



Description

The CLWI-SWEX and CLWI-1SW2EX deliver native Crestron® control for up to two individual lights or other switched loads in new or retrofit 230 Vac applications. Featuring infiNET EX® wireless technology, the CLWI-SWEX and CLWI-1SW2EX can be installed in virtually any location. The CLWI-1SW2EX's dual load control is perfect for controlling a bathroom light and exhaust fan in a single gang.

Specifications for the CLWI-SWEX and CLWI-1SW2EX are listed in the following table.
CLWI-SWEX and CLWI-1SW2EX Specifications

SPECIFICATION	DETAILS
Load Ratings	
Load Types	Incandescent, tungsten-halogen, magnetic low voltage, CFL, fluorescent, electronic low voltage, LED
Max Load per Channel	2 A / AX
Power Requirements	230 Vac, 50/60 Hz, line power
Environmental	
Temperature	0° to 40° C (32° to 104° F)
Humidity	10% to 90% RH (noncondensing)
Enclosure	1-gang mountable in a 35 mm deep square or round electrical box; gangable in horizontal and vertical positioning; requires faceplate (not included)
Dimensions	
Height	72 mm (2.80 in)
Width	72 mm (2.80 in)
Depth	32 mm (1.24 in) including front face with buttons
Weight	85 g (3 oz)

Additional Resources

Visit the product page on the Crestron website (www.crestron.com) for additional information and the latest firmware updates. Use a QR reader application on your mobile device to scan the QR image.



Important Notes

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 A 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.

CAUTION:

- Install the device on 10 A branch circuits only.
- Install using wires that are 1 x 1.5 - 2.5 mm² and comply with BS6004:2000/IEC 60245 and local electrical codes.
- Use the device with loads that have a power factor greater than 0.95.

LOW VOLTAGE APPLICATIONS NOTE: 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 or fuse transformer primary windings to prevent transformer failure due to overcurrent.

NOTE: The device requires a neutral connection to operate.

- Wiring: Use copper wire only. For supply connections, use wires rated for at least 75° C.
- Lamp Type: For use with permanently installed incandescent, tungsten-halogen, magnetic low voltage, CFL, fluorescent, electronic low voltage and LED.
- Temperature: For use where temperatures are between 0° to 40° C (32° to 104° F)

Installation

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

NOTES: Observe the following points:

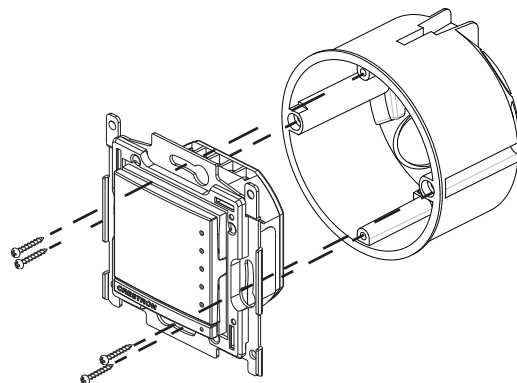
- This product must be installed and used in accordance with appropriate electrical codes and regulations.
- This product must be installed by a licensed electrician.

Single Gang Installation

Refer to the following procedure and illustration to install the device into a single gang electrical box. The electrical box depth must be 35 mm (1.38 in) or deeper.

- Push all power wires back into the electrical box, and fasten the device to the electrical box with the provided screws.

NOTE: Use care when placing the device in the electrical box. Pinched wires may cause a short circuit.



- Attach the faceplate (not supplied).
- Ensure that the button assembly, including the setup button, actuates without sticking.
- Restore power at the circuit breaker.

Multigang Installation

In multigang installations, several devices are grouped horizontally or vertically in one electrical box. When ganging vertically, the devices snap together by sliding the bottom of the upper device into the top of the lower device. This allows the devices to be mounted closer together.

For a smooth appearance, one-piece multigang faceplates (not supplied) can be installed.

