



# Installation Guide/Owner's Manual

## Empower 0-10V Dimmer Switch

Technical Support: 313-259-6400, Press 5

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### 1.0 OWNER/USER RESPONSIBILITY

It is the responsibility of the contractor, installer, buyer, owner and user to install, maintain, and operate this controller in accordance with all applicable laws, regulations and local electrical safety authority requirements.

This product is only to be installed by a qualified electrician.

#### IMPORTANT!

Thoroughly read the entire instructions guide and warnings before beginning installation. The instructions provided are intended to assist in the installation and service of the corresponding product. Failure to follow the instructions may result in product malfunction, damage, injury or death. Contact your Kirlin service representative for replacement parts and procedures.

### 2.0 SAFETY & IMPORTANT INFORMATION



Risk of fire or electric shock. Ensure all power is disconnected during installation process. Refer to wiring diagrams to prevent damages and malfunctions.



This controller may only be connected and installed by a qualified electrician. This controller requires knowledge of controllers and electrical systems. If not qualified, do not attempt installation or maintenance. All applicable regulations, legislation, and building codes must be observed.



Connecting fixtures with power **ON** will “hot plug” the LEDs and cause damage.



To prevent wiring damage or abrasion, do not expose wiring to edges metal or other sharp objects.

### 3.0 STANDARDS & COMPLIANCE

UL Listed	UL XX
Restriction of hazardous substances	RoHS Compliant

### 4.0 ELECTRICAL REQUIREMENTS

Nominal input voltage range AC	120 - 277V
Input frequency range	50 - 60Hz
Maximum wattage	XXXW

## **5.0 BEFORE YOU BEGIN**

### **Before You Begin**

- Shut **OFF** power at fuse box or circuit breaker before installation, inspection or removal.
- To reduce the risk of fire or electric shock, **NEVER** interconnect or short output terminations.

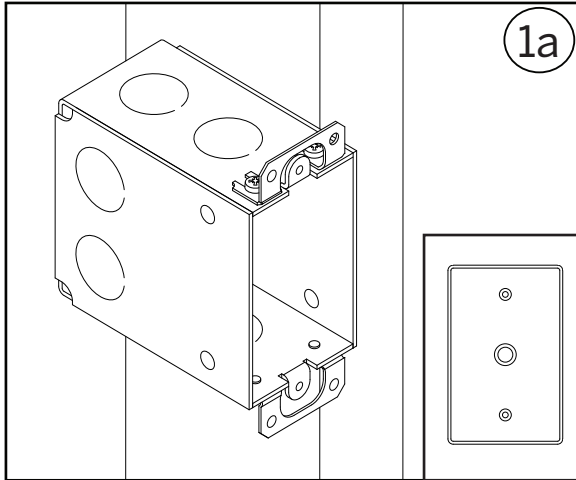
### **Environmental Conditions**

Controller operating ambient temperature (Ta) range	-X0°C to +X0°C
Controller	Damp or dry listed

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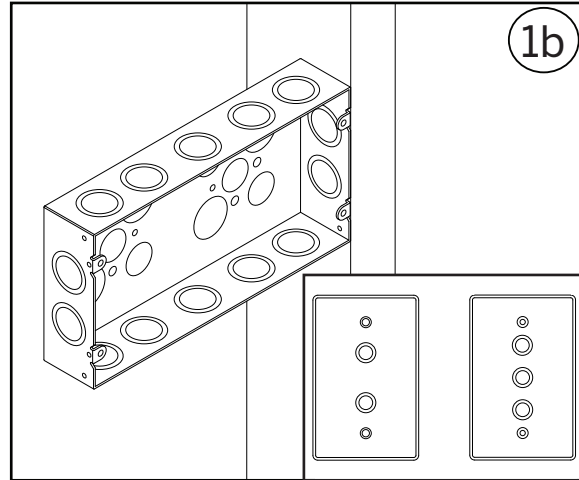
### 6.0 JUNCTION BOX INSTALLATION

