

# Aeotec

## Aeotec WallSwipe



Change history

Revision	Date	Change Description
1	10/09/2018	Initial draft.
2	11/13/2018	Update
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		

## Aeotec WallSwipe Engineering Specifications and Advanced Functions for Developers

Aeotec by Aeotec WallSwipe is a capacitive touch button switch panel, used to connect Aeotec Nano products to control the output loads (on/off/dim) via touching, long pressing, sliding the button area. It also supports control of the load via gesture over the panel. Its surface has some RGB LEDs to indicate the button actions and the status of load.

### 1. Technical specifications

Model number: ZW158

Input: DC 3.0V to 3.6V.

Max power consumption: <0.2W.

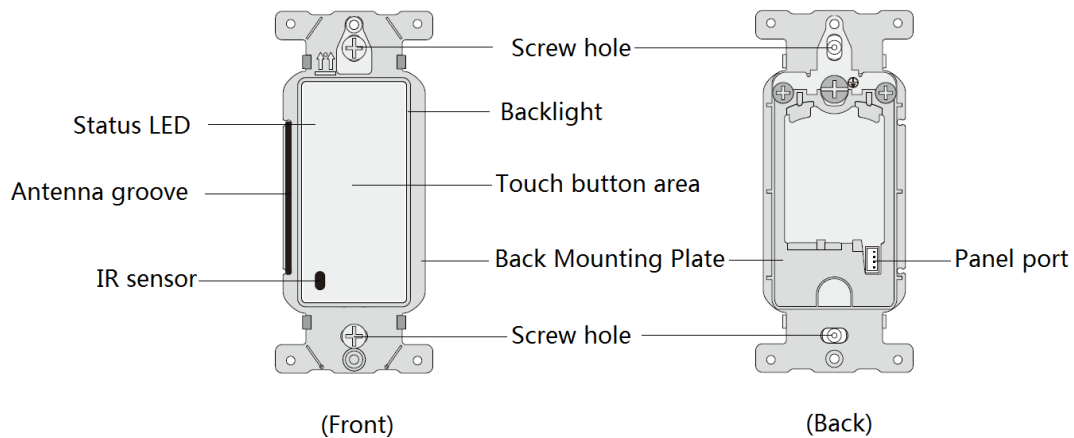
Operating temperature: 0°C to 40 °C .

Relative humidity: 8% to 80%RH.

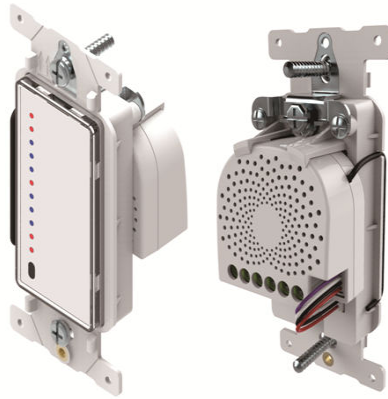
IR/Gesture detection sensitivity: Max 3cm.