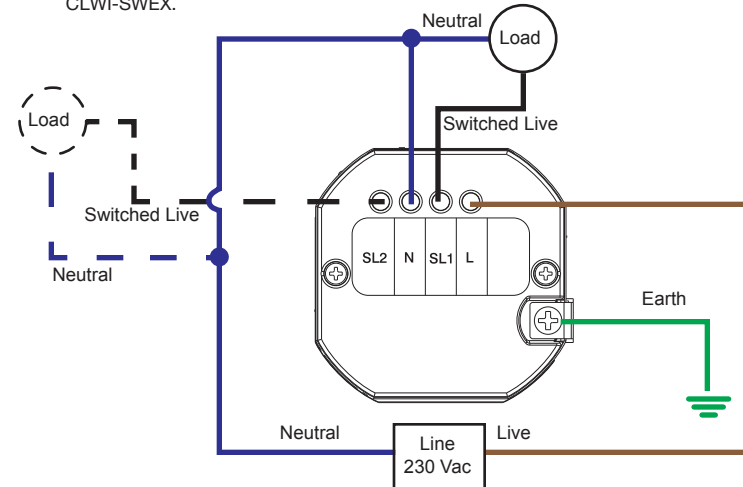
NOTE: When devices are ganged in a horizontal position, the devices do not interlock.

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

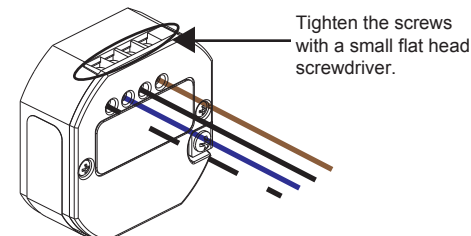
Wiring

The following describes the wiring of a CLWI-SWEX and CLWI-1SW2EX. Use 1 x 1.5 - 2.5 mm² (14 - 12 AWG) wiring when making connections. Refer to "Installation" on the following page for installation instructions.

- Turn power off at the circuit breaker.
- Wire the device as shown in the diagram. Load connections for the SL2 port on the CLWI-1SW2EX are shown with dotted lines. This connection is not available on the CLWI-SWEX.



- When making connections to the device insert the wires into the back of the unit. Use a small flat head screwdriver to tighten the connection.



Configuration

Before the CLWI-SWEX and CLWI-1SW2EX can be used in Local mode, the device must be setup. During the setup process, some or all fixed buttons can be configured for local control. If certain fixed buttons are to be operated remotely (via control system programming), do not assign local programming during this process. Buttons programmed for local functionality have predefined functionality, which is described in the "Assign Button Functions" section that follows. Follow the procedures below to setup the device.

Setup Button Configuration

- Press and hold the setup button (located in the lower right corner of the device) for 5 seconds to enter Button Layout mode. The LEDs that correspond to the current button layout begin to blink fast. Do not release the setup button.

NOTE: If the setup button is held for 15 seconds without other button presses, the device restarts. Refer to "Operation - Device Reboot."

NOTE: If the setup button is released before all buttons are configured the device exits Button Layout mode and no changes are saved. The device reverts to its previously programmed button layout.

- While holding the setup button and within 5 seconds of the flashing LEDs, press any button on the device that requires local functionality. Refer to the "Assign Button Functions" section for valid button layouts. The LED illuminates to verify the button press.

NOTE: After assigning a button, if no buttons are pressed for 10 seconds the device exits Button Layout mode without saving the layout. The device reverts to its previously programmed button layout.

- Continue holding the setup button and press the remaining buttons on the device that require local functionality. The LED associated with each button that is selected for local functionality is illuminated.

NOTE: If an invalid button pattern is selected, the button pattern is not saved.

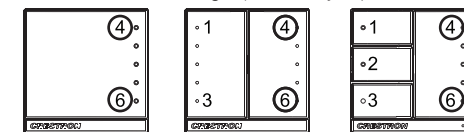
Assign Button Functions

The CLWI-SWEX and CLWI-1SW2EX use a fixed button configuration that functions differently depending on the button assembly that is installed. Refer to the "Change Button Assemblies" section for instructions on how to change the button assembly. The illustrations that follow show the available button assembly configurations for the device. The button number with a circle around it identifies the fixed button(s) configured for local operation during this procedure. All other fixed buttons shown (without a circle) are configured through remote control system programming.