#### Single Dimmer Switch



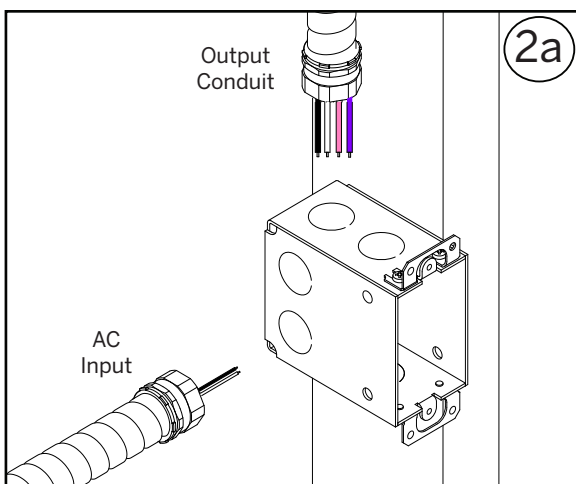
For single dimmer switch wall controllers, install single gang junction box (supplied by others, ex. RACO 590) into stud.

#### Double & Triple Dimmer Switch

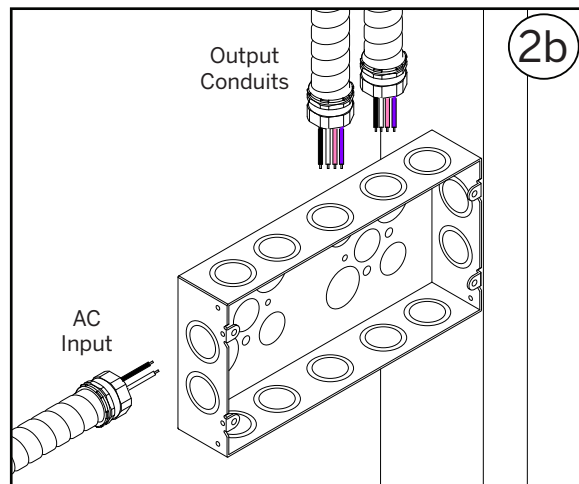


For double and triple dimmer switch wall controllers, install 3-gang junction box (supplied by others, ex. RACO 952) into stud, leaving 1/16" space for the supplied reducer plate.

### 7.0 CONDUIT INSTALLATION

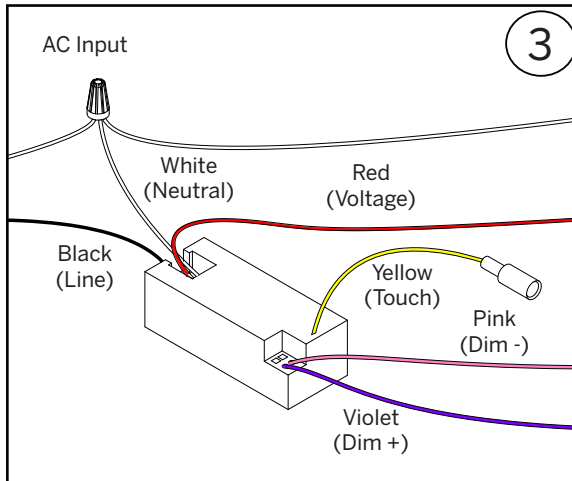


For single switch dimming, install conduit into single gang junction box.

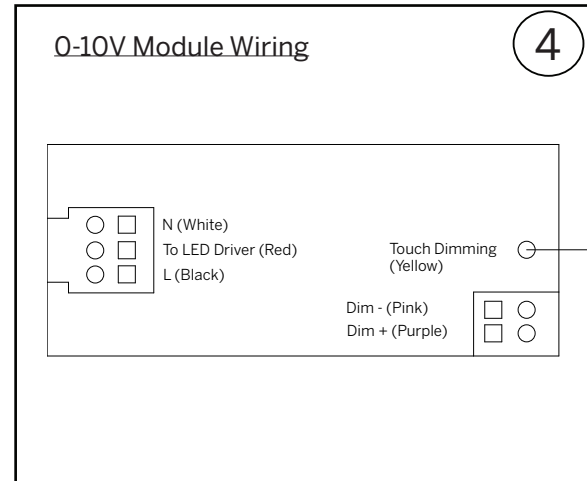


For double and triple switch dimming, install conduit into 3-gang junction box.

