ITC 22105-RGBW-XX Bluetooth Controller Instruction Manual

INSTALLATION INSTRUCTIONS
Bluetooth Controller
Part#: 22105-RGBW-XX

22105-RGBW-XX Bluetooth Controller
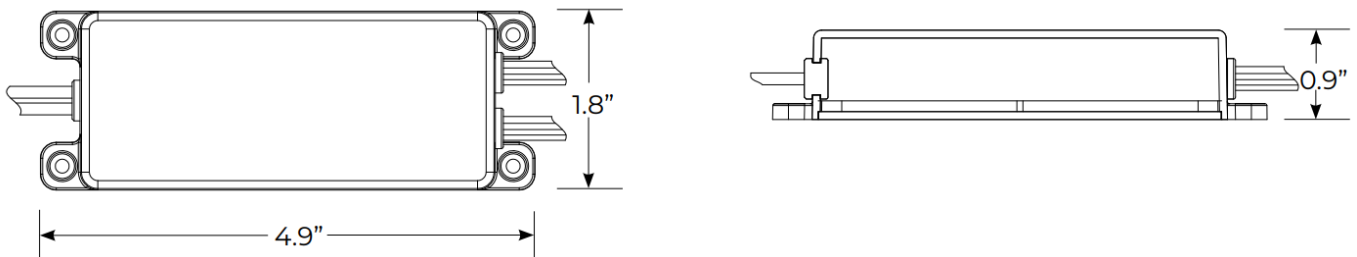
PARTS / TOOLS NEEDED:

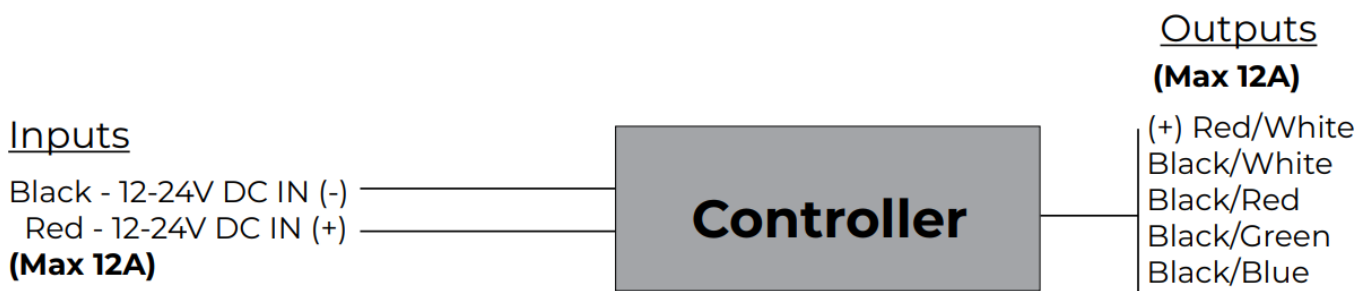|		
RGBW Bluetooth Controller	RGB Lighting (Purchased Separately)	Mounting Screw

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.

1.8"

4.9"

0.9"

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

Inputs

Black - 12-24V DC IN (-)
Red - 12-24V DC IN (+)
(Max 12A)

Controller

Outputs
(Max 12A)

(+) Red/White
Black/White
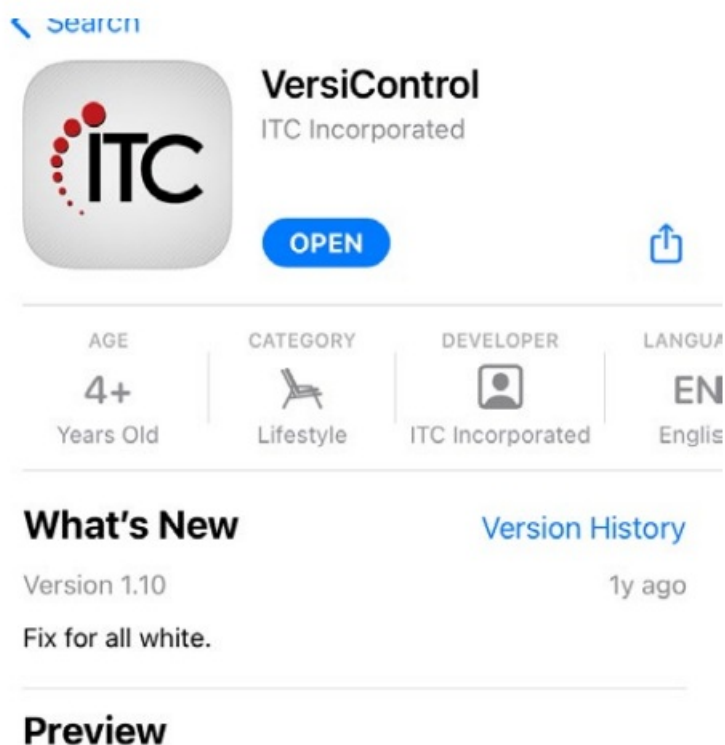Black/Red
Black/Green
Black/Blue

