

# Aeotec Pico Shutter user guide - AEOZZGA004

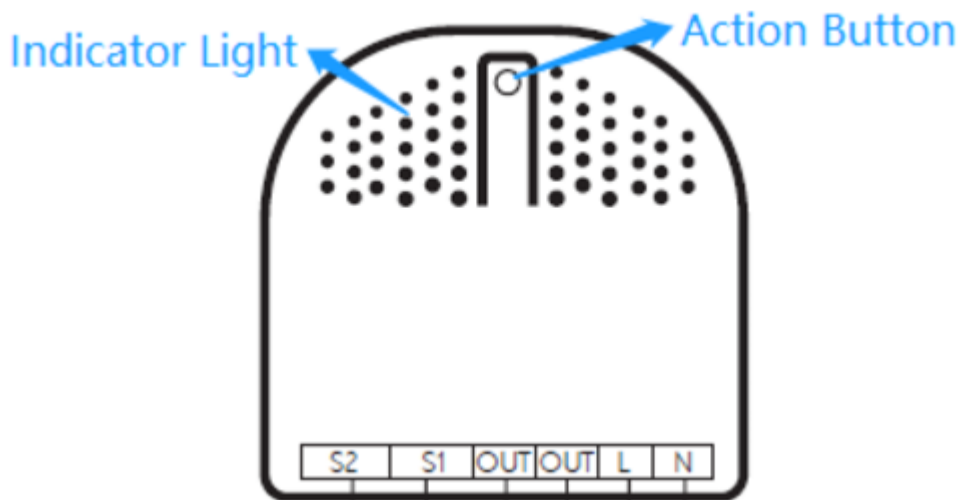
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**Aeotec Pico Shutter** (<https://aeotec.com/smarthings/>) is designed to control devices using any Zigbee 3.0 hub over a physical and wireless connection. It is powered by Zigbee technology.

Aeotec Pico Shutter must be used with a compatible Zigbee hub in order to work.

## Familiarize yourself with Aeotec Pico Shutter



### Package contents:

1. Aeotec Pico Shutter
2. User manual

### Important safety information.

This device is designed to control external other lighting/appliances and electrical devices and operate within their housings. Faulty connection or misuse may result in fire or electric shock. All installations or modifications works on this device must be performed only by a qualified and licensed electrician and must conform to national regulations. Even when the device is turned off, the voltage may be present at its terminals. Any wiring maintenance or modifications introducing changes to the configuration of connections must be always performed with disconnected voltage disconnected(disable the fuse). This device must Always use the same power source for L and IN terminals.

# Wiring Aeotec Pico Shutter

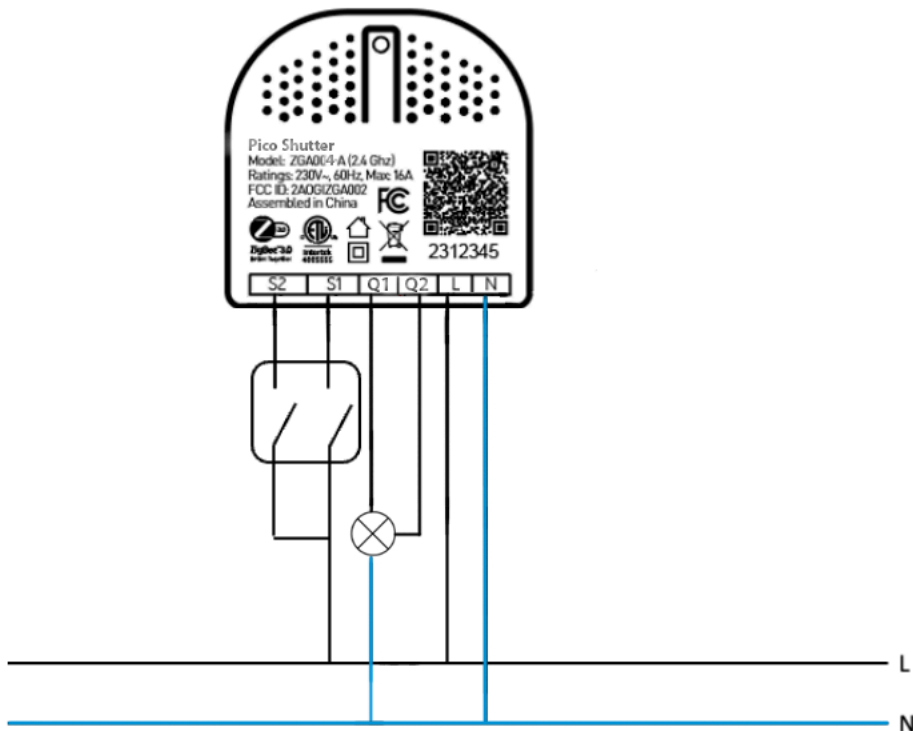
Aeotec Pico Shutter will need to be wired into your wall in order for your Pico Shutter to be powered. It is designed to allow you to make your dumb motor smart.

