

ARGB to RGB Converter

INSTALLATION INSTRUCTIONS

Part#: 22805-CNVTR-00

INSTALLATION CONSIDERATIONS

- The ARGB to RGB converter is part of the ITC VersiColor line of RGB/RGBW controllers and lighting products (purchased separately). Refer to individual product install instructions for additional considerations.
- Disconnect power before installing, adding or changing any component.
- To avoid a hazard to children, account for all parts and destroy all packing materials.
- This converter is capable of sourcing 3A of current per color, limited to 10A total.

1. System Connections

Inputs

Disable Lines

Zone 1 - White
Zone 2 - White/Red
Zone 3 - White/Green
Zone 4 - White/Blue

Black - 12-24V DC IN (-)
Red - 12-24V DC IN (+)
(Max 20A)

V(+)	1
V(-)	2
Shield	3
Plug	4
CAN (+)	5
CAN (-)	6

Controller

Outputs

(CH1+) RD
(CH1-) BK
(DAT1) OR

(CH2+) RD
(CH2-) BK
(DAT2) OR

(CH3+) RD
(CH3-) BK
(DAT3) OR

(CH4+) RD
(CH4-) BK
(DAT4) OR

Converter

(Max 10A)

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



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For warranty information please visit www.itc-us.com/warranty-return-policy
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EMI Noise Considerations

Installation Considerations for Preventing 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.

WHAT IS EMI NOISE?

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

DIAGNOSING EMI NOISE

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. 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

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.

PREVENTING EMI NOISE

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

