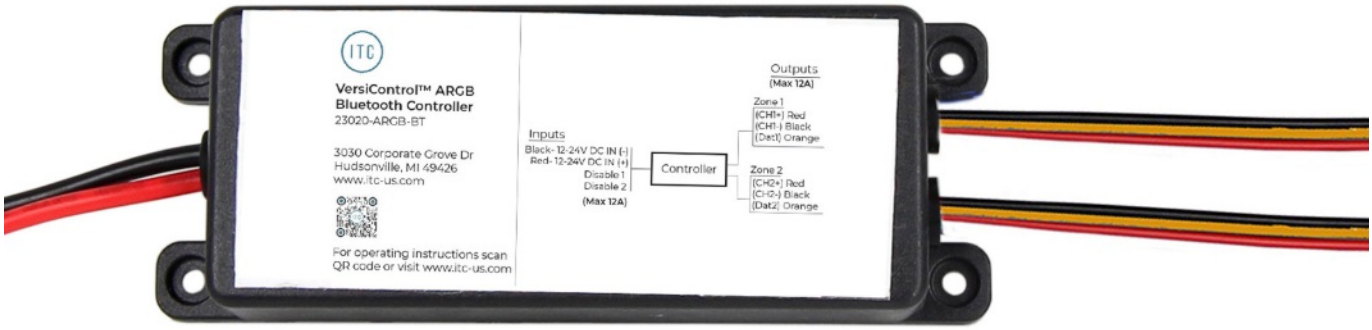
ITC 23020 ARGB Bluetooth Controller Installation Guide

Contents

ITC 23020 ARGB Bluetooth Controller



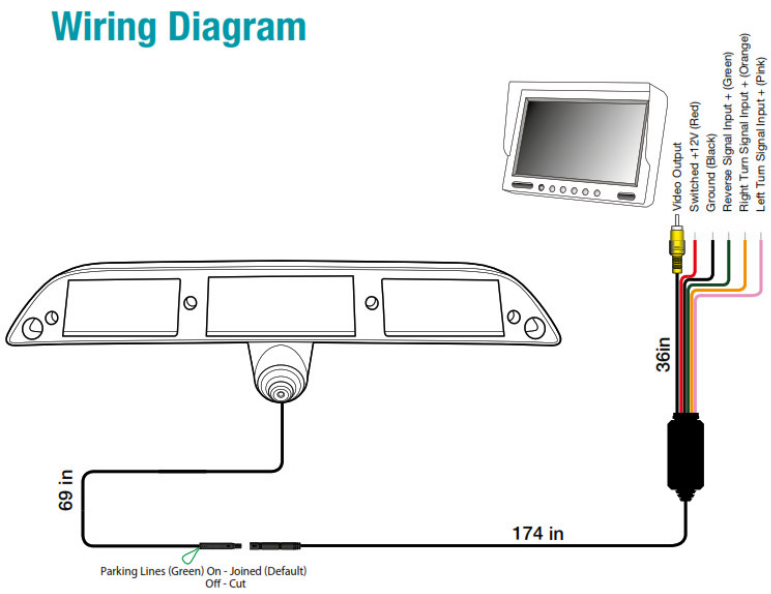
Product Specifications

- **Product Name:** ARGB Bluetooth Controller
- **Part Number:** 23020
- **Required Parts/Tools:**
  - RGB Lighting (Purchased Separately)
  - Mounting Screws x 4 (not provided)
  - Butt Splices (not provided)

Product Usage Instructions

Installation
Determine the installation location for your controller ensuring there is enough room for access and wiring. Screw the controller in place using the provided 3x15mm stainless steel Phillips pan head screws.

Wiring Diagram
Follow the wiring diagram below to wire the module to your system:



Wiring Considerations
Check for any wiring issues before proceeding with the installation.

Download & Open App
Download and install the ITC VersiControl app from the App or Google Play Store. Turn on Bluetooth on your phone, open the app, and connect to the controller. Customize the controller name for easy identification.