Follow the diagrams below to wire your Aeotec Pico Shutter.

## Installation and wiring of Pico Shutter.

1. Switch off the power supply by switching off the main breaker or fuse.
2. Connect the Pico Shutter according to one of the diagrams:

### Wiring Diagrams



**Fig. 1: Using double momentary or separate single-pole toggle switches**

### Finalize power and wiring of Pico Shutter.

3. Switch back on the power supply
4. The LED of the Pico Shutter should pulse slowly now.

(<https://aeotec.freshdesk.com/a/solutions/articles/6000240462>)

# Button Press functions of Aeotec Pico Shutter

## Action Button (From the Pico Shutter)

User behavior	outside network	Inside network
Power OFF	N/A	N/A
Power ON	<p>1. All shutters will remain off</p> <p>2. Touchlink target will automatically begin which will last for 3 seconds before it is stopped.</p> <p>3. LED will stay solid for 1 second then begin a slow breathe to indicate it is ready for pairing.</p>	1. All shutters will remain off.
Click Action Button 1 time	<p><b>Operates Motor Control</b> Normal transfer-&gt;Stop-&gt;Reverse transfer-&gt;stop-&gt;Normal transfer→Stop→...</p> <p>Indicator Light will continue slow breathing.</p>	<p><b>Operates Motor Control</b> Normal transfer-&gt;Stop-&gt;Reverse transfer-&gt;stop-&gt;Normal transfer→Stop→...</p> <p>Indicator light will synchronize to the status of the relays.</p>
Click Action Button 2 times	<p><b>Pair to Zigbee Controller/Coordinator:</b> Indicator Light will quickly flash blue light until it is join into the network or times out if nothing is detected after 180 seconds.</p> <p>If pairing fails, Light Indicator will return to a slow breathe animation.</p> <p>If pairing succeeds, the Light Indicator will enter regular light mode (constantly blue light or off based on the state of the Pico Switch).</p>	<p><b>Central network mode:</b> Nothing to be done.</p> <p><b>Distribute network mode:</b> The device open network for 180 seconds, can join other nodes into the existed network. Indicator Light will blink slowly.</p>
Click Action Button 3 times	N/A	<p><b>External Switch 1 (S1) identify mode:</b> Start identify mode of external switch 1 (S1). The Light Indicator will flash rapidly while attempting to identify the switch automatically.</p> <p>You may toggle/push external switch 1 to identify faster.</p>
Click Action Button 4 times	N/A	<p><b>External Switch 2 (S2) identify mode:</b> Start identify mode of external switch 2 (S2). The Light Indicator will flash rapidly while attempting to identify the switch automatically.</p> <p>You may toggle/push external switch 2 to identify faster.</p>

Click Action Button 5 times	N/A	<b>Endpoint 1 Find and Bind target mode (Initiator):</b> Endpoint 1 enters find and bind target mode, this progress will continue to 180s.  Indicator Light will blink quickly while Pico Shutter is scanning.
Click Action Button 6 times	N/A	<b>Endpoint 2 Find and Bind target mode (Initiator):</b> Endpoint 2 enters find and bind target mode, this progress will continue to 180s.  Indicator Light will blink slowly while Pico Shutter is scanning.
Press and hold Action Button for [1, 2s)	<b>No function</b> Indicator Light will turn off when pressed/held, and return to breathing light when release between 1-2s.	<b>No function</b> Indicator Light will turn off when pressed/held, and then return to its regular light mode when released ( Light Indicator follows switch state of Pico Shutter).
Press and hold Action Button for [2, 5s)	<b>No function,</b> Indicator Light will start breathing.	<b>Touch Link initiator mode.</b> Triggers the device to start Touch Link initiator mode. Indicator Light will turn on solid when held between 2-5s, and fades on slowly then off quickly 5x times when released.
Press and hold Action Button for [5, 10s)	<b>No function,</b> Indicator Light will speed up flashing when held between 5-10s, and returns to breathing light when released.	<b>No function,</b> Indicator Light will flash even faster when held between 5 – 10s, and then returns to regular light mode when released (Light Indicator follows switch state of Pico Switch).
Press and hold Action Button for [10, 12)	<b>No function,</b> Indicator Light will become constantly light when press, and become breathing light when released.	<b>Factory reset</b> When Action button is held for 10s or more, Factory Reset is performed on Pico Shutter.  The Indicator Light will return to a slow breathing light, which indicates a successful factory reset operation.
Press and hold Action Button for [17s]	<b>Factory reset, then create and join a Distributed Network</b> If joining a distributed network succeeds, it will enter regular light mode (Light Indicator follows switch state of Pico Duo Switch).	<b>Factory reset, then create and join a Distributed Network</b> If joining a distributed network succeeds, it will enter regular light mode (Light Indicator follows switch state of Pico Shutter).

