

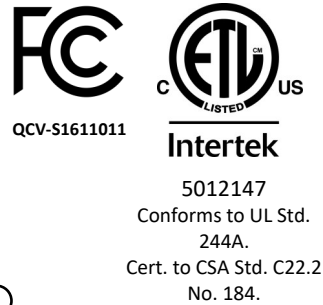
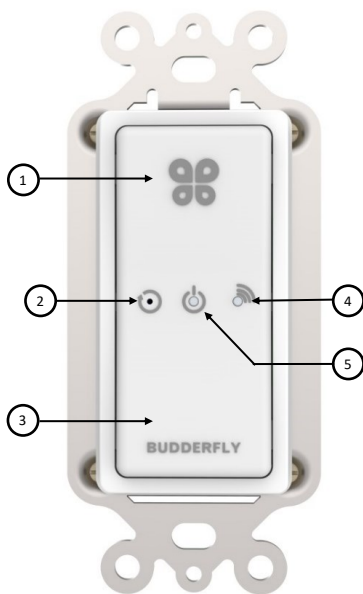


# Wi-Fi Multi-Way Light Switch

Model: S1611011

User Manual

For Control of Incandescent Luminaires, Ballast Loads, Electronic Ballast, CFLs, and LED drivers



- 1: Actuator ON
- 2: Reset Button
- 3: Actuator OFF
- 4: Wi-Fi Status Indicator
- 5: Power Indicator

## 1. Description

The Budderfly Wi-Fi Multi-Way Light Switch is a plug-and-play replacement for your existing building switch. It provides an energy measurement channel for granular energy monitoring of lights loads and communicates data to a facility controller.

Budderfly devices use the Wi-Fi network to communicate with a local or remote server.

The Budderfly Wi-Fi Multi-Way Light Switch is a component of Budderfly system and designed to work with all other Budderfly devices.



**Warning**

**RISK OF FIRE**

**RISK OF BURNS**

**RISK OF ELECTRICAL SHOCK**

Exercise extreme caution when using Budderfly switching devices to control appliances.

To avoid the risk of Fire, Electrical Shock, Burns or other hazards we recommend the following:

- Use Budderfly Wi-Fi Multi-Way Light Switch indoor only.
- Never use the Budderfly Wi-Fi Multi-Way Light Switch to control medical and/or life support equipment.
- Do not use the Budderfly Wi-Fi Multi-way Light Switch where excessive moisture is present or near Water related Applications.
- Do not use the Budderfly Wi-Fi Multi-Way Light Switch to control appliances which may present a hazardous condition due to unattended or unintentional power on control.
- Never use the Budderfly Wi-Fi Multi-Way Light Switch with loads that exceed the maximum rating specified.

## 2. Features

- ◆ Replaces any 15A rated single pole or three-way light switch
- ◆ Use with Decora wall plate
- ◆ Remotely and locally controlled
- ◆ Monitors power consumption
- ◆ LED indicators to show the states of the Switch

### 2.1 LED Indicators

Budderfly Wi-Fi Multi-Way Light Switch are equipped with 2 LEDs that indicate the state of the device.

**Wi-Fi Status Indicator (4):** see table below

**Power Indicator(5):** Illuminates red when the light is switched OFF to show the Wi-Fi Multi-Way Switch location in the dark, and illuminates green when the light is switched ON.

Indicator Color	Status
Alternating Red/Green	Configuration Mode
Blinking Red	Not Connected to Wi-Fi
Solid Red	Connected to Wi-Fi Only
Solid Green	Connected to Server
Flashing Green	Sending/Receiving Data

### 2.2 Reset

If the device stops responding, it can be restarted by pushing the Reset Button (2). A **non-metallic** pin should be used to push the reset button. None of the stored parameters are affected.



### WARNING –ELECTRICAL SHOCK HAZARD

Never use a metallic pin to press the Reset Button (2).

### 2.3 ON/OFF Control

- ◆ **Remote Control:** The Wi-Fi Multi-Way Switch can be switched ON and OFF remotely through the Budderfly Apps.
- ◆ **Local Control:** The Wi-Fi Multi-Way Switch can be switched ON OFF by pressing the Actuator ON (1) and the Actuator OFF (3).