Palette
Adjust colors using slider bars or the palette. Explore advanced color selection tools and save favorite colors.

Music
Enable music sync feature to change lights according to music beats. Allow app access to phone's microphone.

Effects
Choose from a variety of preloaded effects including color fades. Adjust fade speed as desired.

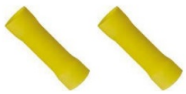
Timers
Set timers to automate turning the lights on or off at specific times.

Frequently Asked Questions (FAQ)

What is EMI Noise?
Electromagnetic interference (EMI) is unwanted signals that interfere with electronic equipment's operation. RGB lighting can create EMI noise due to varying currents.

ARGB Bluetooth
Controller
Part#: 23020

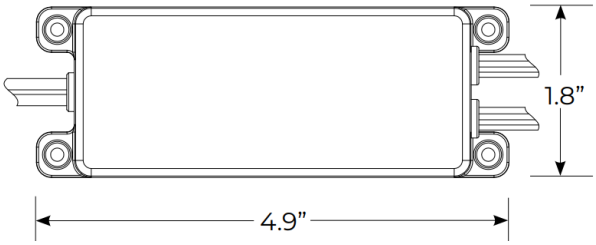
PARTS / TOOLS NEEDED

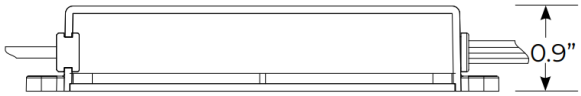
			
ARGB Bluetooth Controller	RGB Lighting (Purchased Separately)	Mounting Screws x 4 (not provided)	Butt Splices (not provided)

Safety Instructions

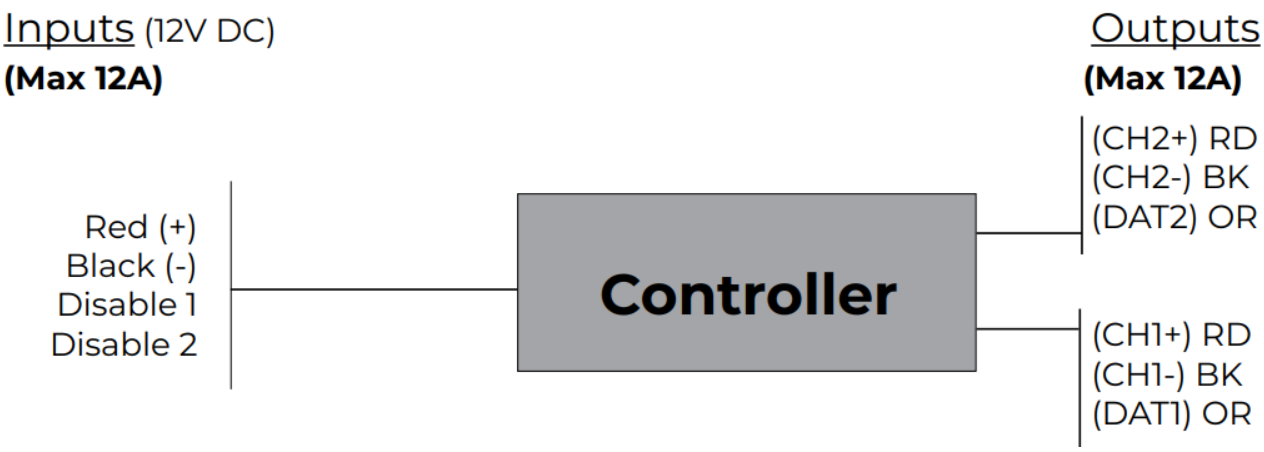
- Disconnect power before installing, adding or changing any component.
- To avoid a hazard to children, account for all parts and destroy all packing materials.
- Do not install any luminaire assembly closer than 6" from any combustible materials.
- Positive (+) outputs require a 16A max fuse.

