



Description

The Cameo® CLW-SWEX-230-E and CLW-SWEX-230-P are 1,200 W/WA in-wall switches and programmable keypads designed to operate as part of a complete Crestron® automation system communicating via the iFINET EX® wireless control network. Without the need for additional control wiring, the switches easily replace any standard in-wall switches. Although functional as standalone switches, the CLW-SWEX-230-E and CLW-SWEX-230-P deliver enhanced automation and control capabilities when connected to a Crestron control system. The CLW-SWEX-230-E and CLW-SWEX-230-P are functionally similar. For simplicity within this guide, the term "CLW-SWEX-230-E/P" is used except where noted.

Specifications for the CLW-SWEX-230-E/P are listed in the following table.

CLW-SWEX-230-E/P Specifications

SPECIFICATION	DETAILS
Power Requirements	230 Vac, 50/60Hz, Line Power
Load Types	Incandescent, Magnetic Low Voltage, Electronic Low Voltage, and Fluorescent Ballast
Load Ratings	
Minimum Load	10 W
Maximum Load	1,200 W/WA
Environmental	
Temperature	0° to 40°C (32° to 104°F)
Humidity	10% to 90% RH (Non-Condensing)

Additional Resources

Visit the product page on the Crestron website (www.crestron.com) or scan the QR code to the right for additional information and the latest firmware updates.



Installation

WARNING: To avoid fire, shock, or death, turn off power at circuit breaker or fuse and test that power is off before wiring!

CAUTION: New installations should be checked for short circuits prior to installing a CLW-SWEX-230-E/P switch. With power off, close the circuit and restore power. If the lights do not work or a breaker trips, check and correct the wiring or fixture (if necessary). Install the switch only when the short is no longer present. The warranty is void if the switch is installed and operated with a shorted load.

CAUTION: TO REDUCE THE RISK OF OVERHEATING AND POSSIBLE DAMAGE TO OTHER EQUIPMENT, DO NOT INSTALL TO CONTROL A RECEPTACLE, A MOTOR-OPERATED APPLIANCE OR TRANSFORMER-SUPPLIED APPLIANCE.

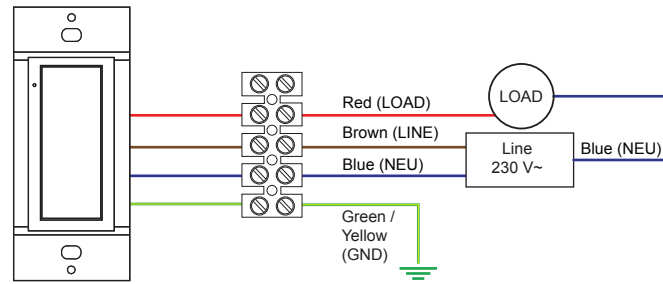
ATTENTION: GRADATEURS COMMANDANT UN BALLAST-AFIN DE RÉDUIRE LE RISQUE DE SURCHAUFFE ET LA POSSIBILITÉ D'ENDOMMAGEMENT À D'AUTRES MATÉRIELS, NE PAS INSTALLER POUR COMMANDER UNE PRISE, UN APPAREIL OPÉRÉ DE MOTEUR OU UN APPAREIL ALIMENTÉ PAR UN TRANSFORMATEUR.

NOTES: Observe the following points.

- Codes: This product should be installed and used in accordance with appropriate electrical codes and regulations.
- Installation: This product should be installed by a qualified electrician.
- Wiring: Use copper wire only. For supply connections, use wire rated for at least 75°C (167°F).
- Lamp Type: For use with permanently installed incandescent, magnetic low voltage, electronic low voltage or fluorescent ballast only.
- Electrical Boxes: Devices mount in standard electrical boxes. For easy installation, Crestron recommends using 89 mm (3 1/2 in) deep electrical boxes. Several devices can be installed in one electrical box (multigang). This requires derating of the switching device. For a smooth appearance, one-piece multigang faceplates (not supplied) can be installed.
- Mechanical 3- or 4-way switches do not work with CLW-SWEX-230-E/P switches.
- Spacing: If mounting one device above another, leave at least 115 mm (4 1/2 in) vertical space between them.
- Low Voltage Applications: Operation of a low voltage circuit with all lamps inoperative or removed may result in current flow in excess of normal levels. To avoid transformer overheating and premature transformer failure, Crestron recommends the following:
 - > Do not operate low voltage circuits without operative lamps in place.
 - > Replace burned-out lamps as quickly as possible.
 - > Use transformers that incorporate thermal protection to prevent transformer failure due to overcurrent.