## 8.0 0-10V MODULE WIRING INSTALLATION

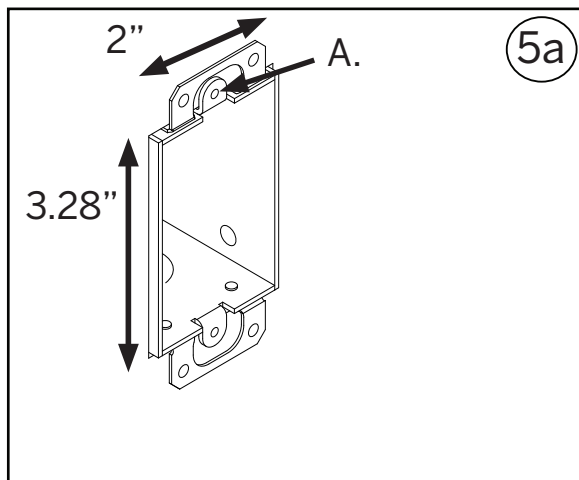


- A. Connect incoming power to poke-in terminal block on supplied 0-10V module.
- B. Use 16-20 gauge solid wire and connect neutral (white), voltage (red), DIM- (pink) and DIM+ (violet) wires to poke-in terminal block on module and route to fixture. Touch (yellow) wire connects to supplied faceplate.

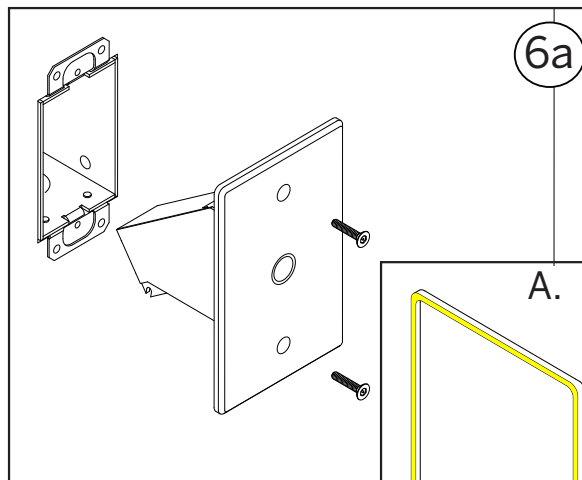


Poke-in connection locations on module terminal block.

## 9.0 SINGLE SWITCH INSTALLATION

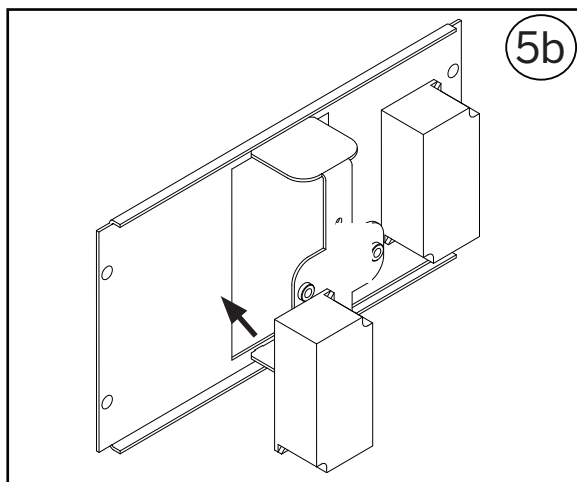


After wiring, install drywall with a 3.28" x 2" cutout for the junction box, using a small awl to clear both mounting holes (A.).

