# PRODUCT MANUAL
# 4 Channel DMX to RGB-W LED Controller

™

**Solid Apollo**
Where light meets perfection

Toll Free. 866-592-3873

www.SolidApollo.com

sales@SolidApollo.com

## Product Description

Thank you for purchasing Solid Apollo´s iChroma DMX to RGB-W LED Controller. It is a new standard in DMX to RGB-W 4 Channel DMX Interfaces. If you currently have a DMX512 controller or any DMX capable control unit, this is the perfect device for controlling RGB or RGB-W products, like RGB Led strip, RGB lamps etc.

Solid Apollo's iChroma DMX to RGB-W LED Controller converts DMX signals to RGB-W in a seemless and easy-to-use way. This second generation receiver/controller has a 3-Digit LED Display which makes it extremely easy to set DMX addresses and configurations.

The iChroma to RGB-W LED controller works as a DMX Decoder, or as a standalone RGB controller when no DMX signal is present. It includes 10 Different LED Color Changing programs when using it in stand alone mode.

## Main Functions

• 4 Channel and 3 Channel configuration for RGB or RGB-W use
• Converts DMX signals to RGB-W
• Standalone function with RGB Programs
• Easy to use Digital Readout
• DMX512 compatible

• DMX Address selection LED Display
• DMX IN and OUT
• RoHs, CE certified
• 12, 24, and 36 Volt Operation
• 3 year warranty

## This Manual will review

## This product includes.

iChroma DMX to RGB Controller

# PRODUCT MANUAL
# 4 Channel DMX to RGB-W LED Controller

™

Solid Apollo
Where light meets perfection

Toll Free. 866-592-3873

www.SolidApollo.com
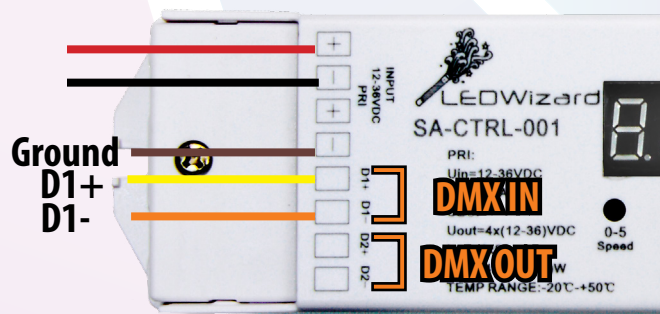
sales@SolidApollo.com

## Installation for DMX 512 Use

Solid Apollo's 4 Channel DMX- RGB-W LED Controller acts as an interface between a DMX controller or RGB/RGB-W Lighting fixture(s). You can also use it as a stand alone unit to control 12-36V LED lighting fixtures, where you can control pre-loaded color changing programs, program speed, and led brightness. This part of the Product Manual will show you how to utilize your 4 Channel DMX-RGB-W controller with a DMX system, in both standard RGB (three channel operation) and RGB-W (four channel operation).

1. Remove the White Plastic end caps of your receiver to expose the wiring slots.
2. To wire the RGB or RGB-W LED Lighting Fixtures you wish to control, attach your wires according to the diagram below. Note the positions of the negative wires and the positive wires. Make sure to wire your White/Yellow lighting part of your RGB-W fixture in the appropriate slot labeled "Yellow." This will be your White channel in DMX mode
3. On the left side (as shown in Figure one) you may connect 12-36 Volts of DC power depending on the LED lights you are using. Be sure to know the power required by the number of lighting fixture. This specific Controller cannot handle more than 240 Watts of power @ 12V or 480 Watts of power at 24V.  Connect your power supply wiring as shown below noting the positive and negative receptacles.

12-36V DC
Power Supply

+
−

Positive Power (Black)

Negative (Red)

Negative (Green)

Negative (Blue)

### Figure 1. Wiring the power and RGB(W) Connections for your Controller

Positive (RED)

Negative (Black)

**Figure 1.1 Wiring the white Channel of RGB-W Fixtures (optional)**

4. Once your 4 Channel DMX-RGB-W LED Controller is wired with power and your RGB(W) lighting fixture(s) you can connect your DMX-In wires. To do this, attach them to the specified slots in Figure 2 shown to the
5. Make sure the ground wire is attached to one of the negative power slots on the left side of the controller.
6. Installation is complete, and we can now turn on our device and begin using it in "DMX 512" Mode

Ground
D1+
D1-

DMX IN

DMX OUT

### Figure 2. Wiring the DMX Wires on your 4 Channel DMX-RGB RGB-W LED Controller

™

**Solid Apollo**
Where light meets perfection
Toll Free. 866-592-3873
www.SolidApollo.com
sales@SolidApollo.com

## Using your 4 Channel DMX to RGB-W LED Controller as a DMX controller/receiver.

This section will show you how to turn on your 4 Channel DMX-RGB-W LED Controller, change the mode to "DMX 512" mode, select either 3-Channel or 4-Channel operation, and select the specific DMX Address on your controller.

