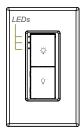
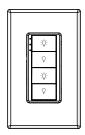
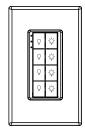
## Multi-Button Interface Switch Station

## Overview

The Multi-Button Interface Switch Station (MBI) uses wireless technology to communicate with compatible Echoflex controllers to manage lighting and dimming commands. The MBI is available in different button configurations, radio frequencies, and colors. Each pair of buttons can be linked to different controllers to manage multiple circuits from one station. Each button is labeled for its function and color LEDs indicate working status.







This document guides covers the installation and basic setup for all MBI models. The product package includes the switch, back support plate, faceplate, and battery.

## Prepare for Installation

To ensure optimal function, consider the installation environment and the following guidelines:

- For indoor use only. Operating temperature -10°C to 45°C (14°F to 113°F), 5%–92% relative humidity (non-condensing).
- High-density construction materials and large metal appliances or fixtures in the space may disrupt wireless transmissions.
- Install the switch within range of linked receivers or controllers,
   24 m (80 ft). Consider adding a repeater to extend reception range.
- CR2032 coin cell battery is provided with the MBI. Install the battery or activate it if factory-installed by removing the protective plastic tab in the battery housing. See *Battery Power on page 3*.
- Avoid mounting transmitters and receivers on the same wall.

Supplies required to install:

- Two #6 screws and wall anchors (not provided)
- Quick strip spacers (not provided)

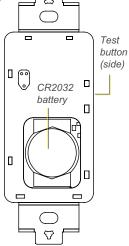


# Echoflex Installation Guide Multi-Button Interface Switch Station

## Installation

Use hand tools when installing. Over-torquing with a power tool can damage the switch. Three different mounting options are available:

- Flush-mounted to a firm surface with screws and wall anchors (not provided).
- On a mud ring using the provided back support plate.
- Over a line voltage device box with a UL approved barrier (Echoflex part number: 8188K1001-5 or 8188K1002-5).
- 1. Insert a precision flatblade screwdriver into the slot at the bottom and pry carefully to remove the faceplate.
- 2. Mount the switch according to the selected option.
- 3. Replace the faceplate by aligning it over the notch on the lower edge. Press above and below the buttons until it clicks into place.
- 4. Press the buttons on and off to test. A green LED blinks each time to indicate a transmitted message.



MBI Back View

## Link to a Controller

The compatible target controller must be installed, powered, and within range of the MBI. Each button pair can be linked to one or more controllers



**Note:** The linking process can be used both to link a device to a controller and to unlink a linked device from a controller.

- 1. Press the **[Learn]** button on the controller to activate Link mode. If necessary, refer to the controller product documentation.
- 2. Press the ON button three times quickly to link the button pair to a controller
- 3. Deactivate Link mode on the controller before attempting to link to any other controllers.
- 4. Repeat for each button pair if linking to different controllers.
- 5. Test the operation by pressing the buttons on and off.



**Note:** If the process fails, check the battery or run Range Confirmation below to confirm adequate signal strength.

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# **Battery Power**

A CR2032 battery is included with the MBI. The battery may be factory installed or packed separately according to shipping regulations. Insert the battery if required or remove the protective plastic tab before installing the MBI.

To replace the battery:

- 1. Remove the faceplate, and then unscrew the switch from its mounting location.
- 2. Insert a precision flatblade screwdriver under the battery clip and gently pry it free.
- 3. Press and hold the ON button for 10 seconds to discharge any stored energy and ensure a clean start for the microprocessor.
- 4. Insert the new battery into the clip with the positive side (+) up and press down. If successful, an LED chase sequence will run three times.

# **Tests and Settings**

Use the [Test] button and color LEDs to navigate the Tests and Settings menu. Remove the faceplate to access the [Test] button on the side. The LEDs display on the front of the MBI.

- Reboot (red LED)
- Range Confirmation (amber LED)

The menu times out after two minutes of inactivity.

### Reboot

- 1. Press and hold the [Test] button until all the LEDs blink.
- 2. Press and release the **[Test]** button to cycle through the menu of color LEDs and stop when the red LED blinks. Disregard any other LEDs that blink; they are for factory use only.
- 3. Press and hold the [Test] button for five seconds to select. The LEDs flash a sequence three times to confirm successful reboot.

# Range Confirmation

The Range Confirmation test quantifies the strength of the wireless signal to a linked controller that has range confirmation capability.



**Note:** Only one controller can be linked to the MBI to run the test properly. Disable repeaters that are in range.

 Press and hold the [Test] button until the green LED is displayed.
 Release the button to enter the menu and display the first item, the blinking green LED.

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- Press and release the [Test] button to cycle through the menu of color LEDs and stop when the amber LED is blinking. Disregard any other LEDs that blink; they are for factory use only.
- 3. Press and hold the [Test] button until the LED stops blinking to initiate the Range Confirmation test.

After the MBI transmits and receives a Range Confirmation message, the signal strength status is displayed as an LED blink color.

LED Blink	Signal Strength
Green	-41 to -70 dBm (best)
Amber	-70 to -80 dBm (good)
Red	-80 to -95 dBm (poor, move closer)
No LED	No linked controllers detected

The test repeats every five seconds and runs for 50 seconds. To exit before the time-out, press and hold the **[Test]** button.

### Compliance

For complete regulatory compliance information, see the Multi-Button Interface Switch Station datasheet at **echoflexsolutions.com**.

#### FCC Compliance

Echoflex Multi-Button Interface Switch Station (For any FCC matters): Echoflex Solutions, Inc. 3031 Pleasant View Road Middleton, WI 53562

+1 (608) 831-4116

echoflexsolutions.com

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.

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. 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 radio communications. Any modifications or changes to this product not expressly approved by Electronic Theatre Controls, Inc. could void the user's authority to operate the product. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at their own expense.

Contains FCC ID: SZV-TCM515U

#### ISED Compliance

This device contains a license-exempt transmitter/receiver that complies with Innovation, Science, and Economic Development Canada's license-exempt RSSs. Operation is subject to the following two conditions:

- 1. This device may not cause interference.
- This device must accept any interference, including interference that may cause undesired operation of the device.

Contains IC ID: 5713A-TCM515U

#### Conformité ISDE

Cet appareil contient un émetteur/récepteur conforme aux CNR d'Innovation, Sciences et Développement économique Canada (ISDE) applicables aux appareils radio exempt de licence. Son fonctionnement est soumis aux deux conditions suivantes:

- 1. L'appareil ne doit pas produire d'interférences.
- L'utilisateur de l'appareil doit accepter toute interférence, même si l'interférence est susceptible d'en compromettre le fonctionnement.

Contient ID IC: 5713A-TCM515U