1. **INSTALL:** Determine the installation location for your controller. Make sure to consider the size of the controller when determining your location. Note, it will require room for access and for wiring. Once determined screw the controller in place using the four 3x15mm stainless steel Phillips pan head screws provided.





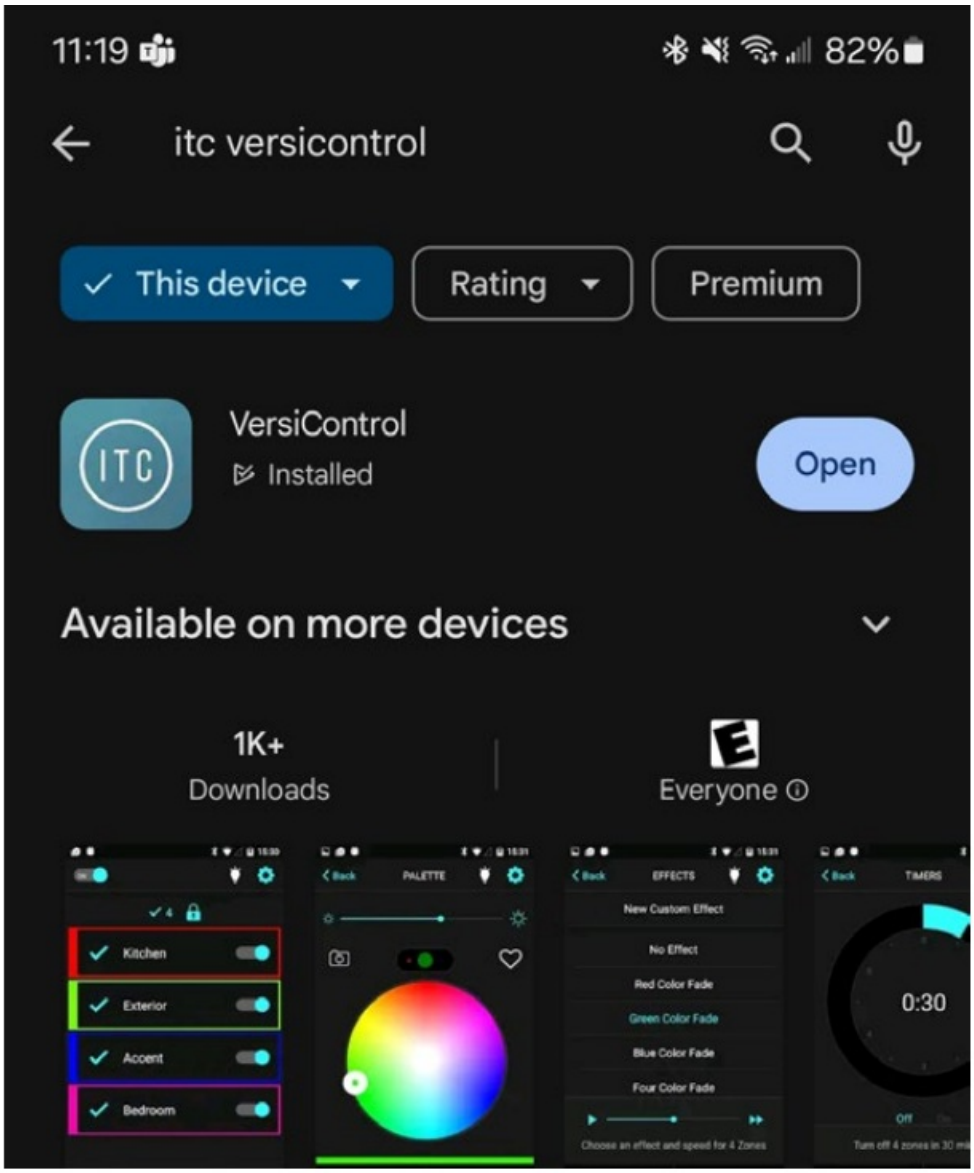
2. **WIRING DIAGRAM:** Follow the wiring diagram below to wire the module to your system.



