


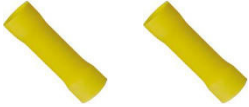


Knob Controller

INSTALLATION INSTRUCTIONS

Part#: 21090A-XX-LL-SS

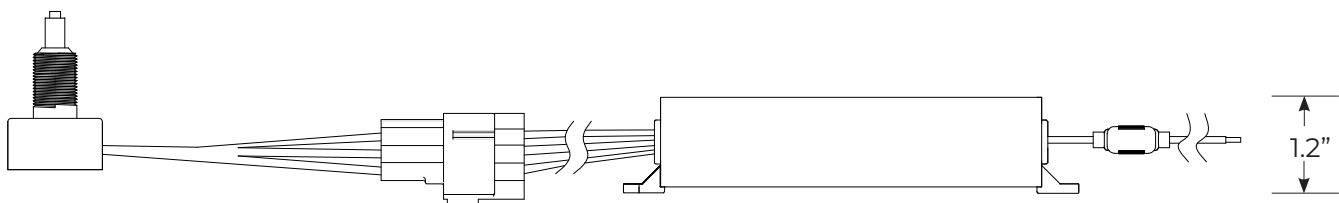
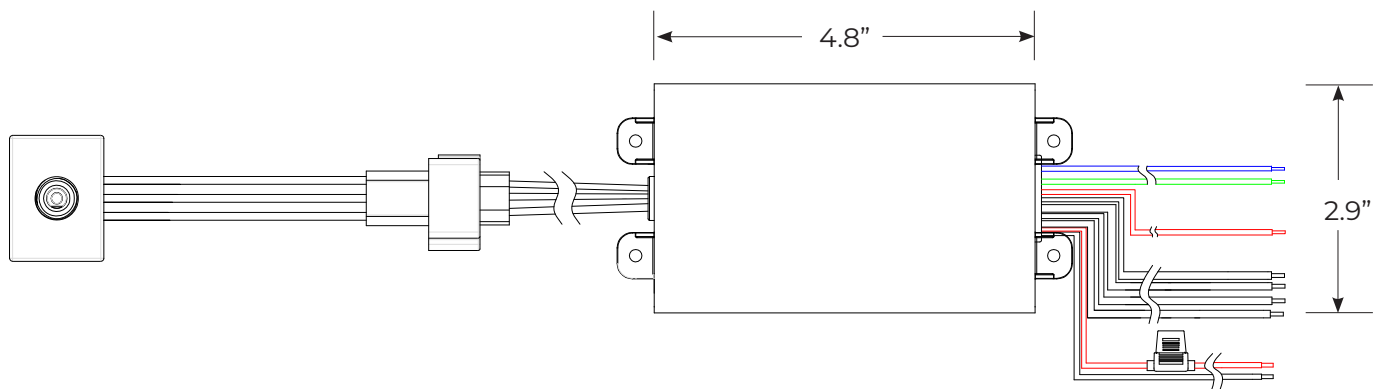
PARTS / TOOLS NEEDED:

			
RGB Zone Controller	RGB Lighting (Varies)	Mounting Screws x 4	Butt Splices (not provided)

Safety Instructions

- Disconnect power before installing, adding or changing any component.
- To avoid a hazard to children, account for all parts and destroy all packing materials.
- Do not install any luminaire assembly closer than 6" from any combustible materials.
- Positive (+) outputs require a fuse if the attached wire leads are not rated to handle the max current.

