# Wireless Companion Switch, Dimmer, and Keypads

Cat. Nos. ZBK00-CSW, ZBK00-CDW, ZBK00-4DW and ZBK00-4PW Ratings: Battery 3VDC

# GreenConnect™

- TO AVOID PERSONAL INJURY OR DEATH, keep new and used batteries out of the reach of children. Seek immediate medical attention if a battery is ingested and follow medical advice
- This product is to be installed and/or used in accordance with electrical codes and regulations.
- If you are unsure about any part of these instructions, consult an electrician.

#### **CAUTIONS:**

- These devices rely on wireless RF communication.
- Use two CR2025 coin cell batteries ONLY. Do not use a rechargeable battery. Use of an improper battery may cause damage to the device.

  • For indoor use only.
- These devices are for surface mount or wallbox mount. They are not suitable for retrofit wall box installation where Class 1 wiring is present.

DI-000-ZBK00-00B-W

**ENGLISH** 

### **INSTALLATION INSTRUCTIONS**

Cat. No.	Description		
ZBK00-CSW	GreenConnect Wireless Companion Switch		
ZBK00-CDW	GreenConnect Wireless Companion Dimmer		
ZBK00-4DW	GreenConnect Wireless Companion Keypad (ON, Raise, Lower, OFF)		
ZBK00-4PW	GreenConnect Wireless Companion Keypad with Preset Levels (ON, 50%, 20%, OFF)		

## **Product Description**

The GreenConnect<sup>TM</sup> wireless companion switch (ZBK00-CSW), dimmer (ZBK00-CDW), and 4-button keypads (ZBK00-4DW and ZBK00-4PW) pair with GreenConnect load controllers to provide lighting control where needed. These devices can be mounted in an existing wallbox or to flat wall surface near an entry point. In addition, these devices are battery powered and do not require any wiring to a power source or to the GreenConnect load controllers.

- Two replaceable CR2025 batteries with 5-year battery life are included.
   Use to connect to Leviton's GreenConnect load controllers.

#### **Installation Notes**

- The ZBK00's are battery-powered companion devices that use wireless RF technology for communication to GreenConnect load controllers.
- These devices do not connect directly to the load or lights. Control of the load or lights is through the GreenConnect load controllers, which are line voltage devices (sold separately).
- For best results, mount these devices within 50 ft. of a GreenConnect load controller or sensor.
- Do not install these devices in metal wall boxes or with metal wallplates, as this may result in poor RF performance.

### Installation in a Wallbox

WARNING: TO AVOID FIRE, SHOCK, OR DEATH, turn OFF power at the circuit breaker.

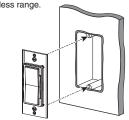
To install in a standard NEMA electrical box in single-gang or multi-gang installation:

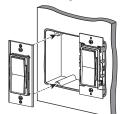
1. Take note of the TOP marking on the reverse side of the device.

- NOTE: Make sure the device is within 50 ft. of the GreenConnect load controller.

  2. Line up the device with the screw holes in the desired location on the wallbox.
- Insert and tighten the screws in the innermost screw holes of the wallbox. Do NOT overtighten the screws.

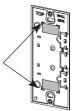
NOTE: Installation in a metal wall box can weaken the RF signal and reduce the



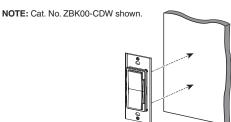


## Installation on a Wall Surface

- 1. Select a clear wall surface within 50 ft of the GreenConnect load controller
- 2. Place the included adhesive tape on the reverse side of the device, and align the top and bottom pieces of tape with the corner markings molded into the base.
- 3. Take note of the TOP and WALL SIDE markings on the back of the device and gently affix the device to the wall surface with the tape. Make sure the device is secure and leveled.



Back Viev



Front View

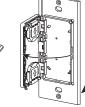
# Powering ON

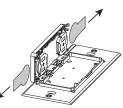
The device comes with two CR2025 batteries (already installed).

- To power ON the device, place your finger on the indent in the base.
   Open the device by gently rotating the frame to the left using the hinges.
   Grasp and pull up each pull tab by its circular portion to remove. Remove both pull tabs (one for each battery).





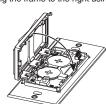




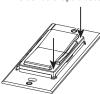
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Cat. No. ZBK00-4xx

4. Close the device by gently rotating the frame to the right using the hinges.



5. Press down firmly in the corners until the device snaps closed.



### **Specifications**

Туре	Specification		
Operating Temperature	32°F - 104°F (0°C - 40°C)		
Operating Humiditiy	Relative humidity (non-condensing): 10%-90%		
Storage Temperature Range	14°F - 185°F (10° - 85°C)		
Batteries	CR2025 x2; 3 V		
Network	2.4 GHz		
Range	50 ft.		
IP Rating	IP20		

Follow the steps below to pair the device with a compatible GreenConnect load controller.