Install the CLW-SWEX-230-E/P.

1. Turn the power off at the circuit breaker.
2. Wire the device as shown in the following diagram.



Connection	Wire Gauge	Wire Color
LINE	1.5 mm ² (16 AWG)	Brown
NEU	1.5 mm ² (16 AWG)	Blue
LOAD	1.5 mm ² (16 AWG)	Red
GND	1.5 mm ² (16 AWG)	Green/Yellow

3. Push all power wires back into the electrical box and fasten the device to the electrical box with the provided screws.
4. Attach decorative faceplate.
5. Ensure all buttons, including the program button, actuate without sticking.
6. Restore the power at the circuit breaker.

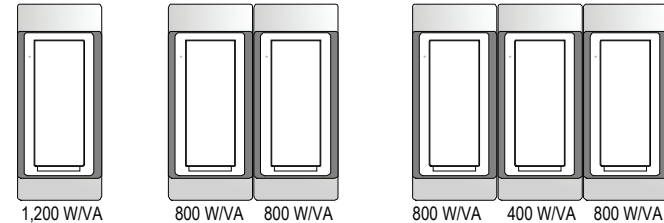
Installing into a Multigang Box

In multigang installations, several devices are grouped horizontally in one electrical box. For a smooth appearance, one-piece multigang faceplates (not supplied) can be installed.

NOTE: When installing into a multigang box, do not fully tighten the devices to the box until the faceplate has been aligned.

The load capacity for each device in the electrical box must be derated. Refer to the following diagrams for derating information.

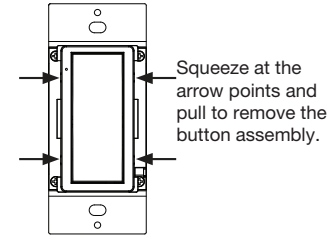
Derating Information for CLW-SWEX-230-E/P Dimmers



Changing Button Assemblies

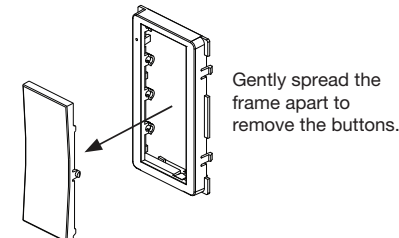
The button assembly can be removed and replaced with other button assemblies.

1. Remove the button assembly by squeezing the sides of the bezel near the bezel snaps.

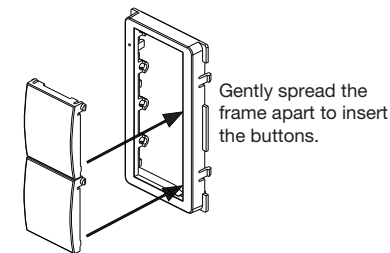


NOTE: When the button assembly is removed, power to the unit and load is removed automatically.

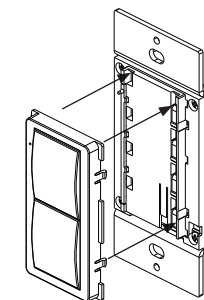
2. Remove button from the front of the button assembly.



3. Insert the new buttons through the front of the bezel and snap them into place. Ensure that the LED is on the left side.



4. Attach the button assembly to the device as shown in the following diagram. Ensure that the LED is on the left side.



Operation

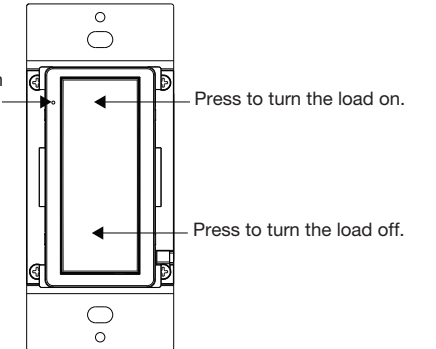
Basic Operation

NOTE: Before using the CLW-SWEX-230-E/P, ensure the device is using the latest firmware. Check for the latest firmware for the CLW-SWEX-230-E/P at www.crestron.com/firmware. Firmware is loaded onto the device using Crestron Toolbox™.

NOTE: The device may be warm to the touch during operation. This is normal.

Operation described in this guide assumes the CLW-SWEX-230-E/P is operating in Local mode (without the use of a control system). The device can also operate in Remote mode, where button behavior is dictated entirely by the control system program. The CLW-SWEX-230-E/P is shipped with a rocker switch already installed. In this configuration, the unit functions as shown below.

The LED indicates that the load is on or off. When all loads are off, the top LED remains dimly lit to act as a night light.