### Turning on your controller

1. To power on your controller, simply attach it to a 12-36V DC transformer that is compatible with your RGB(W) lighting fixtures. Your 4 Channel DMX-RGB-W LED Controller will remain on as long as it is plugged in.

### Selecting DMX 512 Mode

1. Your 4 Channel DMX-RGB-W LED Controller will start in either DMX 512 mode or in its standalone "RGB Control Mode. To ensure it is operating in DMX 512 mode and accepting DMX signal input, follow these steps.
2. Once your Controller is powered on, and the Display Screen is glowing red with numbers, press and hold both the first and second buttons (speed and mode" for ten seconds. After ten seconds the screen should read "r u 1" or "r u 2". **RU1 mode is the stand alone "RGB Control Mode" and RU2 is DMX mode.** To operate the DMX 512 mode, you want to navigate at this screen by pressing Button 3 (Bright) until the screen displays "ru2."
3. Once this is displayed, Press any button for ten seconds to confirm. You controller should be displaying three numbers on the display screen to signal you are in DMX mode.



### Selecting 3-Channel or 4 Channel-Operation within DMX mode

1. Once you are successfully in DMX Mode, you can switch between 3-Channel and 4-Channel Operation depending on the type of RGB or RGB-W Fixture you are using. To start, make sure you are in DMX Mode (see above) and press and hold Buttons 2 and 3 (mode and bright) for 10 seconds.
2. After holding down Buttons 2 and 3 for ten seconds, you should see "3cH" as displayed below. This means you are in 3-Channel DMX Mode.
3. To Switch between 3-Channel and 4-Channel, simply press Button 1 to cycle through "3cH" and "4cH" modes. Once you have selected the mode that corresponds to your LED lighting fixture, simply press and hold any button to confirm for ten seconds.



**Display Screen**
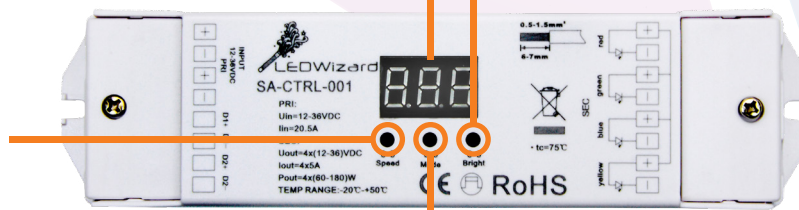
**Button 3**
0-9
Bright

**Button 1**
0-5
Speed

**Button 2**
0-9
Mode

**Figure 3. Running your Controller in DMX Mode**

# PRODUCT MANUAL
# 4 Channel DMX to RGB-W LED Controller

™

Solid Apollo
*Where light meets perfection*

Toll Free. 866-592-3873

www.SolidApollo.com

sales@SolidApollo.com

## Selecting a DMX Address while in DMX mode.

1. Once you are successfully in DMX Mode and in the 3-Channel or 4-Channel operation mode you need for your specific LED Fixtures(s), you can select a DMX address using Buttons 1, 2, and 3. (See figure 3 on the previous page).
2. To select a DMX address for your controller, you can use Button 1 to select the hundreds value. By pressing button 1, you can change the first digit corresponding the 100, 200, 300, 400, and 500 series of addresses. For example. If the address 318 is being displayed on your controller in DMX mode, pressing the first button one time would give a reading of 418.
3. In the same way you can change the hundreds digit for your DMX address using button one, you can also change the ten and single digit address numbers using the second and third buttons on your controller, respectively. To change the tens digit, simply press button 2 (mode) while in DMX mode. If the display has 112 displayed, pressing the second button once will show 122. Now, if the third button is pressed, the display will read 123.

**Button 1**

● 0-5
Speed

**Button 2**

● 0-9
Mode

**Button 3**

● 0-9
Bright
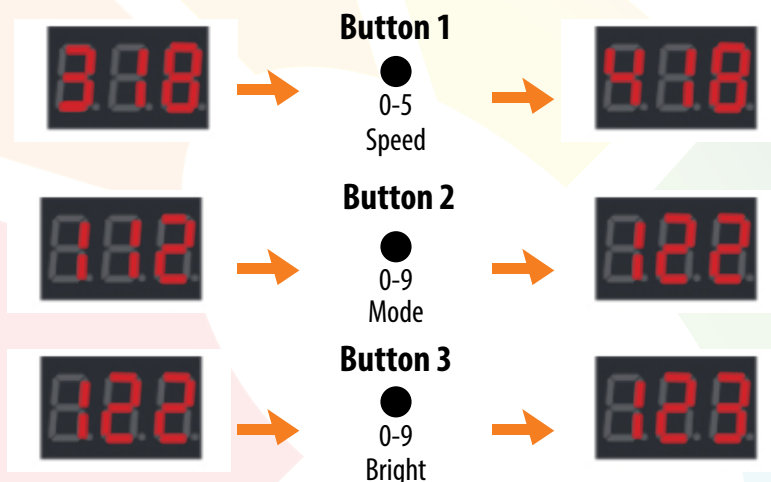
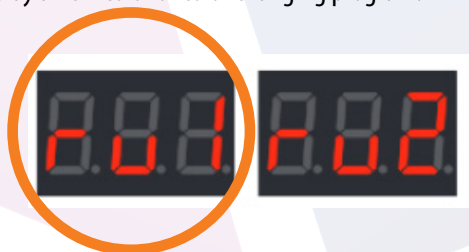## Using your 4 Channel DMX to RGB-W LED Controller in standalone mode.