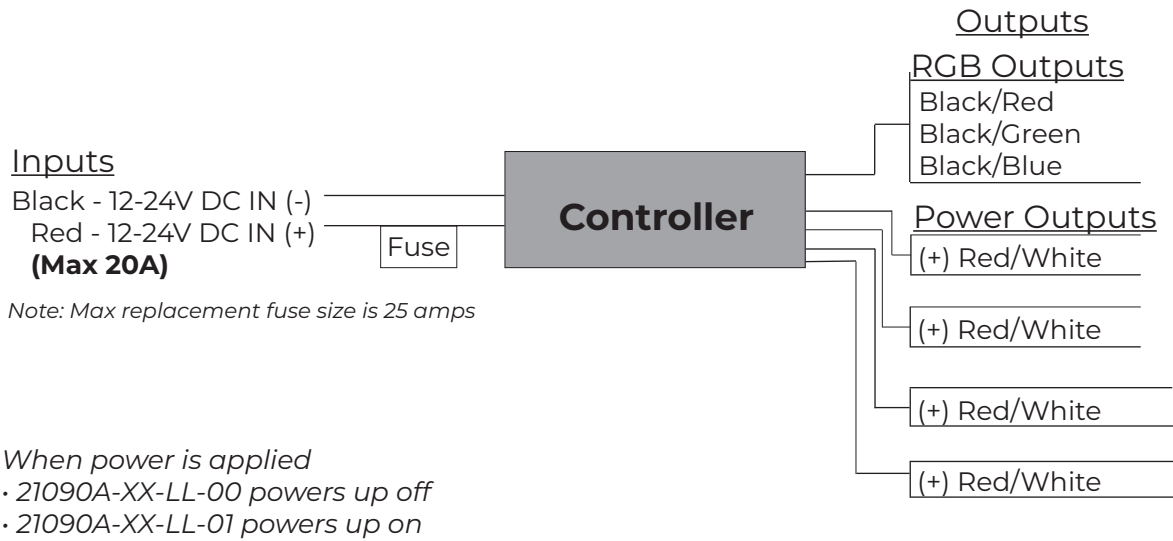
1. INSTALL: Determine the installation location for your controller. Make sure to consider the size of the controller (4.8"L x 2.9"W x 1.2"H) when determining your location. Note, it will require room for access and for wiring. Screw the controller in place using the four 5x15mm stainless steel Phillips pan head screws provided.



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2. WIRING DIAGRAM: Follow the wiring diagram below to wire the module to your system.



*All unused zone(+) outputs must be isolated and secured so that they don't touch anything. When power is applied to controller they are live.

3. OPERATION: You are now ready to customize your lighting. Follow the operating instructions below or scan the QR code to watch a short video.

Select The Color

- Push the knob once
- Turn right or left to select the desired color

Select The Brightness

- Push the knob a second time
- Turn right to increase brightness, left to decrease brightness

Select The Speed of the Color Fade

- Push the knob a third time
- Turn right to speed up, or left to slow down

Turn Off System

- Push and hold knob for three seconds

Turn On System

- Push & hold knob for one second



Installation Considerations for Preventing EMI Noise

WHAT IS EMI NOISE?

Electromagnetic interference (EMI) is any unwanted signal which is either radiated(thru air) or conducted(thru wires) to electronic equipment and interferes with the proper operation and performance of the equipment.

All electrical/electronic components that have varying or switching currents, such as RGB lighting, create Electromagnetic interference (EMI noise). It is a matter of how much EMI noise they produce.

These same components are also susceptible to EMI, especially radios and audio amplifiers. The unwanted audible noise that is sometimes heard on a stereo system is EMI.

DIAGNOSING EMI NOISE

If EMI is observed the following steps should help isolate the problem.

1. Turn off LED light(s)/controller(s)
2. Tune the VHF radio to a quiet channel (Ch 13)
3. Adjust the radio's squelch control until the radio outputs audio noise
4. Re-adjust the VHF radio's squelch control until the audio noise is quiet
5. Turn on the LED light(s)/controller(s) – If the radio now outputs audio noise then the LED lights may have caused the interference.
6. If the radio does not output radio noise then the problem is with another part of the electrical system.

PREVENTING EMI NOISE

Once the EMI noise is isolated the following steps can be used to help prevent and lessen the effect of the noise.

CONDUCTED & RADIATED SOLUTIONS

GROUNDING (BONDING) : How each component is connected and routed to power ground is important. Route the ground of sensitive components back to the battery separately. Eliminate ground loops.

SEPARATION : Physically separate and mount the noisy components away from sensitive components. In the wire harness, separate the sensitive wires from the noisy wires.

FILTERING : Add filtering to either the device creating the noise or the sensitive device.

Filtering may consist of power line filters, common-mode filters, ferrite clamps, capacitors and inductors.

RADIATED SOLUTIONS

SHIELDING :

Shielded cables can be used. Shielding the component in a metal enclosure is also an option.

If you continue to experience EMI issues please contact your ITC sales representative.