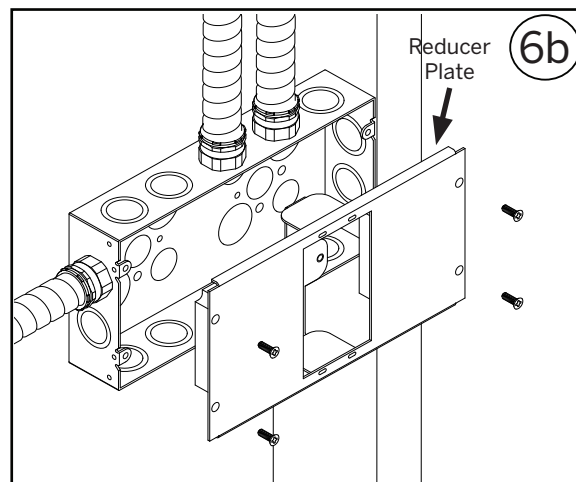


- A. If using anti-pick caulking, apply to the back of the faceplate, as shown (surface A.).
- B. Secure faceplate assembly to single gang junction box using the supplied #6-32 tamper-resistant hex-head screws x2. Ensure the faceplate sits flush against the wall and wipe off any excess caulk.

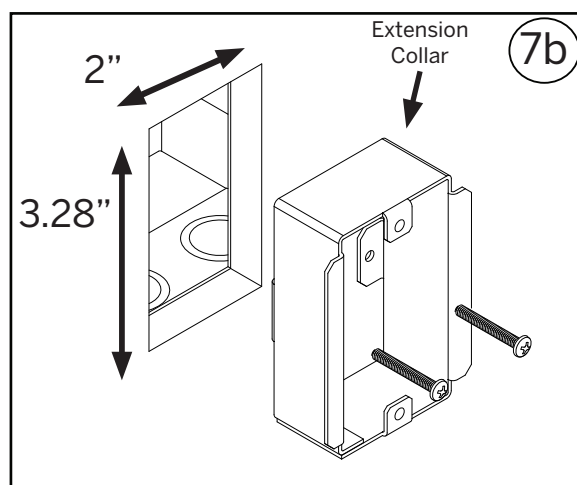
## 10.0 DOUBLE & TRIPLE SWITCH INSTALLATION



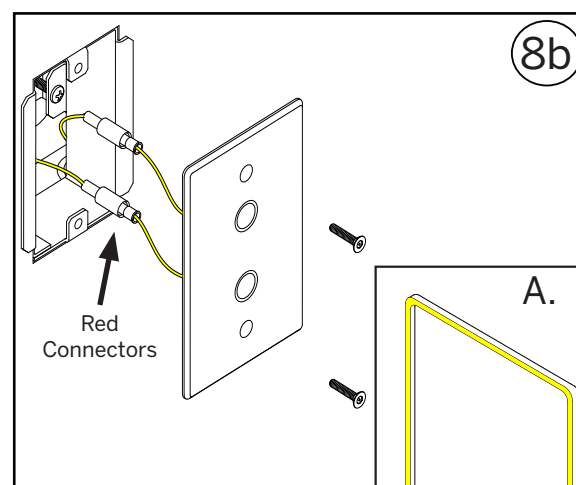
After wiring, remove double-sided tape on modules and install onto supplied reducer plate.



Install the reducer plate onto junction box using the supplied #8-32 Phillips-head screws x4.



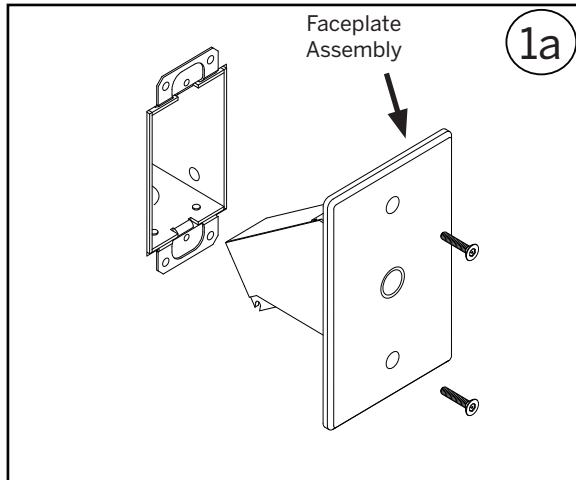
- A. Install drywall with a 3.28" x 2.27" cutout for the supplied extension collar.
- B. Secure the extension collar to the reducer plate using the supplied #8-32 Phillips-head screws x2. Ensure the extension collar flanges sit flush against the wall.