3. **WIRING CONSIDERATIONS:**
    - Don’t power the controller or lights until all connections are made.
    - It is recommended that strain relief be added on all wires to prevent any damage to the lights.
    - If fuses are not included on the ARGB controller then ITC recommends including fuses on each zone output (+) wire.
    - If installing a flexible lighting product, do not install the end caps in the mounting track or it may damage the light.
    - To test the lights, select the single color fade for each of the colors, red, green and blue on the ITC Lighting app. This test will show whether there are wiring issues.
4. **Download & Open App:**

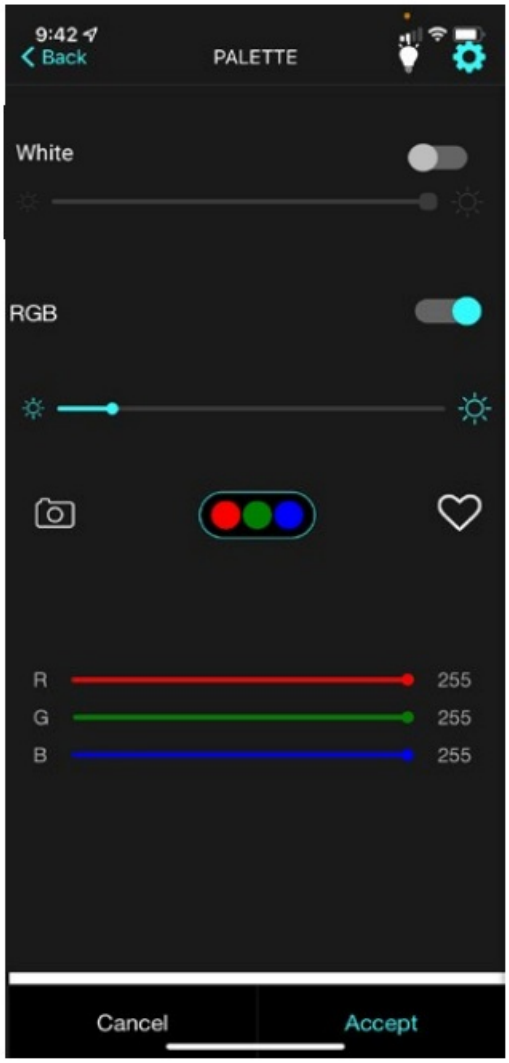
    Search “ITC VersiControl” in the App or Google Play Store and click install. Depending on your operating system, your screen may differ slightly from the follow-ing screenshots. Turn on the Bluetooth on your phone and open the app, it should automatically connect to the controller. If not, turn power off to the controller and back on. You can also customize the name of the controller to make it easier to find if you have multiple controllers.

    Clicking on the About under the drop down menu will take you to a help screen.