### 2. Familiarize yourself with your WallSwipe

#### 2.1 Interface



#### 2.2 Wire connection



### 3. All functions of each trigger

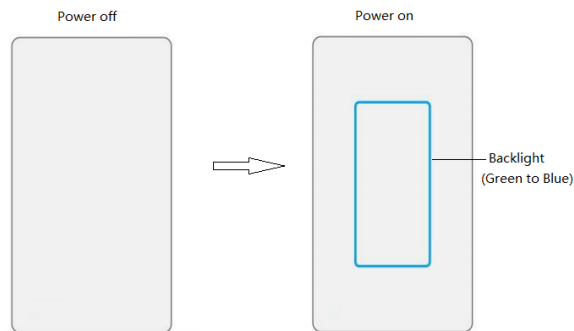
Product	Action	Trigger times	Function				
			If out of network		If in network		
Nano Switch	Tap	Click	Toggle On/Off; Send Non-Security NIF		Toggle On/Off		
		Double Click	Send Security NIF		N/A		
		Multi Click	N/A		N/A		
		2 Up-Down Click	N/A		Send NIF		
		4 Up-Down Click	N/A		Enter RF power test mode		
	6 Up-Down Click	Exit Learn Mode		Reset to factory defaults			
	Hold	Hold	N/A		N/A		
	Slide	Up	N/A		N/A		
		Down	N/A		N/A		
	Wave	Up	Turn On load	Option 1	Option 2	Scene On/ Scene Off	Turn On load
		Down	Turn Off load				Turn Off load
		Left	N/A				Scene On/ Scene Off
Right		N/A					
Dual Nano Switch	Tap	Click Up area	Toggle Switch 1 On/Off, Send out Non-Security NIF		Switch 1 Toggle On/Off		
		Click Down area	Toggle Switch 2 On/Off; Send Non-Security NIF		Switch 2 Toggle On/Off		
		Double clicks	Send Security NIF		Disabled		
		Multi clicks	N/A		Disabled		
		2 Up-Down clicks	N/A		Send NIF		
		4 Up-Down clicks	N/A		Enter RF power test mode		
	6 Up-Down Click	Exit Learn Mode		Reset to factory defaults			
	Hold	Hold	N/A		N/A		
	Slide	Up	Both Switches On		Both Switches On		
Down		Both Switches Off		Both Switches Off			

	Wave	Up	Both Switches On	Option 1	Both Switches On	Option 2	Scene On/ Scene Off
		Down	Both Switches Off		Both Switches Off		
		Left	N/A		Scene On/ Scene Off		
		Right	N/A				
Nano Dimmer	Tap	Click once	Toggle On/ Off, Send Non-Security NIF	Toggle On/ Off			
		Double clicks	Send Security NIF	Disabled			
		Multi Click	Disabled	Disabled			
		2 Up-Down Click	Disabled	Send NIF			
		4 Up-Down Click	Disabled	Enter RF power test mode			
		6 Up-Down Click	Exit Learn Mode	Reset to factory defaults			
	Hold	Hold Up-area	Dim up until release, the max brightness is 99%.	Dim up until release, the max brightness is 99%.			
		Hold Down-area	Dim down until release, the min brightness is 5%	Dim down until release, the min brightness is 5%			
	Slide	Up	Dim up until release, the max brightness is 99%.	Dim up until release, the max brightness is 99%			
		Down	Dim down until release, the min brightness is 5%	Dim down until release, the min brightness is 5%			
	Wave	Up	Dim On	Option 1	Dim On	Option 2	Scene On/ Scene Off
		Down	Dim Off		Dim Off		
		Left	N/A		Scene On/ Scene Off		
		Right	N/A				
Nano Shutter	Tap	Click Top area	Up direction moving. Send Non-Security NIF	Up			
		Click Middle area	Stop moving; Send Non-Security NIF	Stop			
		Click Bottom area	Down direction moving. Send Non-Security NIF	Down			
		Double clicks	Send Security NIF	N/A			
		Multi clicks	N/A	N/A			
		2 Up-Down clicks	N/A	Send NIF			
		4 Up-Down clicks	N/A	Enter RF power test mode			
		6 Up-Down clicks	Exit Learn Mode	Reset to factory defaults			
	Hold	Hold Top area	Up direction moving. until release	Up direction moving. until release			
		Hold Middle area	N/A	N/A			
		Hold Bottom area	Down direction moving until release	Down direction moving until release			
	Slide	Up	N/A	N/A			
		Down					
	Wave	Up	Up direction moving	Option 1	Up direction moving	Option 2	Scene On/ Scene Off
		Down	Down direction moving		Down direction		

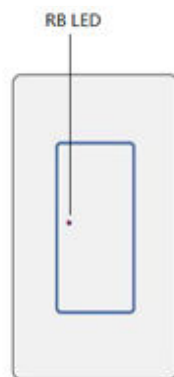
				moving	
		Left	N/A	Scene On/ Scene Off	
		Right	N/A		

#### 4. Panel control of WallSwipe

When the WallSwipe is powered on and connected to a Nano device, you will see the backlight is lighted up. At the same time, the WallSwipe starts recognizing the connected Nano device and then enter the correct control mode (Nano Switch control mode, Dual Nano Switch control mode, Nano Dimmer control mode or Nano shutter control mode).