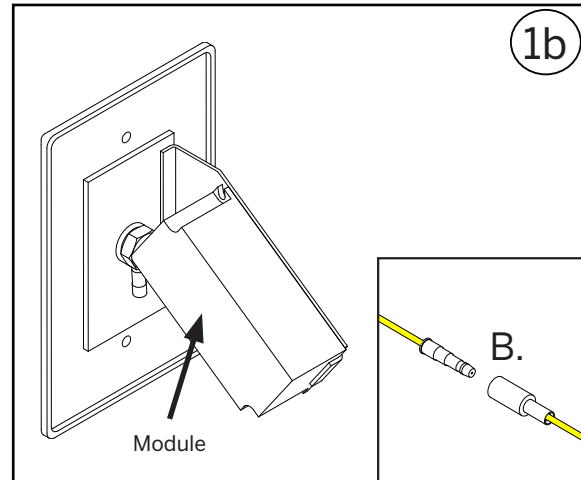
- A. Connect touch (yellow) wires from 0-10V drivers to faceplate using the supplied red connectors.
- B. If using anti-pick caulking, apply to the back of the faceplate, as shown (surface A).
- C. Secure faceplate to extension collar using the supplied #6-32 tamper-resistant hex-head screws x2. Ensure the faceplate sits flush against the wall and wipe off any excess caulk.

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### 11.0 SERVICE - SINGLE SWITCH MODULE REPLACEMENT



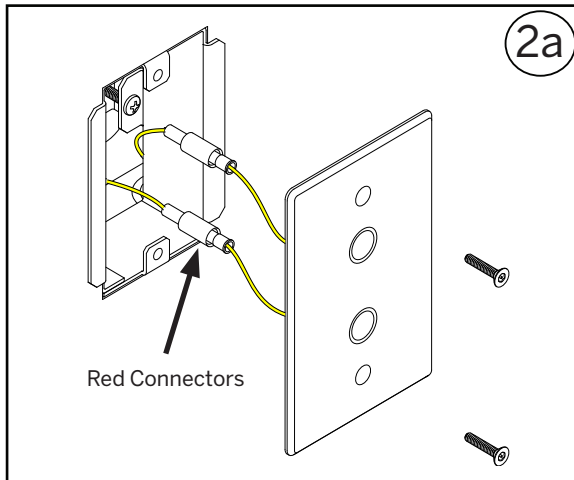
Remove the #6-32 tamper-resistant hex-head screws x2 and faceplate assembly from the single gang junction box. Disconnect all wire connections.



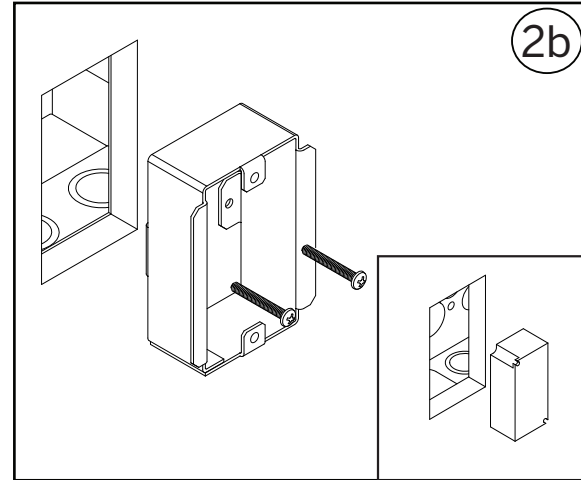
- A. Remove module from the bracket by prying off the double-sided tape.
- B. Disconnect the touch (yellow) wires at the red connectors.
- C. Swap the module and remove the tape backing for reinstallation. Repeat steps in reverse order to reinstall module.



