

# Daintree® Wireless Controls

## Self-Powered Wireless Rocker Switch

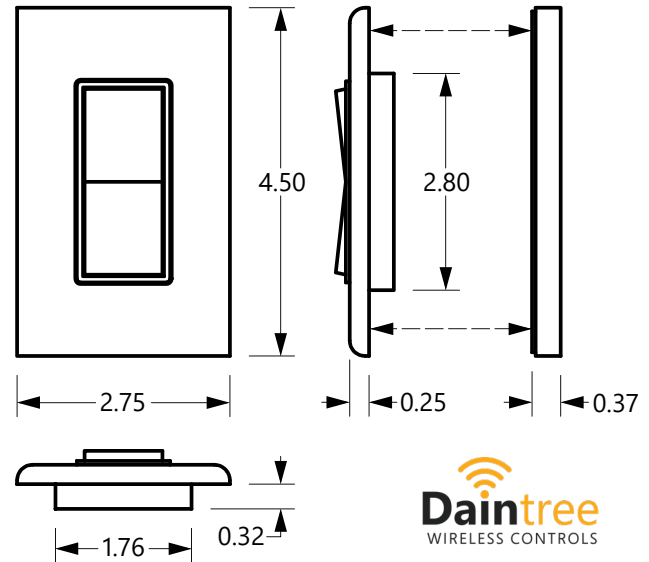
Project Name \_\_\_\_\_

Date \_\_\_\_\_ Type \_\_\_\_\_

Catalog Number \_\_\_\_\_



### Product Dimensions



### Description

The **Self-Powered Wireless Rocker Switch (ZBT-S1AWH)** is a wireless transmitter that communicates with Daintree EZ Connect sensors. The switch uses battery-free, energy harvesting technology. Every time the switch is pressed a micro-generator produces a small electrical current that powers a built-in transmitter. This transmitter sends wireless radio signals that are used to remotely control a compatible system.

For application spaces in need of a system that is simple, easy to install, and code complaint, Current offers Daintree EZ Connect, our mobile app based wireless controls system that provides zonal control and commissioning of lighting systems. The Daintree EZ Connect mobile app and integrated sensors allow customers to zone lighting fixtures. This simple tool can dramatically decrease the installation time and expertise required to commission a room-based lighting controls system for deployments of all sizes and complexities.

The app is available for download on the iOS store.

**Compatible with:** 

- ZigBee Green Power (included in ZigBee 3.0)
- Lumination LED Luminaires integrated with Daintree EZ Connect controls
- WIT100 sensors
- LCA kit can be added to any 0-10V luminaire to enable Daintree EZ Connect controls.

### Ordering Information

Product Code	Product Description
ZBT-S1AWH	Single Rocker Self-Powered ZigBee Switch

- **Easy Deployment:** Daintree EZ Connect mobile app simplifies and reduces the installation process, minimizing disruption to enterprise operations.
- **Zoned Communication:** Fixtures can be zoned and the sensors talk to each other to react in concert with each other to occupancy, daylight and wall controls.
- **Simplicity:** Integration with fixtures reduces the amount of devices that need to be installed in a room.
- **Room Based Control:** Customize the lighting parameters to the task that is being performed in the application space.
- **Code Compliant:** Integrated wireless sensors offer daylight harvesting and granular lighting controls.

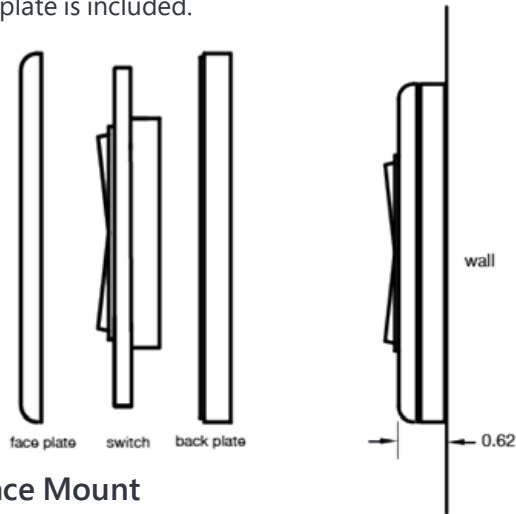
# Daintree® | Single Rocker Self-Powered ZigBee® Switch

## Mounting

**Commission (link) the switch to the compatible system before mounting.**

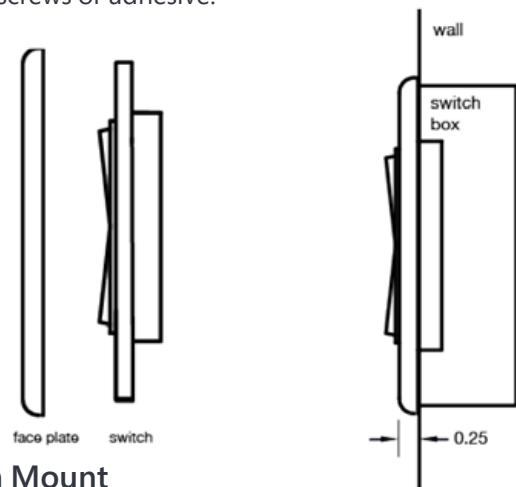
The light switch is compatible with standard decorator style faceplates.