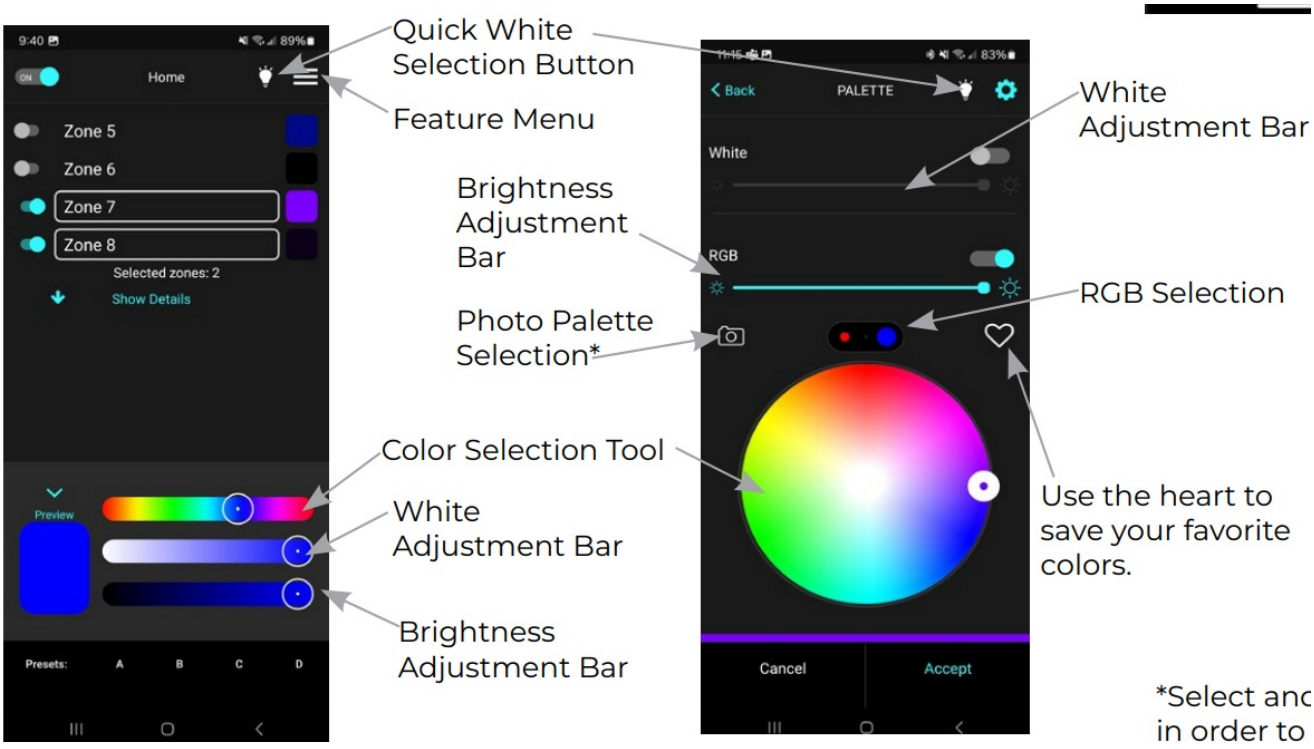


5. **Palette:**

   Color can be adjusted by either with the slider bars or by using the palette under the menu options. Select the RGB buttons in the middle to use the RGB advanced selection tool.

