



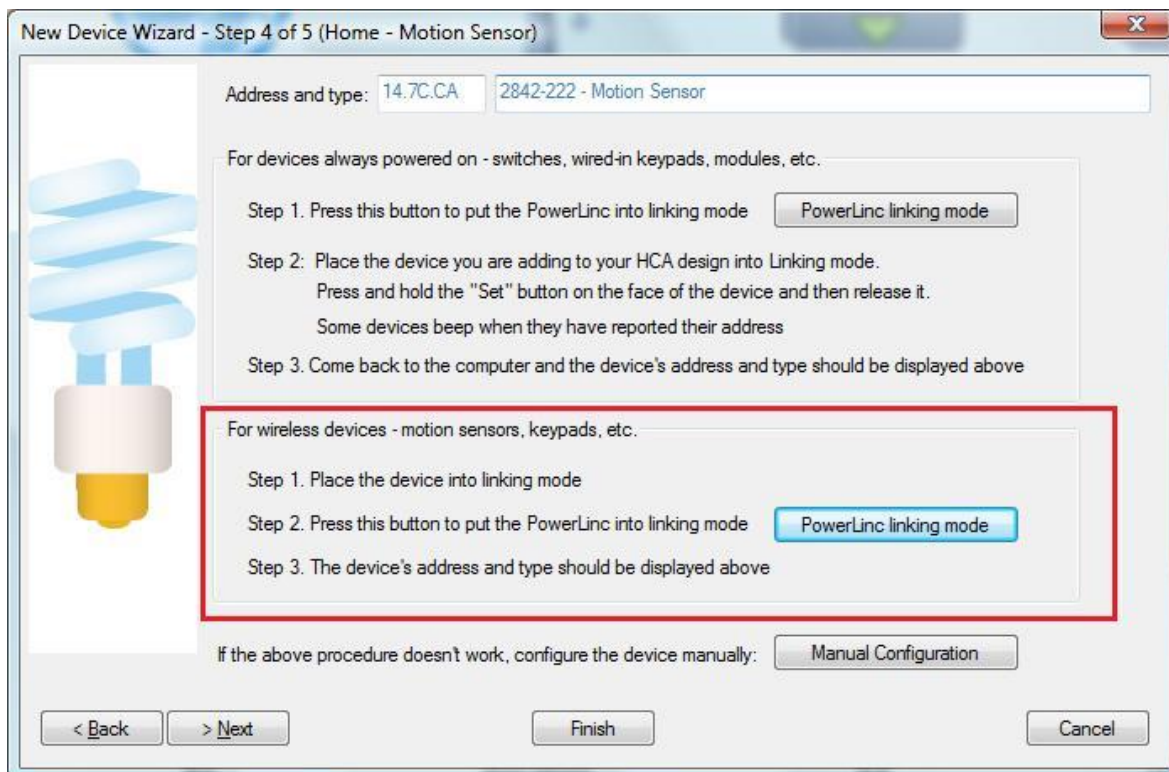
# HCA Tech Note 208

## Working with the Insteon Motion Sensor

<http://www.smarthome.com/insteon-2842-222-wireless-motion-sensor.html>

Using the Motion 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 behind the back cover where the battery goes.

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.



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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.

The Motion Sensor makes these transmissions:

Group 1: Motion – ON when seen, OFF when no motion after the timeout

Group 2: Day/Night – ON when night and OFF when day

Group 3: Low Battery

Unlike other wireless sensors there is no periodic one-a-day message to tell you the device is alive although in most cases you can use the group 2 (Day-Night) for this purpose (unless the device is in some always dark area).

Before HCA can receive the groups 2 & 3 reports they first must be linked. Place the motion sensor into linking mode so that it is listening, and then on the linking tab press the group buttons to create the link. The linking button shows "HCA" if it is already linked.

**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

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Once linked then you can create program triggers for the events you want to handle. For example this program will trigger on the low battery message.



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Name	Notes	Triggers	Visual Programmer	Advanced	Restart	Icon	Display	Log	Schedule	References
Start the program on any of these triggers:										
Trigger									Edit	Delete
▶ When Home - Motion sends On by group 3									Edit	Delete

You can configure the Overdue Device Alert to watch for the group 2 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.

**Alert Frequency**

Configuration for alert:

Disable this Alert

When this alert occurs:

- ... Create an alert log entry
- ... and show the troubleshooter alert level Yellow after  occurrences then Red after  occurrences
- ... and start this program
- ... and clear the alert count

Device Selection

Home - Door Sensor		Home - Motion
Home - Leak Detector		
Home - Open Close Sensor		

Alert if no reception in:  days  hours  minutes

OK Cancel