## 11.1 SERVICE - DOUBLE AND TRIPLE SWITCH MODULE REPLACEMENT



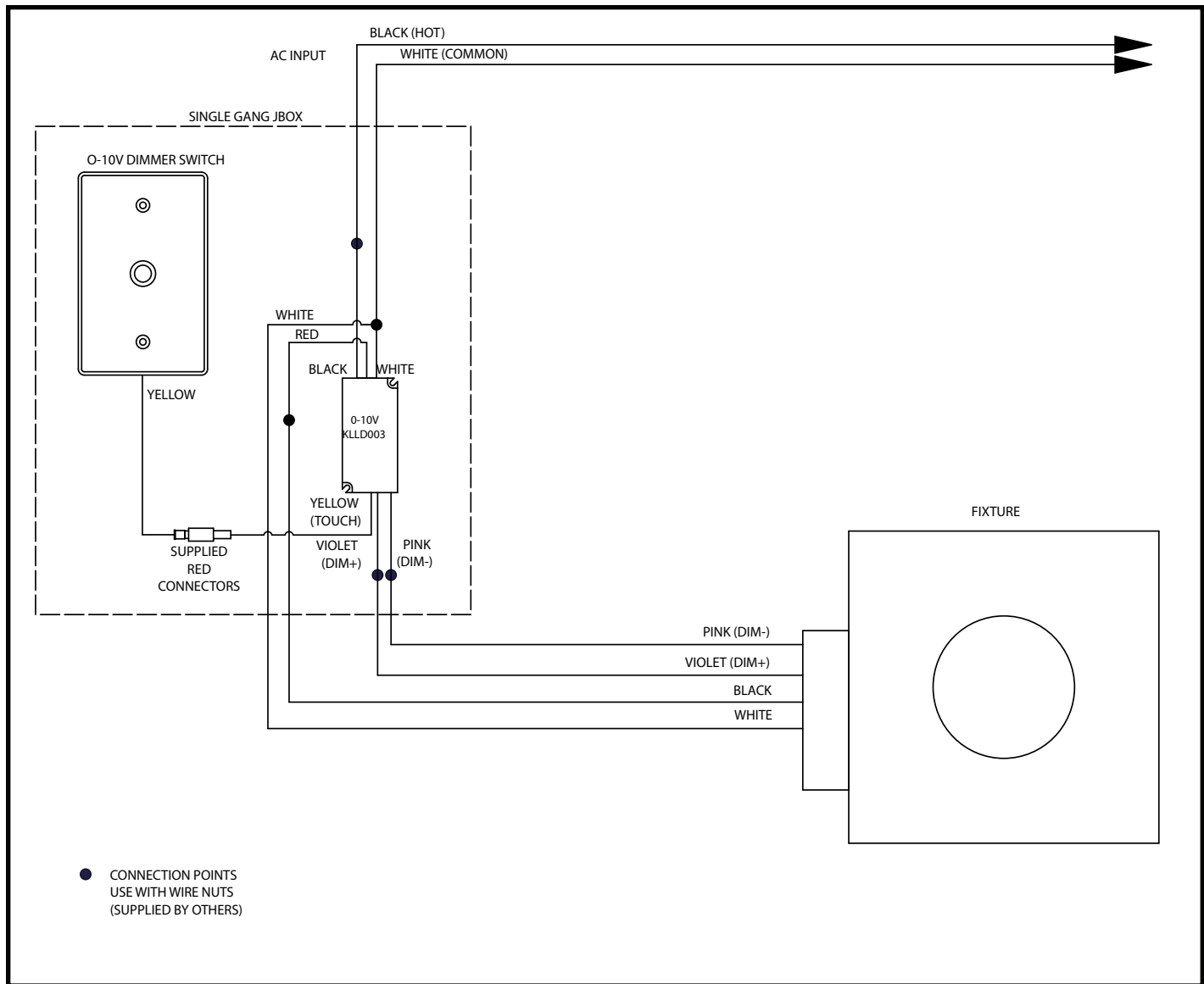
Remove the #6-32 tamper-resistant hex-head screws x2 and faceplate assembly from the extension collar. Disconnect the touch (yellow) wires at the red connector.