The four diagrams that follow show the local button functions available on the CLWI-SWEX.

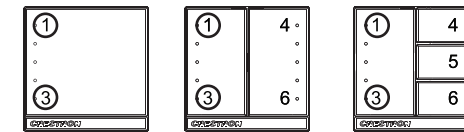
Button Functions for CLWI-SWEX

Rocker with LEDs on Right (Default Layout)



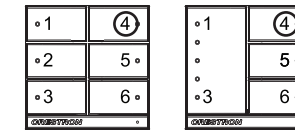
BUTTON #	TAP	DOUBLE TAP	HOLD	LED FEEDBACK	NIGHTLIGHT LED FEEDBACK
4	On	N/A	N/A	The LED is on when the load is on.	The LED glows when load is off.
6	Delayed Off	Off	N/A	N/A	-

Rocker with LEDs on Left



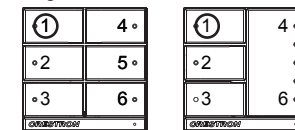
BUTTON #	TAP	DOUBLE TAP	HOLD	LED FEEDBACK	NIGHTLIGHT LED FEEDBACK
1	On	N/A	N/A	The LED is on when the load is on.	The LED glows when load is off.
3	Delayed Off	Off	N/A	N/A	-

Single Right Button Control



BUTTON #	TAP	DOUBLE TAP	HOLD	LED FEEDBACK	NIGHTLIGHT LED FEEDBACK
4	Toggle On or Delayed off	N/A	N/A	The LED is on when the load is on.	The LED glows when load is off.

Single Left Button Control



BUTTON #	TAP	DOUBLE TAP	HOLD	LED FEEDBACK	NIGHTLIGHT LED FEEDBACK
1	Toggle On or Delayed off	N/A	N/A	The LED is on when the load is on.	The LED glows when load is off.

The four diagrams that follow show the local button functions available on the CLWI-1SW2EX.

Button Functions for CLWI-1SW2EX

Dual Rocker Button Control (Default Layout)



BUTTON #	TAP	DOUBLE TAP	HOLD	LED FEEDBACK	NIGHTLIGHT LED FEEDBACK
1	Load 1: On	N/A	N/A	The LED is on when the load is on.	The LED glows when load is off.
3	Load 1: Delayed Off	All: Off	N/A	-	-
4	Load 2: On	N/A	N/A	The LED is on when the load is on.	The LED glows when load is off.
6	Load 2: Delayed Off	Off	N/A	-	-

Rocker with LEDs on Right



BUTTON #	TAP	DOUBLE TAP	HOLD	LED FEEDBACK	NIGHTLIGHT LED FEEDBACK
4	All: On	N/A	N/A	The LED is on when the load is on.	The LED glows when load is off.
6	All: Delayed Off	All: Off	N/A	N/A	N/A

Rocker with LEDs on Left



BUTTON #	TAP	DOUBLE TAP	HOLD	LED FEEDBACK	NIGHTLIGHT LED FEEDBACK
1	All: On	N/A	N/A	The LED is on when the load is on.	The LED glows when load is off.
3	All: Delayed Off	All: Off	N/A	N/A	N/A

Dual Single Button Control



BUTTON #	TAP	DOUBLE TAP	HOLD	LED FEEDBACK	NIGHTLIGHT LED FEEDBACK
1	Load 1: Toggle	N/A	N/A	The LED is on when the load is on.	The LED glows when load is off.
4	Load 2: Toggle	N/A	N/A	The LED is on when the load is on.	The LED glows when load is off.

Operation

NOTE: Before using the CLWI-SWEX or CLWI-1SW2EX, ensure the device is using the latest firmware. Check for the latest firmware for the CLWI-SWEX or CLWI-1SW2EX at www.crestron.com/firmware. Firmware is loaded onto the device using Crestron Toolbox™.

Restore Default Settings

If needed, use the following command to reset the device to its factory default settings. Send the console command "restore" to perform a restore of the factory defaults. All local programming needs to be reset.

Device Reboot

To reboot the CLWI-SWEX or CLWI-1SW2EX press and hold the setup button for 15 seconds. Release the setup button after all LEDs on the front of the device flash to full on and then turn off. This indicates that the device is rebooting. Reboot is completed once the LEDs come back on to normal operating mode.