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 RGB 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.
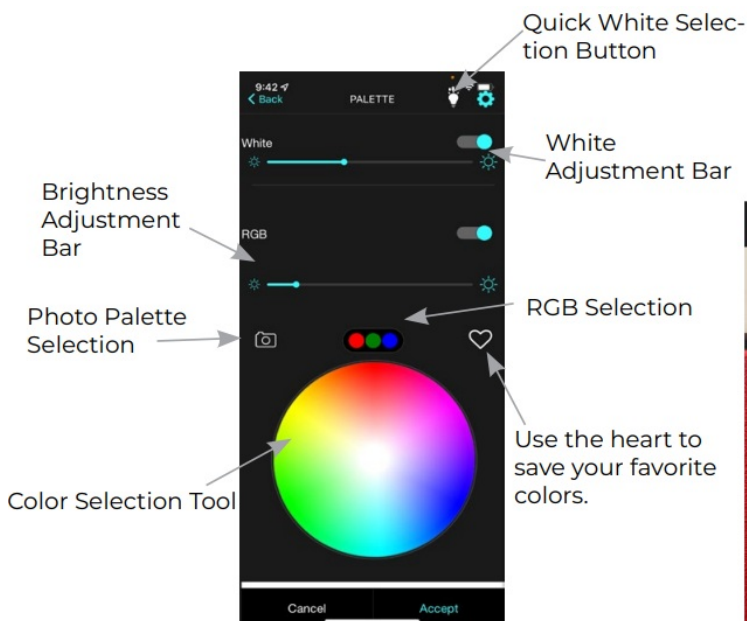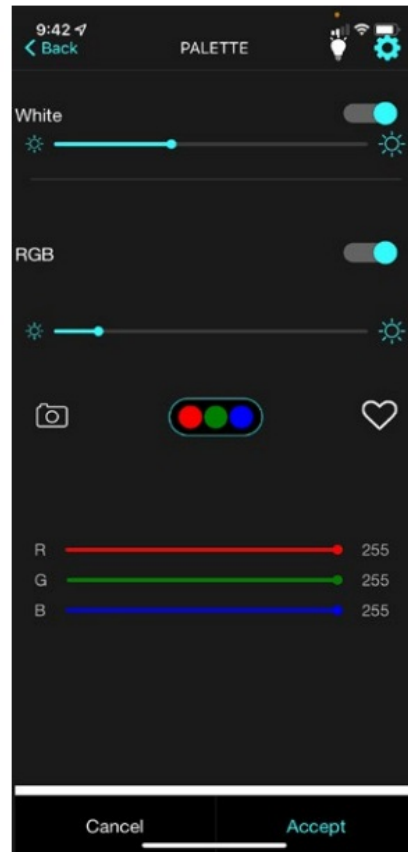
4. Download & Open App:

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 following screenshots. Turn on the Bluetooth on your phone and open the app, it should automatically connect to the controller. If not, turn the 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 settings symbol in the upper right will take you to a help screen.

5. Palette:

Color can be adjusted by pushing anywhere on the color wheel and brightness can be adjusted by sliding the brightness bar left or right. You can also choose white saturation by sliding the top bar left or right.
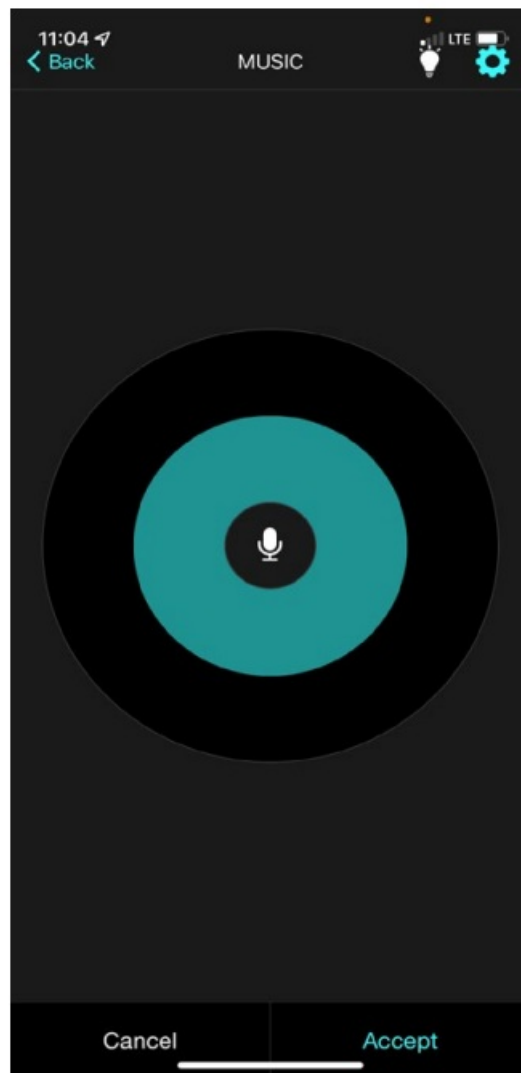
Select the RGB buttons in the middle to use the RGB advanced selection tool.