## External Switch (Connected switch)

User behavior	outside network	Inside network
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Click External Switch 1 time	N/A	<p><b>Local Control for external switch = control local enable</b> S1 = Up/Open or Stop S2 = Down/Close or Stop</p> <p><b>external switch mode = Covering Mode:</b> S1 = send Endpoint 1 bind Up/Open or Stop S2 = send Endpoint 1 bind Down/Close or Stop</p> <p><b>external switch mode = Control Mode:</b> S1 = send Endpoint 3 bind ON/OFF command S2 = send Endpoint 4 bind ON/OFF command</p>
Click External Switch 2 times	N/A	<p><b>Scene report for Scene ID 1/2</b> switch 1 : Multicast delivery (group 1, recall scenes, ID1) switch 2 : Multicast delivery (group 1, recall scenes, ID2)</p>
Click External Switch 3 times	N/A	<p><b>Endpoint 3/4/5 Find and Bind target mode (Initiator):</b> <b>Attribute 0x0012 of 0xFD00 cluster is 0.</b> Switch 1 : enter endpoint 3 bind initiator mode for 5s. <b>Attribute 0x0012 of 0xFD00 cluster is 1</b> Switch 1 : enter endpoint 4 bind initiator mode for 5s. Switch 2 : enter endpoint 5 bind initiator mode for 5s.</p> <p>Indicator Light will turn on quickly and turn off slowly while in this mode.</p>
Click Action Button 6 times	<p><b>Pair to Zigbee Controller/Coordinator:</b> Indicator Light will quickly flash blue light until it is join into the network or times out if nothing is detected after 180 seconds.</p> <p>If pairing fails, Light Indicator will return to a slow breathe animation.</p> <p>If pairing succeeds, the Light Indicator will enter regular light mode (constantly blue light or off based on the state of the Pico Switch).</p>	<p><b>Enter manual calibration mode</b> Indicator Light will blink quickly during manual calibration mode.</p> <ol style="list-style-type: none"> <li>When calibration starts, the shutter will start moving to 0 degree/full open.</li> <li>When the motor reaches 0 degree/full open, click external switch 2 once.</li> <li>The motor will begin the opposite rotation to 180 degrees/full close.</li> <li>When the motor reaches 180 degrees/full close, click external switch 2 once to complete the calibration.</li> </ol>
Press and hold	N/A	<p>(Only momentary push button)</p> <p><b>external switch mode = Covering Mode:</b> S1 = Up/Open (held) or Stop (release) S2 = Down/Close or (held) Stop (release)</p> <p><b>external switch mode = Control Mode:</b> Binding Color Level control.</p>
Press and hold both S1/S2 at the same time for 5 seconds.	<p><b>Momentary Switch Only</b> Change between momentary movement / continuous movement modes. Indicator Light will blink quickly 2 seconds.</p>	

# Connect Aeotec Pico Shutter

Various hubs have different processes to pair the Aeotec Pico Shutter, you can follow the steps below to pair your Pico Shutter to one of the various hubs this device has been tested and proven to work in.

## Using any other Zigbee controller/hub.

- a. Open your Zigbee Controller/Hub interface.
- b. Set your hub into Zigbee connect/pair mode.
- c. When prompted by your hub, **tap the Action Button on Pico Shutter twice**, the LED will flash rapidly while it attempts to connect.

## Direct guides with specific hubs.

We have more specific guides for Home Assistant and SmartThings / Smart Home Hub which you can find in the links below:

- [SmartThings / Smart Home Hub](https://aeotec.freshdesk.com/a/solutions/articles/6000266750) (https://aeotec.freshdesk.com/a/solutions/articles/6000266750)
- [Home Assistant](https://aeotec.freshdesk.com/a/solutions/articles/6000266751) (https://aeotec.freshdesk.com/a/solutions/articles/6000266751)

## Connection LED states of Aeotec Pico Shutter.

If the steps were followed correctly, the LED will change from a rapid flash to one of these LED states depending on success or failure.

- **Success:** LED will have a solid light based on the state of the switch output (OFF = led off, ON = led on) light permanently when the device is switched on.
  - **Fail:** LED will return to fading in and out.
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# Calibrate Aeotec Pico Shutter

To calibrate, press the connected button 6 times in succession

- Indicator Light will blink quickly during manual calibration mode.
  - When calibration starts, the shutter will start moving to 0 degree/full open.
  - When the motor reaches 0 degree/full open, click external switch 2 once.
  - The motor will begin the opposite rotation to 180 degrees/full close.
  - When the motor reaches 180 degrees/full close, click external switch 2 once to complete the calibration.
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# Factory reset your Aeotec Pico Shutter

Aeotec Pico Shutter can be factory reset at any time if you come across any issues, or if you need to re-pair Aeotec Pico Shutter to another hub.

(<https://www.youtube.com/watch?v=1LxhVcqbalo>)

## Steps to manually factory reset.

1. **Press and Hold the connect button** for five (10) seconds.
2. **Release the button** when the LED starts fading blue in and out.

## Remove Pico Shutter from your hub.

Removing your Pico Shutter from your hub can automatically factory reset your Pico Shutter.