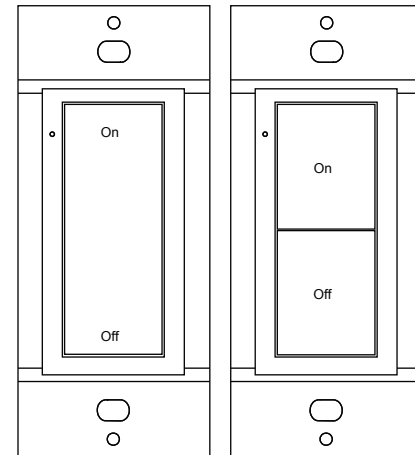


Default Button Functions

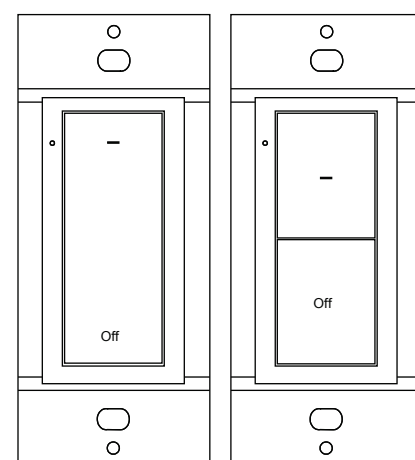
The figures below illustrate the default functions available for each physical button configuration and press and hold actuation sequence.

NOTE: A delayed off can be added via control system programming.

Single Button Press



Double Button Press



Wireless Communications

The device connects to the Crestron network via the infiNET EX communications protocol. Use the procedures outlined below to join or leave an infiNET EX network and to verify communications between the device and the control system.

Joining an infiNET EX Network

Before a device can be used in a lighting system, it must first join an infiNET EX network by being acquired by an infiNET EX gateway.

NOTE: A device can be acquired by only one gateway.

1. Put the infiNET EX gateway into Acquire mode from the unit itself or from Crestron Toolbox, as described in its manual at www.crestron.com/manuals.

NOTE: In an environment where multiple gateways are installed, only one gateway should be in Acquire mode at any time.

2. Place the device into Acquire mode.
 - a. Tap the top button three times, and then press and hold it down (tap-tap-tap-press+hold) until the top LEDs on the device blink once (this can take up to 10 seconds).
 - b. Release the button to start the acquire process. The top LED blinks slowly to show that the device is actively scanning the infiNET EX network.
 - The top two LEDs turn on for 5 seconds to show that the device has been successfully acquired by the infiNET EX network.
 - The top LED blinks fast to indicate that the device was not successfully acquired by the infiNET EX network. Tap the top button to acknowledge failure to acquire the infiNET EX network. Ensure the gateway is in Acquire mode and within range before attempting the acquire process again.
3. Once all devices have been acquired, take the gateway out of Acquire mode. Refer to the gateway's operations guide for details.

Leaving an infiNET EX Network

To leave an infiNET EX network, put the device into Acquire mode, as described in "Joining an infiNET EX Network" above, when no gateway is in Acquire mode.

Verifying Communications Status

To check the communications status of the device, tap the setup button three times, and then press and hold it down (tap-tap-tap-press+hold) for up to 2 seconds. The LED blinks to indicate the communications status. Refer to the following table for details.

LED	COMMUNICATIONS STATUS
Turns on for 5 seconds	The device is communicating with the control system.
Blinks three times	The device is communicating with the gateway but the gateway is not communicating with the control system.
Blinks twice	The device was previously joined to the network but is not communicating with the gateway.
Blinks once	The device is not joined to the network.

Troubleshooting

The following table provides corrective action for possible trouble situations. If further assistance is required, please contact a Crestron customer service representative.

Trouble	Possible Cause(s)	Corrective Action
The device does not function.	The switch is not receiving line power.	Verify that the switch is properly connected to the power line (HOT and NEU) and that the circuit breaker is closed.
	The device is in Remote mode.	Check the program to determine if a change to the operating mode is needed.
The switch powers up but the load does not turn on.	The lamp is burned out.	Check the lamp.
	There is an open circuit.	Check the wiring.
The switch cycles off and on.	A thermal overload condition exists.	Check that the total load is within the device's limits.

As of the date of manufacture, the CLW-SWEX-230-E and CLW-SWEX-230-P have been tested and found to comply with specifications for CE marking.



The product warranty can be found at www.crestron.com/warranty.

The specific patents that cover Crestron products are listed at patents.crestron.com.

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Specifications subject to change without notice.