White

RGB

R — 255
G — 255
B — 255

Cancel   Accept

Quick White Selection Button

White Adjustment Bar

Brightness Adjustment Bar

RGB Selection

Photo Palette Selection

Use the heart to save your favorite colors.

Color Selection Tool

Select and take a picture in order to select a color from your own color palette.
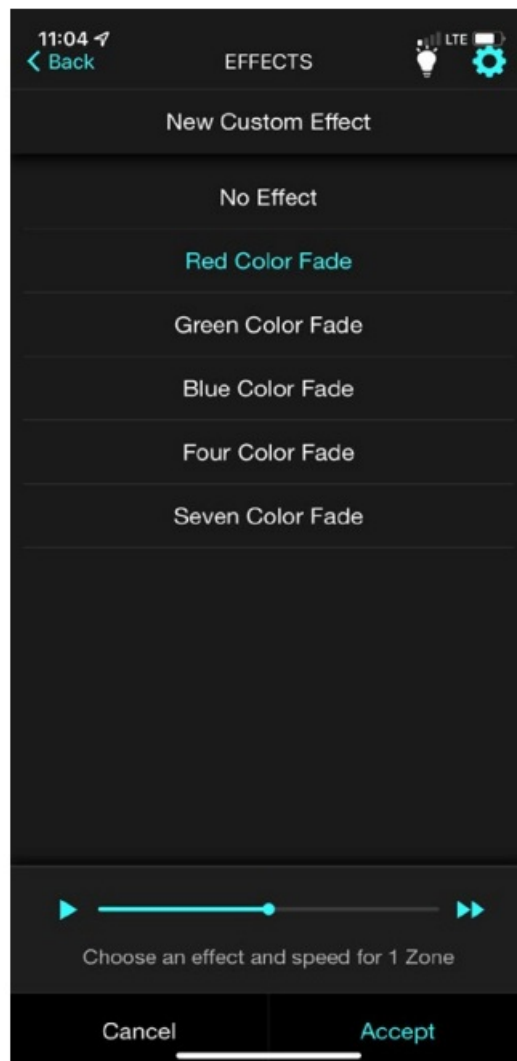
6. Music:
The controller has the ability to change the lights to the beat of the music. Allow the VersiColor ITC app to use your phone's microphone. The app will pick up the music and sounds around you to change your light display.
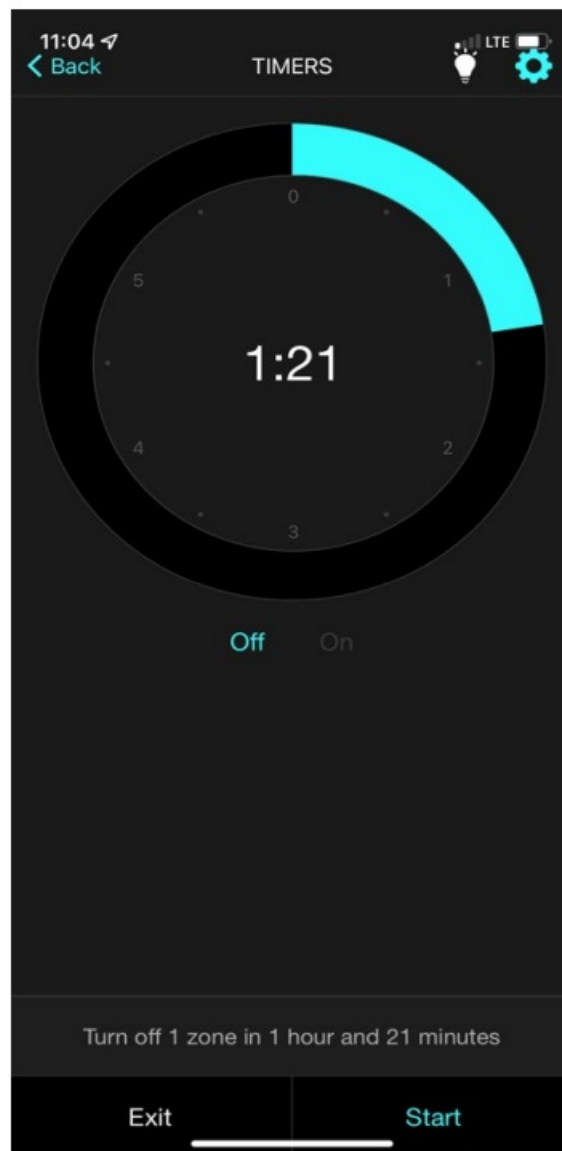
Cancel   Accept

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 toward 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 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 the 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.

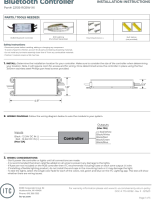3030 Corporate Grove Dr.
Hudsonville, MI 49426
Phone: 616.396.1355
itc-us.com
For warranty information please visit **www.itc-us.com/warranty-return-policy**
DOC #: 710-00182 • Rev F • 12/15/21

Documents / Resources

ITC 22105-RGBW-XX Bluetooth Controller [pdf] Instruction Manual
22105-RGBW-XX Bluetooth Controller, 22105-RGBW-XX, Bluetooth Controller, Controller

References

- **ITC Warranty & Return Policy**