A faceplate is included.



### Surface Mount

For surface mount, attach included backplate to the wall using screws or adhesive.



### Flush Mount

For flush mount, mount the switch without the backplate into either a standard electrical switch box or a low voltage mounting bracket using included screws.

## Commissioning

### PART 1

**Activate commissioning (or linking) mode for a system compatible with the switch.**

From the Daintree EZ Connect App, tap to connect to the room and navigate to the "Switches" tab. Switches should be commissioned no more than 10 ft (3 m) from where they

are intended to be installed. Tap the + icon to begin adding a new switch. Follow the on-screen instructions. For more information download the [Daintree EZ Connect User Guide](#).

### PART 2

**Put the switch into commissioning mode.**

Put the switch into commissioning mode.

To enter commissioning mode, start by selecting one button on the switch. (Use the same button for the entire sequence. Pressing any other button will exit the commissioning mode.)

**Next, execute the following long-short-long sequence:**

1. Press and hold the selected button for more than 7 seconds before releasing it.
2. Press the selected button quickly (hold for less than 2 seconds).
3. Press and hold the selected button again for more than 7 seconds before releasing it.

**The switch has now entered commissioning mode.**

### PART 3

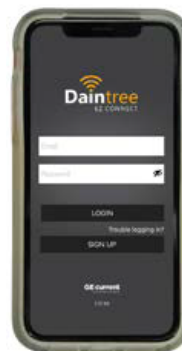
**Linking the switch to the compatible system.**

A radio signal needs to be sent from the switch to the compatible system on the correct ZigBee channel. The system uses one of sixteen possible channels, automatically set by the system. Using the switch, a signal will be sent on each channel until the channel used by the compatible system is found.

Upon entering commissioning mode, the switch sends a signal on the currently selected channel. The signal is sent on the default channel 15, unless the switch had been put on another channel previously. (This allows linking additional devices without changing the currently used radio channel.)

## Zonal Control & Commissioning

Current offers Daintree EZ Connect, our mobile app based wireless controls system that provides zonal control and commissioning of lighting systems. The app is available for download on the iOS store.



## Commissioning (cont.)

Here is a chart of the ZigBee channels and the corresponding radio frequencies (in MHz).

Channel ID	Lower Frequency	Center Frequency	Upper Frequency
11	2404	2405	2406
12	2409	2410	2411
13	2414	2415	2516
14	2419	2420	2421
15*	2424	2425	2426
16	2429	2430	2431
17	2434	2435	2436
18	2439	2440	2441
19	2444	2445	2446
20	2449	2450	2451
21	2454	2455	2456
22	2459	2460	2461
23	2464	2465	2466
24	2469	2479	2471
25	2474	2475	2476
26	2479	2480	2481

\*Daintree EZ Connect Preprogrammed to Channel ID 15

## Cycle through the sixteen channels

To change the switch's channel, short press the selected switch button (less than 7 seconds) once after entering commissioning mode. This will reset the channel used by the switch to channel 15.

*If the switch was already operating on channel 15 (default condition) then the radio channel will remain unchanged. This ensures that the switch will always use channel 15 as the starting point for the channel adjustment.*

**Short press the selected button (less than 7 seconds) again to move to the next channel.**

For each such button press, the switch transmits on the next channel. If channel 26 has been reached then channel 15 will be used next.

When the switch is on the correct channel, the Daintree EZ Connect App will provide a confirmation indication.

Specifications	
<b>ZBT-S1AWH</b>	<b>Daintree EZ Connect Self-Powered Wireless Rocker Switch</b>
Range (to nearest neighboring Daintree EZ Connect device)	Up to 30 ft or 10 m (typical). Range can extend up to 100ft or 30 m
Frequency	4°F to +149°F (-20°C to +65°C) Dry location (or inside Listed non-metallic waterproof enclosure)
Buttons	Green LED (power) Green LED (joined network) Red LED (error state)
Dimensions	Snap-in 1/2" nipple for junction box mount Screw tab and optional mounting bracket
Operating Temperature	-13° to +149° F (-25° to +65° C)
Radio Certifications	Certified according to FCC, IC and CE regulations
Addressing	Factory Set Unique ID

*\*Switches should be commissioned no more than 10 feet (3 m) from their intended installation location.*

Contains FCC ID: SVZ-PTM215Z

Contains IC: 5713A-PTM215Z

*The enclosed device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (i.) this device may not cause harmful interference and (ii.) this device must accept any interference received, including interference that may cause undesired operation.*

*Always follow local electrical codes when installing this device. Installation should be performed by a qualified electrician.*

*This device or certain aspects thereof is protected by at least one of the U.S. or international patent or has at least one such patent application pending.*