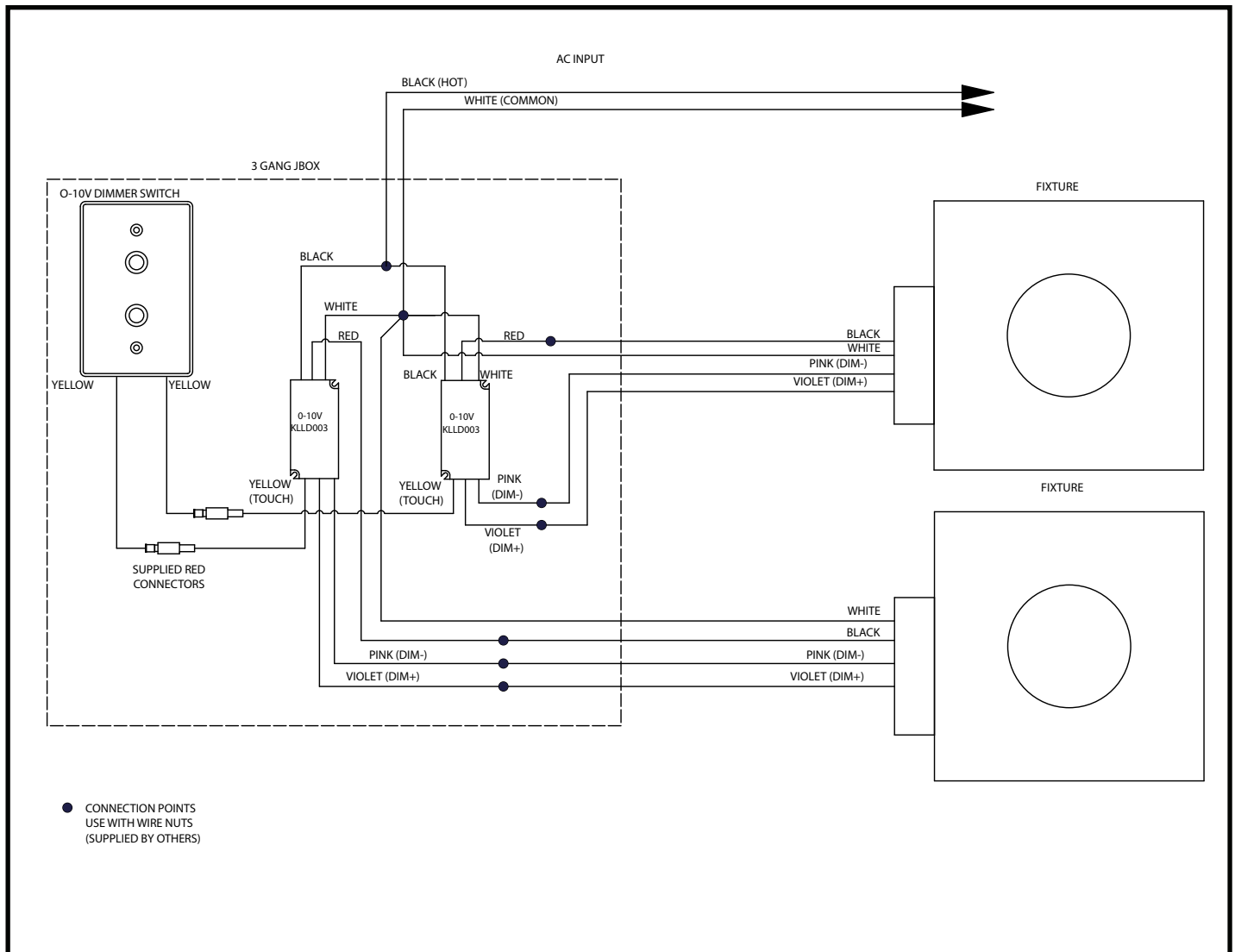
- A. Remove the #8-32 Phillips-head screws x2 and extension collar from the reducer plate.
- B. Remove the module from the backside of the reducer plate by prying off the double-sided tape. Disconnect all wire connections.
- C. Swap the module and remove the tape backing for reinstallation. Repeat steps in reverse order to reinstall module.