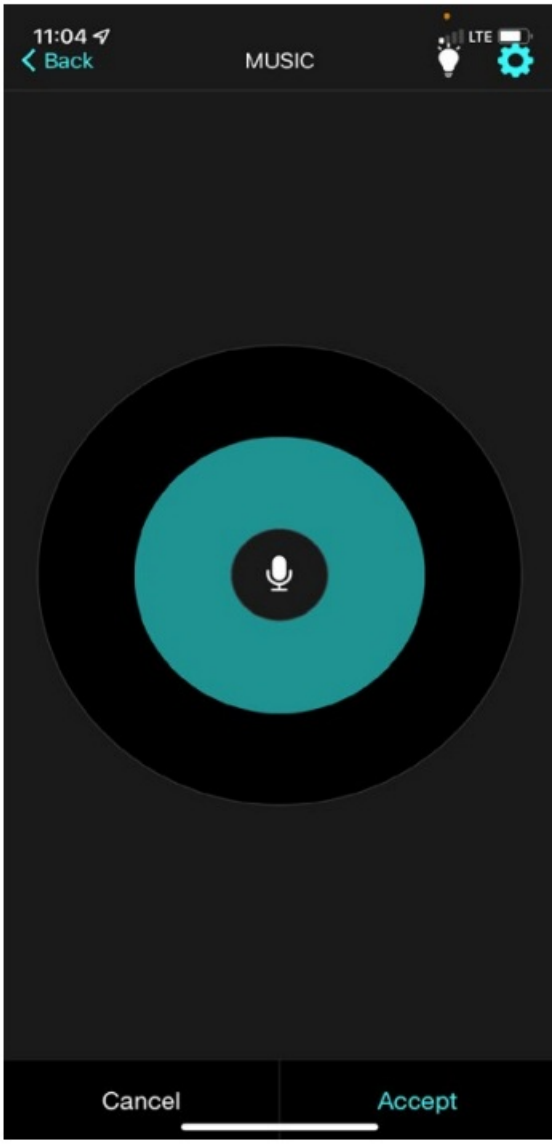


Select and take a picture in order to select a color from your own color palette.



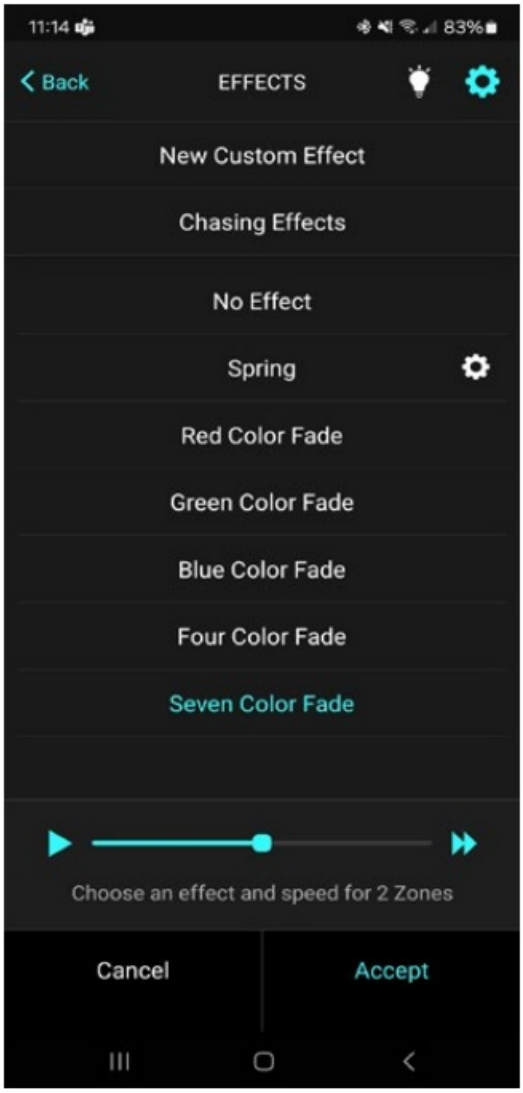
6. **Music:**

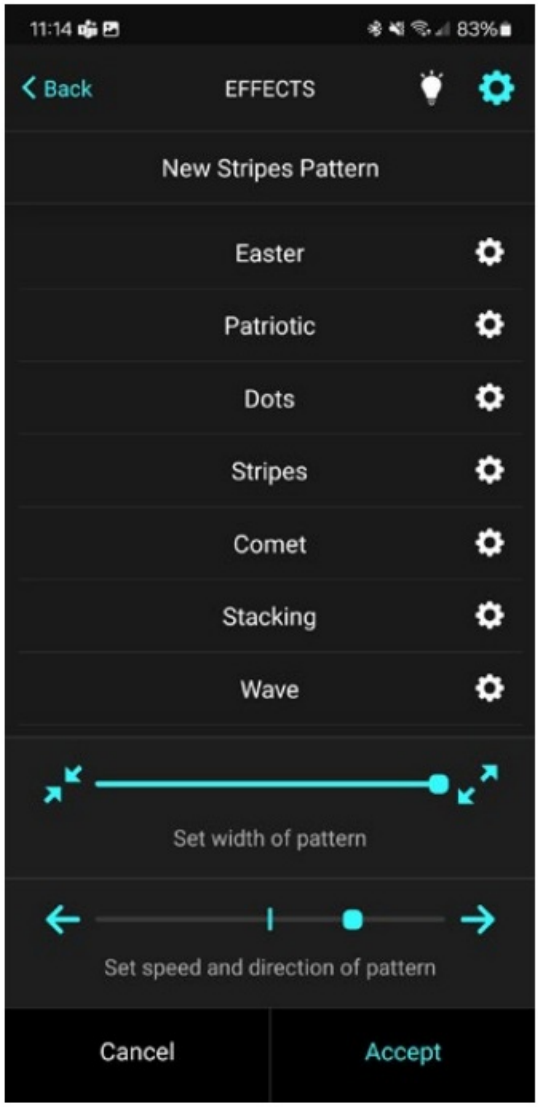
The controller has the ability to change the lights to the beat of music. Allow the VersiColor ITC app to use your phone's mi-crophone. The app will pick up the music and sounds around you to change your light display.



