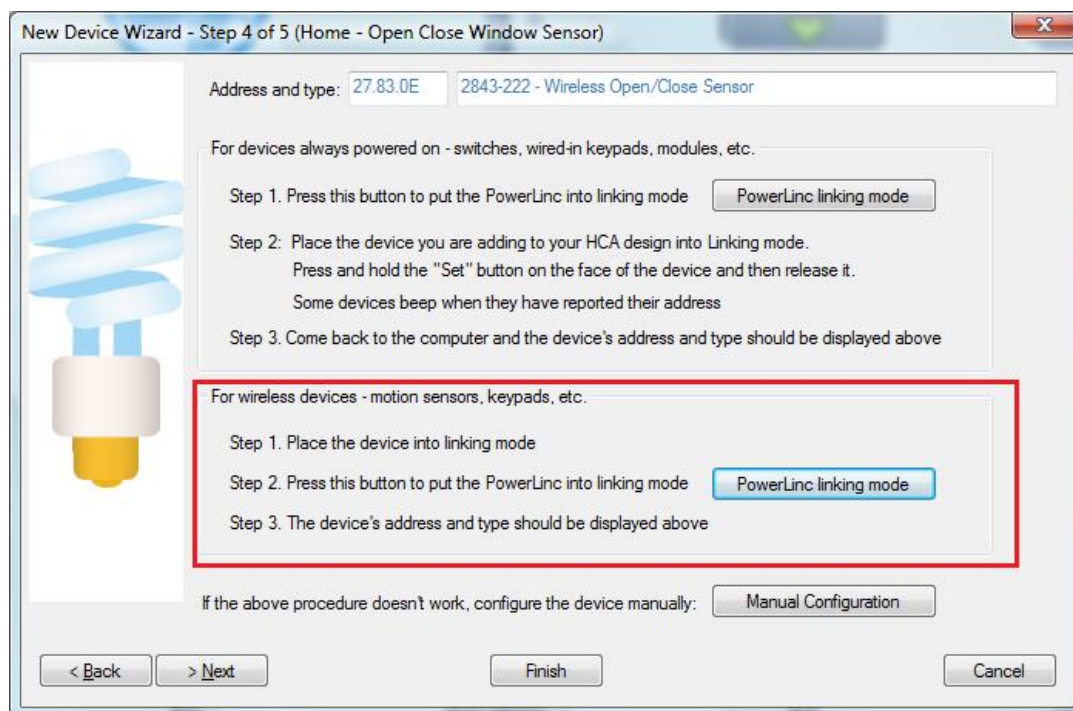
# HCA Tech Note

## Working with the Insteon Open Close Sensor

<http://www.smarthome.com/insteon-2843-222-wireless-open-close-sensor.html>

Using the Open Close Sensor with HCA starts by adding it to your design. You need to be able to access the "Set" button on it to establish a link to it. The set button is on the top of the case.

In the Add Wizard on step 3 choose "Insteon" as the manufacturer and then press the Next button. In step 4 before pressing the dialog button to put the PowerLinc into linking mode, place the device into linking mode by pressing and holding its set button until it enters linking mode. Then press the PowerLinc button in the dialog to complete the link.



Insteon devices send commands that HCA receives. These commands are things like On, Off, Fade Start, Fade Stop, Status, etc. The message, in addition to the command, contains what is called the "group number". A group number is just a method by which the message identifies the source of the command from the possible subunits of the device. For a keypad, the group numbers are used to identify which button pressed. For other devices, the group numbers identify a specific sub-unit. In the case of this device there are several different groups. You just have to know – using the table below – what group does what.

When you create a trigger in HCA you specify the device, the group, and the command. When a message is received that matches all three of these then the trigger happens and the program starts.



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The Open/Close Sensor makes these transmissions:

Group 1: Open/Close action

Group 2: (not used)

Group 3: (not used)

Group 4: Periodic notification so you know it is alive. Reports approximately once a day.

Unlike some of the other wireless sensors no additional linking is needed to have HCA receive the group 1 and 4 messages.

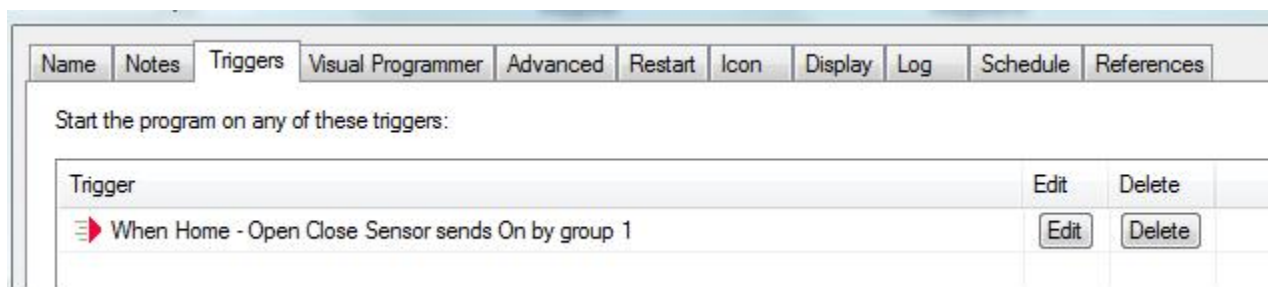
**Insteon Input → HCA**      Device initiates the linking and once complete the device sends commands that HCA can use as program triggers

When you link an Insteon input - like a keypad button - to a device, the device is controlled when the input transmits. In this same way, you can link an input to HCA. When the input transmits, HCA receives the Insteon message and you can use the receipt of the message as a trigger for a program.

To link an input to HCA, press the button on the right you want to link and follow any directions

No additional linking is needed. The link created when this device was added allows access to all its transmitted groups.

Once added to the design you can create program triggers for the events you want to handle. For example this program triggers on the message when the sensor detects that the window or door is open.



You can configure the Overdue Device Alert to watch for the group 4 messages and raise an alert if the device isn't heard from over two days. Configuring the overdue time of two days handles the possibilities of a missed message.



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The screenshot shows the 'Alert Frequency' configuration window. The configuration is for 'Category 1 devices overdue'. There is a checkbox for 'Disable this Alert' which is unchecked. Under 'When this alert occurs:', the settings are: '... Create an alert log entry' set to 'Each Time'; '... and show the troubleshooter alert level Yellow after 1 occurrences then Red after 2 occurrences'; '... and start this program' set to '(none)'; and '... and clear the alert count' set to 'Never'. The 'Device Selection' section shows a list of devices on the left: 'Home - Box', 'Home - Door Sensor', 'Home - KL8', 'Home - Leak Detector', 'Home - Mini 2', 'Home - Mini Remote', and 'Home - Thermostat'. The 'Home - Open Close Sensor' is selected in the right-hand list. Below the device lists are four arrow buttons: '-->', '<--', '>>', and '<<'. At the bottom, the 'Alert if no reception in:' is set to 2 days, 0 hours, and 0 minutes. 'OK' and 'Cancel' buttons are at the bottom.

You can also use the Visual Scene Editor (VSE) with this sensor. Using the VSE you can build scenes that are controlled by the sensor and control Insteon receivers (switches, KeypadLinc LEDs, output devices). When using the HCA VSE, the programming pauses when the scene contains a wireless device to give you time to place it into linking mode so its receiver is on and can then receive the programming commands.