### **System Programming**

- 1. Required devices
  - GreenConnect requires one load control device to create a wireless network and function as the network manager. This can be a wireless load controller, dimmer, or switch.
     Receptacles and battery-powered devices cannot create a network.
  - A maximum combination of 16 load controllers, wall stations, or sensors can be connected
  - GreenConnect devices are also compatible with GreenMAX DRC Wireless for systems that require more than 16 devices.
- 2. Connecting your companion dimmer or switch to a GreenConnect or GreenMAX DRC Wireless network
  - a. Ensure only the network you want to join is open. If more than one network within range is open, your device may join the wrong network.
  - b. Press and hold the top paddle. After about four seconds, the LED will blink back the device diagnostic. Continue to hold for seven seconds until the LED blinks amber once, then release. The LED will start blinking amber rapidly, indicating you are at the main menu.
  - c. Tap the top paddle once. The LED will blink green slowly while your device searches for a network to join. When it connects, the load will toggle OFF and ON twice with all connected devices in the network.
  - d. To join a GreenMAX DRC network, use the GreenMAX DRC App to scan the QR code and follow the instructions included with the GreenMAX DRC room controller.
  - e. If after 60 seconds a network is not found, the LED will stop blinking and the device will
- 3. Resetting your companion dimmer or switch

To remove your device from a network, or to restore it to default settings, press and hold the top paddle for 12 seconds until the LED blinks amber twice, then release. The LED will blink red while the device leaves the network and resets to factory defaults. If the device was a network manager, the reset will break the network and any enrolled devices will no longer be connected.

- 4. System features
  - System settings are saved in the network manager.
  - GreenConnect is a single zone system.
  - All lighting loads respond together as a single lighting zone.
  - · All sensors form a single occupancy zone.
  - Daylight values are aggregated across all sensors in a single daylight zone.
  - The default settings are:
    - i. Occupancy Mode: Auto-ON/Auto-OFF
  - iii. Sensitivity: High
  - iv. Occupancy time-out: 15 minutes
  - v. Partial Off: Disabled
  - vi. Photocell: Disabled
- 5. Changing the system features
  - a. Feature settings are saved in the load control device that is functioning as the network manager. Press and hold the top paddle or test button of the network manager for seven seconds until the LED blinks amber once, then release. The LED will begin blinking amber rapidly.
  - b. Tap the number of times that corresponds to the feature menu you want to access. The LED will blink the feature menu number in green, pause, then blink the menu setting number currently saved in amber. For example, to access feature menu #3 (Occupancy Auto-ON level) from the main menu, tap three times. The LED will blink green three time then blink amber five times for the default setting #5. This blink back pattern will repeat every 60 seconds.
  - c. Once within the feature menu, tap the number of times that corresponds with the r setting you want to select. For example, to change the default Auto-ON value from setting #5 to setting #1, tap once. The LED will blink the number of times corresponding with the selected option in amber. Watch the new blink back patten to ensure the setting is what you selected. If it isn't, enter your selection again.
  - d. Return to the main menu by pressing and holding the top paddle for seven seconds until the LED blink amber once, then release. The LED will then begin blinking amber rapidly.
  - To exit the main menu, press and hold again for seven seconds until the LED stops blinking amber, then release.



### 6. Features menus

Feature #3: Occupancy Auto-ON level			
Setting #	Value		
1	100%		
2	50%		
3	25%		
4	Manual-ON (vacancy)		
5	Restore last level (default)		

Feature #4:Occupancy Sensitivity		
Setting #	Value	
1	Medium	
2	Low	
3	High (default)	

Feature #5: Primary time-out				
Setting #	g # Value			
1	Test mode (30 seconds for 5 minutes then reverts to prior setting)			
2	60 minutes			
3	30 minutes			
4	15 minutes (default)			
5	5 minutes			
6	Disabled			

Feature #6: Partial-OFF level			
Setting #	Value		
1	Disabled (Default)		
2	50%		
3	25%		

### ture #7: Secondary time-out Value 5 minutes 2 15 minutes (Default) 3 30 minutes

Feature #8: Daylighting Target			
Setting # Value			
1	Disabled (Default)		
2	25 footcandles		
3	35 footcandles		
4	45 footcandles		