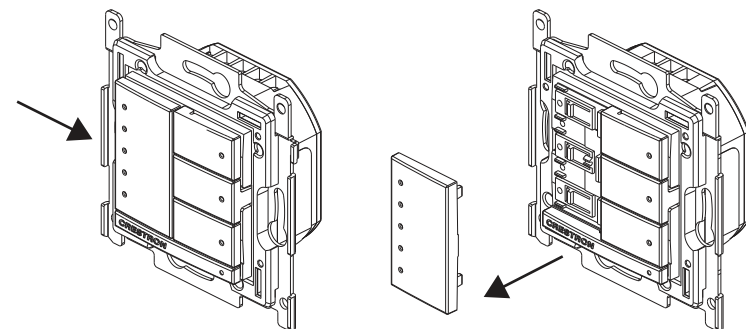
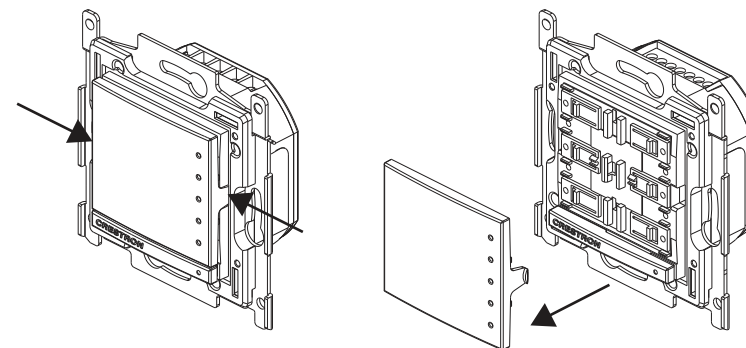
Change Button Assemblies

Follow the procedure below if the button assemblies need to be changed or replaced.

1. Remove the button assembly by squeezing the sides of the button assembly near the center of the device.
2. Remove the button assembly by carefully pulling the button assembly off of the device. Refer to the illustrations that follow.

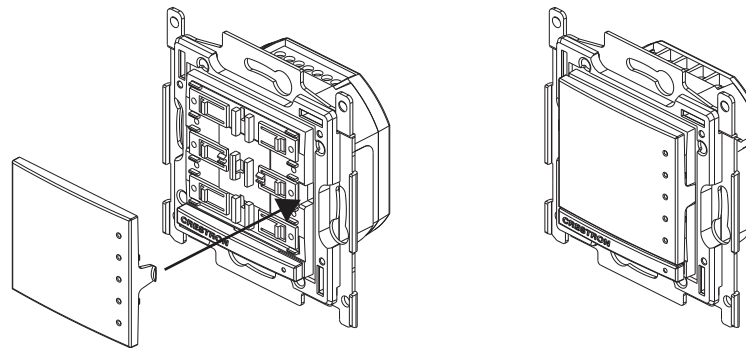
NOTE: When there are more than one button assemblies installed on a device, press on one side of the button assembly and carefully remove the button assembly. The second button assembly can be removed in the manner described in step 1 and 2 above.

Remove Button Assembly



3. Insert the new button assemblies onto the device by pressing them into the device. It might be necessary to squeeze the sides of the button assembly to allow for easier assembly.

Install Button Assembly



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. To join an infiNET EX network, the device must be 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. Refer to the gateway's manual at www.crestron.com/manuals for details.

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

2. Put the device into Acquire mode:
 - a. Tap the setup button three times and then press and hold it down (tap-tap-tap-press+hold) until all LEDs on the device blink once (this can take up to 10 seconds).
 - b. Release the button to start the acquire process. The top two LEDs blink 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 two LEDs blink fast to indicate that the device was not successfully acquired by the infiNET EX network. Tap the setup button to acknowledge the failure. 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 manual 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 top two LEDs blink 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.

As of the date of manufacture, the CLWI-SWEX and CLWI-1SW2EX 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.

Certain Crestron products contain open source software. For specific information, please visit www.crestron.com/opensource.

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Specifications subject to change without notice.