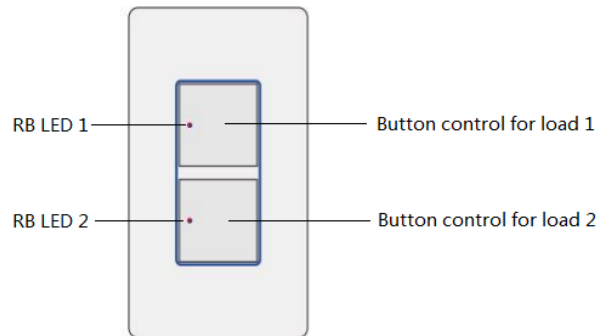


4.1 When the WallSwipe enters the Nano Switch control mode, there will be only one RB LED is lighted up on the top left of panel (see below figure), which means the current control destination is a Nano Switch device, the RB LED is also used to indicate the output load states (red color indicates the load is off, blue color indicates the load is on). You can press the panel button to toggle on/off the output load.

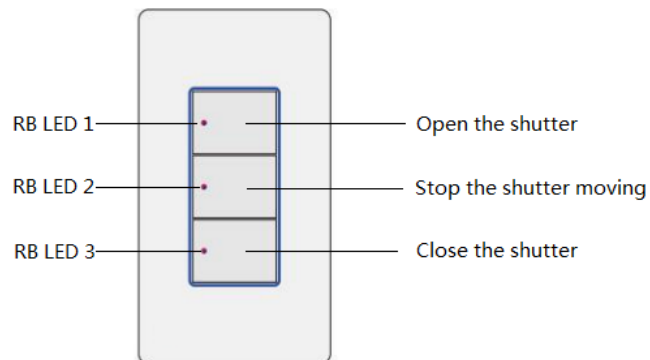


4.2 When the WallSwipe enters the Dual Nano Switch control mode, there will be two RB LEDs are lighted up on the panel (see below figure), which means the current control destination is a Dual Nano Switch device, the RB LEDs are also used to indicate the 2 output loads' state (red color

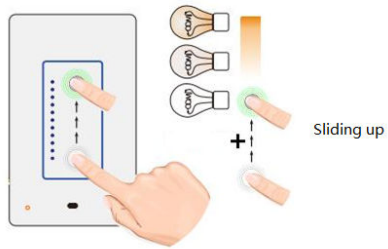
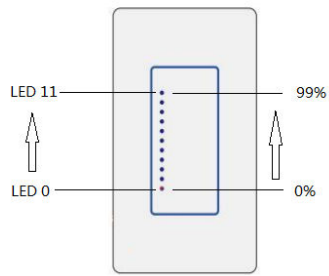
indicates the load is off, blue color indicates the load is on). Pressing the buttons will toggle on/off the output load.



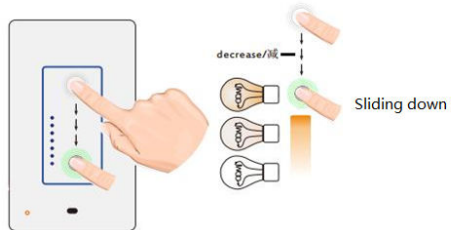
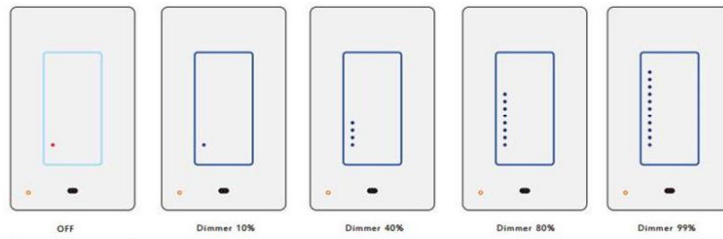
4.3 When the WallSwipe enters the Nano shutter control mode, there will be three RB LEDs are lighted up on the panel (see below figure), which means the current control destination is a Nano shutter device, the RB LEDs are also used to indicate the motor's state (red color indicates the motor is inactive, blue color indicates the motor is activated and the buttons are pressed). You can press and hold the button area to control the shutter to open/stop/close.