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### 12.0 WIRING DIAGRAM - SINGLE BUTTON SWITCH

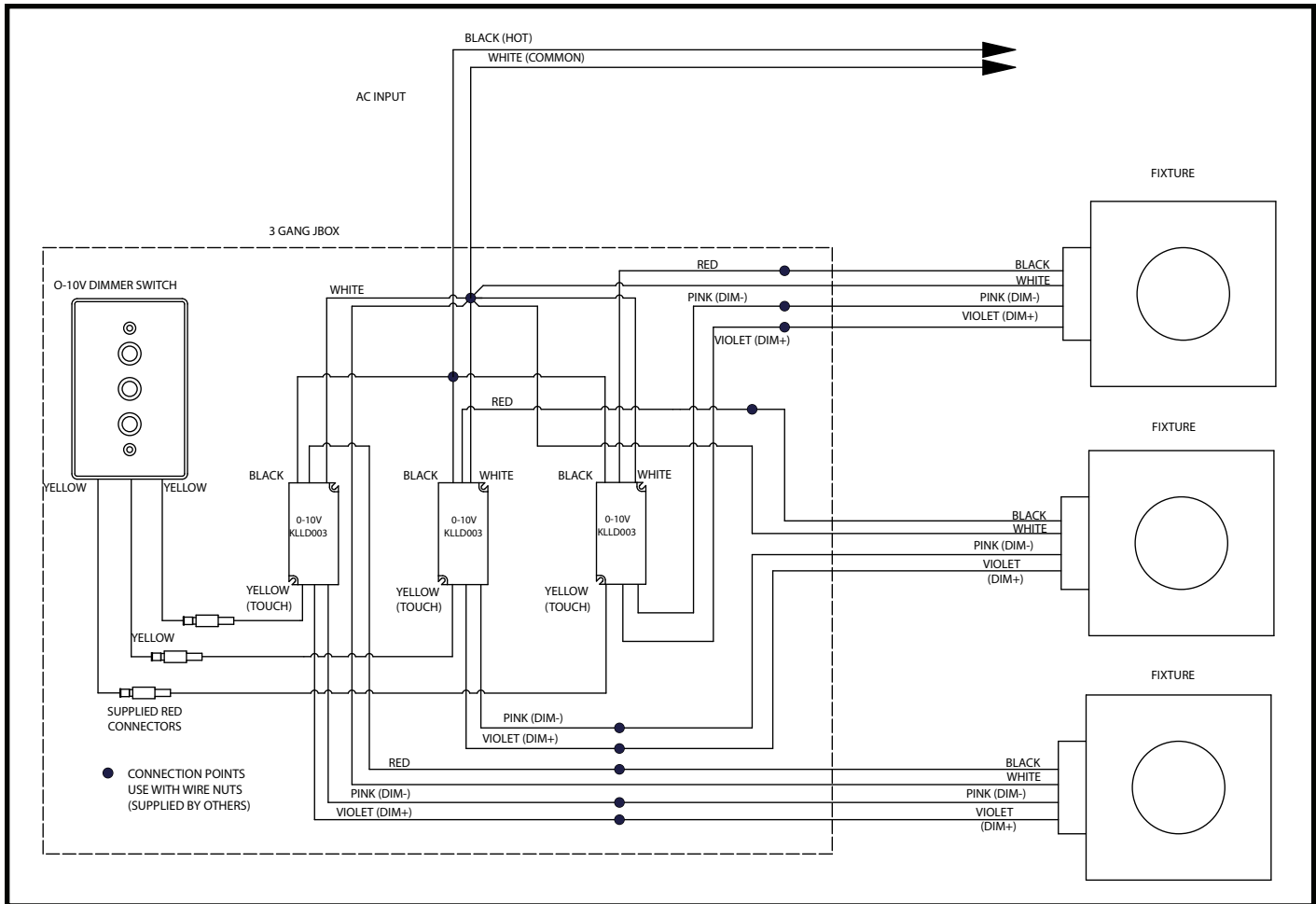


## 12.1 WIRING DIAGRAM - TWO BUTTON SWITCH



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### 12.2 WIRING DIAGRAM - THREE BUTTON SWITCH



### 13.0 USER NOTES