## 3. Specifications

- ◆ Voltage: 85-277 VAC, 50/60Hz
- ◆ Operating Temperature: 0°C to +40°C
- ◆ Maximum Load: 16A.
- ◆ **For Control of:**
  - ◆ **Incandescent/Tungsten Lamps:** 1600W/120VAC.
  - ◆ **Standard Ballast:** 800W/120VAC, 1200W/277VAC.
  - ◆ **Electronic Ballast/Self-ballasted lamp, CFLs, and LED drivers:** 1400W/120VAC, 3300W/277VAC.

For indoor use only.

*Specifications subject to change without notice due to continuing product improvement.*

## 4. Installation

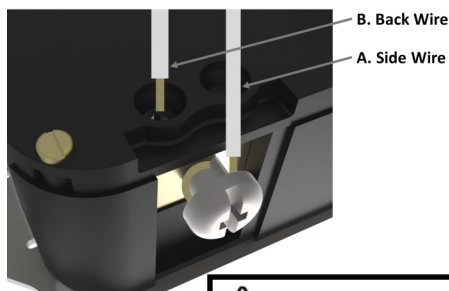
**NOTE:** Back and side terminal screws accept wires up to #10AWG copper or copper clad wire. Use #12AWG or larger wires suitable for 80°C



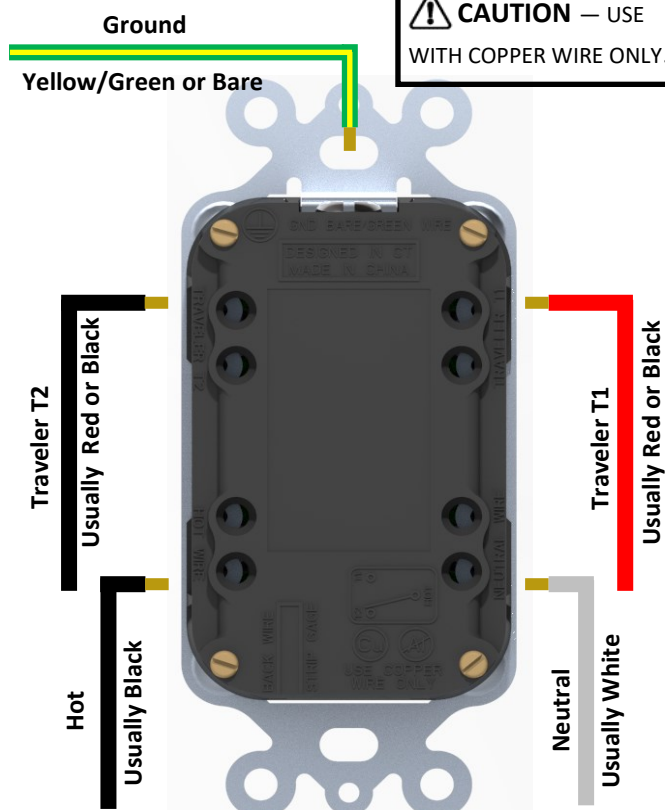
### WARNING — ELECTRICAL SHOCK HAZARD

TO AVOID FIRE, SHOCK, OR DEATH; **TURN OFF POWER** AT CIRCUIT BREAKER OR FUSE AND TEST THAT POWER IS OFF BEFORE WIRING

**⚠ WARNING** — THESE WIRE CONNECTORS ARE SUITABLE FOR USE WITH COPPER WIRE ONLY.



**⚠ CAUTION** — USE WITH COPPER WIRE ONLY.



5. Mount device in wall box using screws provided and mount wall plate.
6. Restore power at circuit breaker or fuse.
7. Installation is complete.

**WARNING:** If you are not sure about any part of the above instructions, consult a qualified electrician.  
TO BE INSTALLED AND/OR USED IN ACCORDANCE WITH THE APPROPRIATE ELECTRICAL CODES AND REGULATIONS

## 5. Wi-Fi Setup

There are two main methods to configure Budderfly devices:

### A. Default Connect

Budderfly Wi-Fi Multi-Way Light Switch connect to a default Wi-Fi network SSID: “GoEnergy” with Password: “BudSdaZ1p”. An access point can be configured with the above credentials, Budderfly Wi-Fi devices will automatically connect.