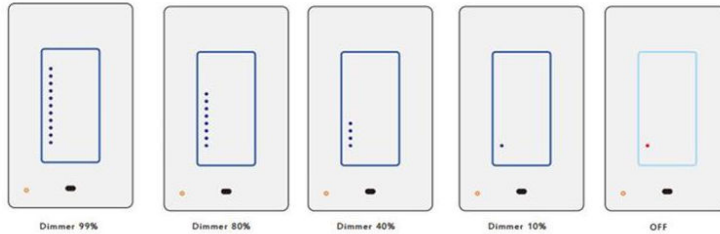
4.4 When the WallSwipe enters the Nano Dimmer control mode, there will be 11 LEDs are lighted up on the panel (see below figure), which means the current control destination is a Nano Dimmer device, the LEDs are also used to indicate the dimming level (e.g. if all LEDs are lighted up with blue color, the current dimming level is 99%, if only LED 0 is lighted up, the current dimming level is 0%). You can change the dimming levels via sliding up/down on the panel.



Dimming up



Dimming down





## 5. Configuration Command Class

7	6	5	4	3	2	1	0
Command Class = COMMAND_CLASS_CONFIGURATION							
Command = CONFIGURATION_SET							
Parameter Number							
Default	Reserved					Size	
Configuration Value 1(MSB)							
Configuration Value 2							
.....							
Configuration Value n(LSB)							

### Parameter Number Definitions (8 bit):

Parameter Number Hex / Decimal	Description	Default Value	Size
0x15 (21)	Enable/disable the IR sensor of WallSwipe. (LSB)Value 1 = 0, disable the IR Sensor. Value 1 = 1, enable the IR Sensor. Value 2 = 0, Wave Option 1 is selected. Value 2 = 1, Wave Option 2 is selected. Value 3 = 0, disable the scene control functionality for Left/Right wave. Value 3 = 1, enable the scene control functionality for Left/Right wave Value 4 = 0, disable the scene control functionality for all wave actions. Value 4 = 1, enable the scene control functionality for all wave actions.	0x01010101	4
0x40 (64)	Set the button color of WallSwipe. Value 1= Brightness level (0x00-0x63). Value 2= the color value of Red. Value 3= the color value of Green. Value 4= the color value of Blue.	0x0AFFFFFF	4
0x41 (65)	Set the LED indication color of WallSwipe when the gesture action is UP. Value 1= Brightness level (0x00-0x63). Value 2= the color value of Red. Value 3= the color value of Green. Value 4= the color value of Blue.	0x32FFFFFF	4

0x42 (66)	Set the LED indication color of WallSwipe when the gesture action is Down. Value 1= Brightness level (0x00-0x63). Value 2= the color value of Red. Value 3= the color value of Green. Value 4= the color value of Blue.	0x32FFFFFF	4
0x43 (67)	Set the LED indication color of WallSwipe when the gesture action is Left. Value 1= Brightness level (0x00-0x63). Value 2= the color value of Red. Value 3= the color value of Green. Value 4= the color value of Blue.	0x32FFFFFF	4
0x44 (68)	Set the LED indication color of WallSwipe when the gesture action is Right. Value 1= Brightness level (0x00-0x63). Value 2= the color value of Red. Value 3= the color value of Green. Value 4= the color value of Blue.	0x32FFFFFF	4
0x45 (69)	Set the LED indication color of WallSwipe when it is in Night light state. Value 1= Brightness level (0x00-0x63). Value 2= the color value of Red. Value 3= the color value of Green. Value 4= the color value of Blue.	0x0AFF0000	4
0x46 (70)	Set the LED indication state of WallSwipe when the output load is OFF. 1= the LED indicates red color. 2= the LED indicates red color and blue color of historical brightness level (note: if the historical brightness level is less than 9%, it only indicates red color). Note: Only Nano Dimmer supports this feature.	1	1
0x47 (71)	Re-calibrate the sensitivity of WallSwipe. Note: Set-only parameter.	-	1
0x90 (144)	Get the connection state of WallSwipe 0 = disconnected. 1 = connected. Note: this is a Get-only parameter.	-	1
0xFB (251)	Enable/disable the button reset function of WallSwipe. 0 = Disable. 1 = Enable.	1	1