

**What is the XSW (Xicato Switch Converter)?**

XSW is a family of products within the Xicato Controls portfolio that converts standard 0-10V dimming switches or low voltage momentary contact switches into sophisticated Bluetooth mesh lighting controllers.

**Does XSW require a hub or central controller?**

No. XSW communicates directly, peer-to-peer, with Bluetooth actuator nodes such as lighting nodes, shade controllers, beam angle controllers, and pan-tilt controllers. XSW commands may be relayed over the Bluetooth mesh, but no hub is required.

**What are the advantages of XSW over standard low voltage control switches?**

XSW eliminates the cost and complexity of wires, relay panels, power supplies, and central controllers associated with wired control networks.

**What are the different members of the XSW family, and how do they differ?**

There are currently five members of the XSW family:

- XSW-DIM-01-BK1: Xswitch, 0-10V dimmer, 1 circuit, black plastic housing
  - XSW-LVC-4A-BK1: Xswitch, low voltage contact, 4 button, common anode, black plastic housing
  - XSW-LVC-4C-BK1: Xswitch, low voltage contact, 4 button, common cathode, black plastic housing
  - XSW-LVC-8A-BK1: Xswitch, low voltage contact, 8 button, common anode, black plastic housing
  - XSW-LVC-8C-BK1: Xswitch, low voltage contact, 8 button, common cathode, black plastic housing
- XSW-DIM-01 converts the 0-10V output of any standard single-channel, 0-10V dimming switch into a Bluetooth command that can control dimmable Xicato Bluetooth mesh-compatible light source, lighting group, or network.

XSW-LVC is programmable to transmit Bluetooth commands in response to the contact closure generated by a button press on any standard low voltage contact switch. Each button is independently programmable.

Commands can be directed at individual lights, configured lighting groups, or broadcast to an entire lighting network. Commands can include:

- Simple button press data: "button press" or "button release"
- Intensity command, e.g. "Group 5 go to 47% intensity"
- Scene command, e.g. "everyone go to Scene 4"
- State command, e.g. "Group 3 go to State 2" (a state determines a node's behavior in response to further inputs)

Different variants of XSW-LVC accommodate up to 4 or up to 8 buttons, and accommodate either common Anode (4A or 8A) or common Cathode (4C or 8C) LED configurations.

**How do I power the XSW?**

XSW is powered by 12-48V DC, which can come from an independent power supply for each XSW, or one that is shared by multiple DC components. XSW then provides the low voltage power to the switch.

**Do I also need to power the switch itself?**

No. The XSW provides the power to the low voltage switch, both for the switch itself, and the switch LEDs if necessary. XSW regulates the power as needed. Some LVC switch LEDs may perform better (be brighter) with higher voltage input to the XSW (e.g. 24-48V), but 12V-15V should be sufficient for most applications.

**What is the difference between "common anode" and "common cathode" models?**

Many LVC switches employ tiny LEDs to indicate which switch buttons have most recently been pressed. LEDs are DC-powered components in which electricity can flow in only one direction, from anode to cathode. Most switch vendors wire their switch LEDs such that each LED has its own wire on the anode side, but the circuitry is common (wired together) on the cathode side. This is referred to as "common cathode".

The opposite is true for common anode switches: there is a single wire that is common to the anode side of the LEDs, but each LED has its own wire on the cathode side. Customers must choose the appropriate XSW if they intend for their LEDs to function properly.

**Can I use XSW with ANY low voltage switch?**

Xicato has yet to find a low voltage switch that is incompatible with one of our XSW models, but they may exist. It is best to study the switch's datasheet to figure out which XSW to purchase, then test the switch yourself.

**Can I use XSW with my existing AC on/off switch?**

AC switches typically control the AC power to the lights themselves. XSW is designed to work with switches that control independently-powered lights.

**Is there an XSW for phase-cut dimming switches?**

There is currently no XSW that can translate the output of an AC trailing-edge or leading-edge phase-cut dimming switch into a Bluetooth intensity command.

**Is there a list of switches that are compatible with XSW?**

Xicato has a growing list of switches that are compatible with the different XSW models. Talk to your Xicato representative for the latest list.

**Does Xicato currently manufacture programmable Bluetooth switches?**

Xicato does not currently manufacture the switches themselves. There is an enormous variety of switches already on the market. The XSW allows users to pick their favorite vendors, colors, and styles while retaining the ability to control their lighting wirelessly over Bluetooth.

**How do I program the XSW?**

XSW can be programmed easily using Xicato Control Panel software, which runs on Windows or macOS computers and also is a tool for commissioning Xicato Bluetooth lighting and machine control nodes.

**How can I test the XSW to see if I like it?**

Customers need the following items to test XSW:

- A low voltage 0-10V dimming switch or low voltage momentary contact switch
- A personal computer running Windows 7+ or macOS and Xicato Control Panel software, and configured with a SiliconLabsBlueGiga BLED112 Bluetooth USB dongle
- At least one Xicato Bluetooth mesh compatible lighting node

**How is the XSW priced?**

Customers can order XSW in standard order quantities. Pricing is based on order quantity. Contact your Xicato representative for more information.