

Aeotec Pico Duo Switch user guide (AEOZZGA003)

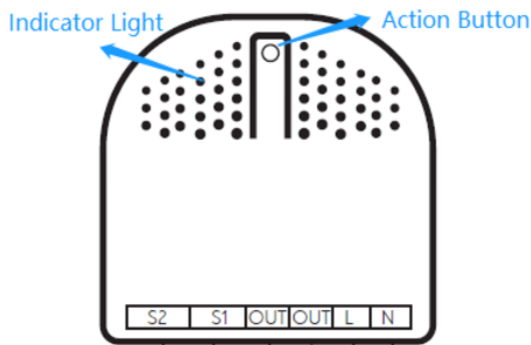
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Aeotec Pico Duo Switch (<https://aeotec.com/smarthings/>) is designed to control devices using any Zigbee 3.0 hub over a physical and wireless connection. It is powered by Zigbee technology.

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

Familiarize yourself with Aeotec Pico Duo Switch



Package contents:

1. Aeotec Pico Duo Switch
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 Duo Switch

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

Follow the diagrams below to wire your Aeotec Pico Duo Switch.

Installation and wiring of Pico Duo Switch.

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

Wiring Diagrams

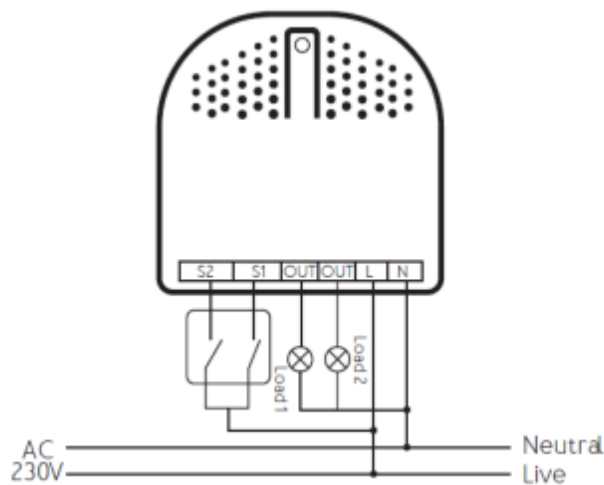


Fig. 1: Using double momentary or separate single-pole toggle switches

Finalize power and wiring of Pico Duo Switch.

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

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

Button Press functions of Aeotec Pico Duo Switch

Action Button (From the Pico Duo Switch)

User behavior	outside network	Inside network
Power OFF	N/A	N/A
Power ON	<p>1, If external switch is a 2-state switch, the relays will synchronize the status with the position of the external switch, otherwise all relays will turn off.</p> <p>2, The device start the Touch Link target process automatically. Touch Link lasts only 3 seconds.</p> <p>3. Enter ZigBee3.0 initial start up. The LED will flash quickly for about 180 sec while scanning or until the device is joined to a controller If device is not joined within 180 sec. The LED will start slow breathing.</p>	<p>The status of the relays is determined by the priority from top to bottom:</p> <p>1, If the external switch endpoint has any binded devices, and if the external switch is a 2-state switch, the relays will synchronize it.</p> <p>2, Refer to the attribute StartUpOnOff belong to On/off cluster to determine the status of the relays.</p> <p>3. The led will turn on for 1 seconds, then synchronize to the status of the relays.</p>
Click Action Button 1 time	<p>Toggles on or off.</p> <ul style="list-style-type: none"> - If one channel is on, both channels will turn off. - if both channels are off, both channels will turn on <p>Indicator Light will continue slow breathing.</p>	<p>Toggles on or off.</p> <ul style="list-style-type: none"> - If one channel is on, both channels will turn off. - if both channels are off, both channels will turn on <p>Indicator light will synchronize to the status of the relays.</p>
Click Action Button 2 times	<p>Pair to Zigbee Controller/Coordinator: 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 Duo Switch).</p>	<p>Central network mode: Nothing to be done.</p> <p>Distribute network mode: 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>External Switch 1 (S1) identify mode: 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>External Switch 2 (S2) identify mode: 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	<p>Endpoint 1 Find and Bind target mode (Initiator): Endpoint 1 enters find and bind target mode, this progress will continue to 180s.</p> <p>Indicator Light will blink quickly while Pico Duo Switch is scanning.</p>
Click Action Button 6 times	N/A	<p>Endpoint 2 Find and Bind target mode (Initiator): Endpoint 2 enters find and bind target mode, this progress will continue to 180s.</p> <p>Indicator Light will blink slowly while Pico Duo Switch is scanning.</p>
Press and hold Action Button for [1, 2s)	No function Indicator Light will turn off when pressed/held, and return to breathing light when release between 1-2s.	No function 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 Duo Switch).
Press and hold Action Button for [2, 5s)	No function, Indicator Light will start breathing.	<p>Touch Link initiator mode. Trigger the device to start Touch Link initiator mode.</p> <p>Indicator Light will turn on solid when held between 2-5s, and fades on slowly then off quickly 5x times when released.</p>
Press and hold Action Button for [5, 10s)	No function, Indicator Light will speed up flashing when held between 5-10s, and returns to breathing light when released.	No function, 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 Duo Switch).
Press and hold Action Button for [10, 12)	No function, Indicator Light will become constantly light when press, and become breathing light when released.	<p>Factory reset When Action button is held for 10s or more, Factory Reset is performed on Pico Duo Switch.</p> <p>The Indicator Light will return to a slow breathing light, which indicates a successful factory reset operation.</p>
Press and hold Action Button for [17s)	<p>Factory reset, then create and join a Distributed Network If joining a distributed network succeeds, it will enter regular light mode (Light Indicator follows switch state of Pico Duo Switch).</p>	<p>Factory reset, then create and join a Distributed Network If joining a distributed network succeeds, it will enter regular light mode (Light Indicator follows switch state of Pico Duo Switch).</p>

External Switch (Connected switch)

User behavior	outside network	Inside network
Click External Switch 1 time	N/A	1. Binding ON/OFF (server) delivery. 2. Toggles Pico Switch on/off - S1 controls Out1 - S2 controls Out2
Click External Switch 2 times	N/A	switch 1 : Multicast delivery (group 1, recall scenes, ID1) switch 2 : Multicast delivery (group 1, recall scenes, ID2)
Click External Switch 3 times	<p>Pair to Zigbee Controller/Coordinator: 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>Trigger the external switch X to send Initiator query finding and binding the other devices in the network, this progress will continue to 3s. Note: 'X' is mapped to either external switch 1 or 2.</p> <p>Indicator Light will become turns on quickly and turns off slowly.</p>
Click External Switch 6 times	N/	N/A
Press and hold External Button	N/A	Binding Level control (server) delivery (Momentary switch only)

Connect the Aeotec Pico Duo Switch

Various hubs have different processes to pair the Aeotec Pico Duo Switch, you can follow the steps below to pair your Pico Duo Switch 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 Duo Switch 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/6000266748) (https://aeotec.freshdesk.com/a/solutions/articles/6000266748)
- [Home Assistant](https://aeotec.freshdesk.com/a/solutions/articles/6000266749) (https://aeotec.freshdesk.com/a/solutions/articles/6000266749)

Connection LED states of Aeotec Pico Duo Switch.

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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Factory reset your Aeotec Pico Duo Switch

Aeotec Pico Duo Switch can be factory reset at any time if you come across any issues, or if you need to re-pair Aeotec Pico Duo Switch 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 Duo Switch from your hub.

Removing your Pico Duo Switch from your hub can automatically factory reset your Pico Duo Switch.