Feature #9: Secondary level			
Value			
0% (Default)			
50%			
25%			

#### 7. Device menus

Menus and LED feedback				
Act	Action		Blink Rate	Status
Тар	1 Time	Green	Blink	Normal operation
		Red	Blink	Low battery
Press and	old: 4 Diagnostic	Red	3 times	Not enrolled in a network
seconds		Green	3 times	Enrolled in active network
			2 times	Enrollment incomplete
			1 time	Enrolled no communication from the network
Press and hold: 5-9	Main Menu An	Amber	1 time	Release after first amber
seconds			Rapid	blink to enter the main menu. The LED will begin blinking amber rapidly
Тар	1 time	Green	Slow	Enter pairing mode and search for network to join. If already paired, open the network
Press and hold: 10-14 seconds	Reset	Amber	2 times	Release after the second amber blink to reset to factory default settings
Press and hold: 15-19 seconds	Exit		3 times	Release after the third amber blink to take no action and exit

#### Attach the Wallplate

You can attach any Decora®-style standard or screwless wallplate in single- and multi-gang configurations.

1. Insert the screws into the outermost screw holes of the wallplate mounting bracket, and tighten until snug. Do NOT overtighten.

2. Snap on the wallplate.

# Changing the Batteries

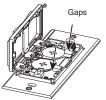
- Remove the wallplate. (If using a screwless wallplate, you do not have to remove the mounting bracket.)
- 2. Place your finger on the indent in the base, and open the device by gently rotating the frame to the left using the hinges.



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Place your finger in the gaps indicated by the arrows, and gently pull the batteries out of the holder. While lifting the batteries, press on battery holder tabs to release batteries.





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Cat. No. ZBK00-4xx



4. In each battery space, insert a CR2025 battery only.

5. Close the device by gently rotating the frame to the right using the hinges.



6. Press down firmly in the corners until the device snaps clo

7. Re-attach the wallplate.



### What to do if...

If the device is not performing as expected, review the troubleshooting information below, or contact Leviton's Technical Support team.

The device does not pair to the GreenConnect load controller.

Make sure you are pairing to a compatible device.

 Ensure the device is within 50 ft of the GreenConnect load controller. In addition, make sure you followed the pairing instructions in System Programming completely

How do I know if I have a compatible GreenConnect load controller? Go to leviton.com/greenconnect for additional product details and list of compatible devices.

The device has an intermittent connection to the GreenConnect load controller:

• Ensure the device is within 50 ft of the GreenConnect load controller.

 This device does not transmit through exterior surfaces. Environmental factors can impact the wireless signal. Before installing, consider materials, such as concrete or steel reinforced floors, ceilings, walls, masonry, cinder block, and reinforced materials, such as plaster and stucco that may interfere with the wireless signal.

• Check to make sure the device does not have a low battery. (See the Diagnostic LEDs table.) Can one wireless switch or dimmer belong multiple GreenConnect networks?

Yes. Enroll the device in the first network, then repeat with the second network.

# How do you clean the device?

Use a damp cloth with mild soap. DO NOT use disinfecting products, including foggers, sprays, or othe types of atomized cleaning agents. Changes or modifications not expressly approved by Leviton Manufacturing Co., could void the user's authority to operate the equipment.

FCC CAUTION:

ECC STATEMENT

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

• Reorient or relocate the receiving antenna.

• Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

- Increase the separation between the equipment and receiver.

   Consult the dealer or an experienced radio/TV technician for help.

## IC STATEMENT

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

FCC SUPPLIERS DECLARATION OF CONFORMITY (sDoC): Models ZBK00-CSW (Switch),ZBK00-CDW (Dimmer), ZBK00-4DW (4-Button Keypad / Dimmer), and ZBK00-4PW (4-Button Keypad with Pre are manufactured by Leviton Manufacturing, Inc., 201 N. Service Road, Melville, NY, www.leviton.com. This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Any changes or modifications not expressly approved by Leviton Manufacturing Co., could void the user's authority to operate the equipment.

RF EXPOSURE AND CO-LOCATION: To comply with FCC OET Bulletin 65 and ISED RF exposure limits for general population and uncontrolled exposure, this device shall be installed and operated with a minimum distance of 7.9 inches (20 cm) between the radiator and your body. Also, must not be co-located or operated in conjunction with any other antenna or transmitter.

Patents covering this product, if any, can be found on www.leviton.com/patents.

### TRADEMARK STATEMENT

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## FOR CANADA ONLY

For warranty information and/or product returns, residents of Canada should contact Leviton in writing at Leviton Manufacturing of Canada ULC to the attention of the Quality Assurance Department, 165 Hymus Blvd, Pointe-Claire (Quebec), Canada H9R 1E9 or by telephone at 1-800-405-5320.

LIMITED 5 YEAR WARRANTY
For Leviton's limited 5 year product warranty, go to www.leviton.com. For a printed copy of the warranty, call 1-800-824-3005.