### B. Setup Individual Device

1. Press the reset button 3 times (wait 1-4 seconds between presses). The Wi-Fi Status Indicator (5) should alternate red/green. This enables the Access Point mode on the Budderfly device with SSID “BUD-XX:XX:XX:XX:XX:XX”
2. Connect your smartphone, tablet or computer to the above network using password “bud-1234”  
**Note:** XX:XX:XX:XX:XX:XX stands for the MAC address.
3. In your web browser, open the following page: <http://192.168.4.1/> to view the configuration
4. Enter the SSID and password of your Wi-Fi Network in the appropriate fields. To change the broker settings, click/tap on advanced.  
**Note:** Clicking “Save” at any time overwrites the old configuration. If you are not sure about the configuration, click “Cancel” to keep using the old configuration. LED will stop blinking and Access point mode will be terminated.
5. Wi-Fi Status Indicator should illuminate solid red in a minute if Wi-Fi connection is successful and green if server connection is successfully established.
6. If Wi-Fi Status Indicator (5) is still blinking red, revisit the Wi-Fi configuration. If it stays red for more than 5 minutes, double check your network/internet connectivity or server status.

## 6. Warranty

Budderfly LLC warrants to the original consumer purchaser and not for the benefit of anyone else that this product at the time of its sale by Budderfly is free of defects in material and workmanship under normal and proper use for a period of three (3) years from the date of delivery to you. Budderfly's only obligation is to correct such defects by repair or replacement, at its option, if within such three year period the product is returned prepaid via Budderfly's Returned Materials Authorization (RMA) process to **Budderfly LLC, Att: Quality Assurance Department, 2 Trap Falls Road, Suite 507, Shelton, CT 06484**. In no case is product to be returned without first obtaining an RMA.

This warranty excludes and there is disclaimed liability for labor for removal of this product or reinstallation. This warranty is void if this product is installed improperly or in an improper environment, overloaded, misused, opened, abused, or altered in any manner, or is not used under normal operating conditions or not in accordance with any labels or instructions. **There are no other or implied warranties of any kind, including merchantability and fitness for a particular purpose**, but if any implied warranty is required by the applicable jurisdiction, the duration of any such implied warranty is required by the applicable jurisdiction, the duration of any such implied warranty, including merchantability and fitness for a particular purpose, is limited to three years. **Budderfly is not liable for incidental, indirect, special, or consequential damages, including without limitation, damage to, or loss of use of, any equipment, lost sales or profits or delay or failure to perform this warranty obligation. Budderfly's liability on any claim for damages arising out of in connection with the manufacture, sales, installation delivery, or use of the product shall never exceed the purchase price of the product.** The remedies provided herein are the exclusive remedies under this warranty, whether based on contract, tort or otherwise.

1. At the circuit breaker or fuse panel, disconnect the power for all of the circuits in the switch junction box. **Test that power is off.**

2. Remove wall plate, unscrew the switch you are replacing and disconnect it.

### Standard configuration:

Connect the LOAD wire that goes to the light to the **Traveler T1** of the Wi-Fi Multi-Way Light Switch.

### 3-Way configuration:

Connect the Wi-Fi Multi-way Light Switch Traveler T1 and Traveler T2 to the travelers of any standard 3-way switch.

3. Follow instructions in 3A or 3B for side or back wiring respectively:

#### **A. Side Wire**

Remove insulation from each conductor, approximately 3/4" (1.9cm). Connect wires per wiring diagram above. Loop wires clockwise 3/4 turn around terminal screws. Tighten screw **FIRMLY** over loop wires.

#### **B. Back Wire**

Remove insulation from each conductor, approximately 1/2" (1.3cm) as per the strip gage located on the back cover. Connect wires per wiring diagram above. Insert straight wires under clamps next to appropriate terminal screw. Tighten screw **FIRMLY**.

4. Scan the QR code or write down its MAC ADDRESS.

## 7. FCC Compliance

### FCC Warning

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Note: This device has been tested and found to comply with the limits for a Class B digital device, according to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This device generates, uses, and can radiate radio frequency energy and, if not installed and used following the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this device does cause harmful interference to radio or television reception, which can be determined by turning the device off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- i. Reorient or relocate the receiving antenna.
- ii. Increase the separation between the equipment and receiver.
- iii. Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- iv. Consult the dealer or an experienced radio/TV technician for help.

Note: The Grantee is not responsible for any changes or modifications not expressly approved by the party responsible for compliance. Such modifications could void the user's authority to operate the equipment.

### Radiation Exposure Statement

This device complies with FCC radiation exposure limits set forth for an uncontrolled environment. This device should be installed and operated with a minimum distance of 20cm between the radiator and your body.