7. **Effects:**

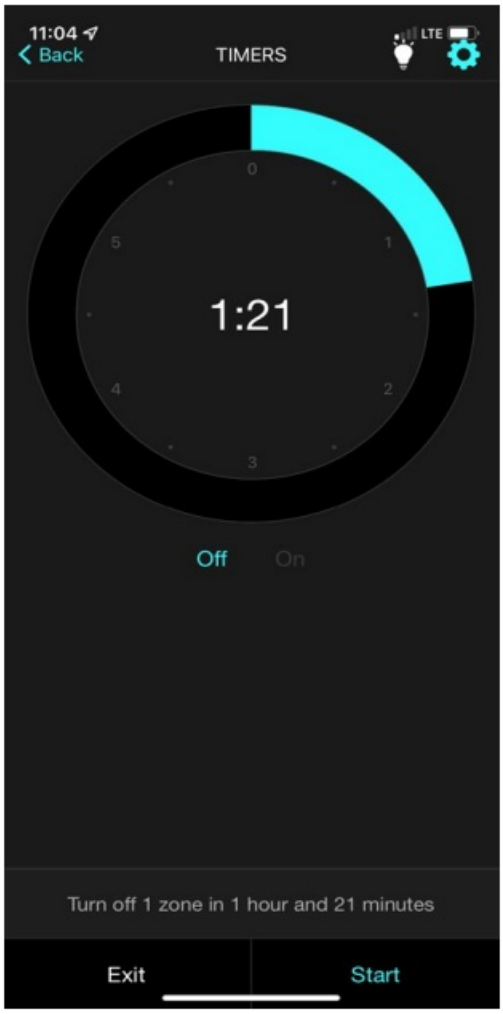
   There are many effects preloaded on the app from single color fades to multi-color fades. You can also select the speed of the fade by sliding the bar towards the bottom of the page to the left or right.





8. **Timers:**

   The timer feature allows you to set the lights to turn on or off after a certain amount of time.



Installation Considerations for Preventing EMI Noise

WHAT IS EMI NOISE?
Electromagnetic interference (EMI) is any unwanted signal which is either radiated(thru air) or conduct-ed(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.

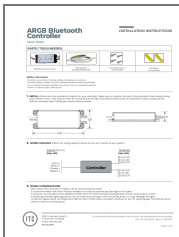
RADIATED SOLUTIONS

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.

3030 Corporate Grove Dr. Hudsonville, MI 49426 Phone: 616.396.1355
itc-us.com

For warranty information please visit www.itc-us.com/warranty-return-policy DOC #: 710-00273 • Rev A • 08/13/24

Documents / Resources

	ITC 23020 ARGB Bluetooth Controller [pdf] Installation Guide 23020, 23020 ARGB Bluetooth Controller, 23020, ARGB Bluetooth Controller, Bluetooth Controller, Controller

References

- ITC Warranty & Return Policy
- User Manual