### Getting your Controller into RGB Control Mode (standalone mode)

1. If you want to control your RGB LED Lighting fixtures without DMX or if DMX signal is not present at the moment, you can easily enter stand alone mode with these simple steps.
2. First, ensure your RGB LED Lighting fixtures are connected securely to your 4 Channel DMX-RGB-W LED controller, and then that it is properly powered.
3. Now, press and hold Button 1 (Speed) and Button 2 (Mode) simultaneously for ten seconds. Your display screen will change to display "r u 1" or "r u 2." To be in the RGB Control Mode, press Button 3 Until the screen displays "r u 1." Now hold down any button for at least 10 seconds, until the screen changes to a number readout, and your RGB LED Lighting fixtures display a new color or color changing program.

**Button 1**

● 0-5
Speed

**+**

**Button 2**

● 0-9
Mode

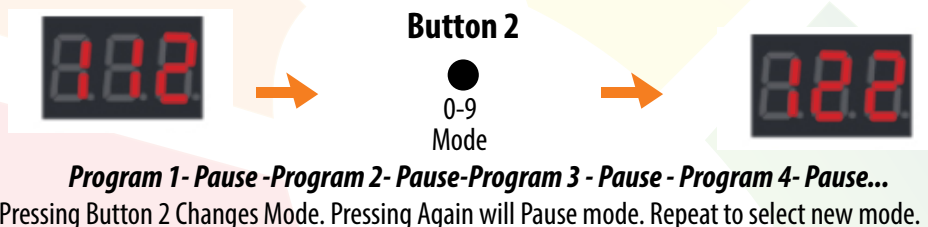Hold down both buttons for 10 seconds

"r u 1" for RGB Control

# PRODUCT MANUAL
# 4 Channel DMX to RGB-W LED Controller

Toll Free. 866-592-3873

www.SolidApollo.com

sales@SolidApollo.com

## Controlling your lights with the 4 Channel DMX to RGB-W LED Controller While in RGB Control Mode
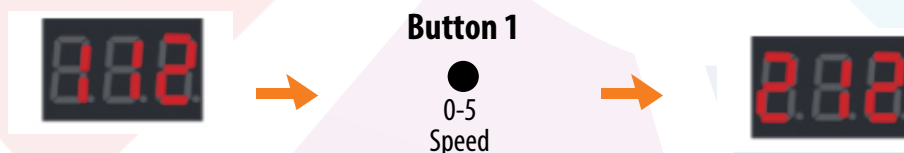
### Selecting Color Changing Program

1. Selecting a program using your 4 Channel DMX to RGB-W LED Controller is very easy to do, and you can select one of 9 preloaded color changing programs. Note that your White Channel will not be utilized while in RGB Control Mode, and will only be powered on during DMX operation.
2. Once your controller is in color changing mode, you will see three numbers on your display. The second number corresponds to the color changing program you controller is running. By pressing Button 2, you can cycle through all nine color changing programs (digits 1-9) with 0 (zero) turning your lights off.
3. Each time you press Button 2, you will switch color changing programs. By pressing Button 2 again, you will experience a pause at which ever color the program is currently displaying. This is so you can pause the program and display a specific color. Pressing Button 2 again will change your RGB LED Lighting fixtures to a new color changing program. See next page for how to select white or a specific color in RGB Control Mode.

**Button 2**

0-9
Mode

*Program 1- Pause -Program 2- Pause-Program 3 - Pause - Program 4- Pause...*
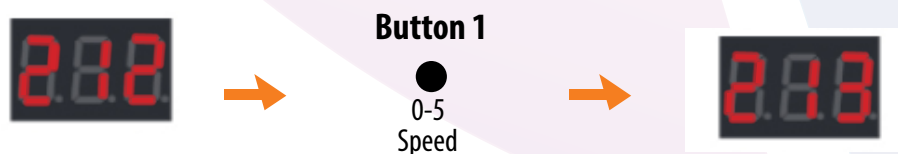Pressing Button 2 Changes Mode. Pressing Again will Pause mode. Repeat to select new mode.

### Changing Program Speed

1. Your 4 Channel DMX to RGB-W LED Controller can easily control your program speed as well.
2. To change Program speed at any time while in RGB Control Mode, you will use Button 1 (Speed). By pressing it once, you will see the first digit displayed on the display screen increase by one. This is actually a decrease in your program speed. 0 (zero) signifies the fastest program speed, so by cycling through speeds 0-9, you will see your running program speed decrease. Press one more time to change to speed 0 (zero) which is the fastest color changing speed.

**Button 1**

0-5
Speed

### Changing Color Brightness

1. Whether you are displaying a static color, or your DMX to RGB-W LED Controller is running a color changing program, you can change the brightness of your RGB LED Lights while in RGB Control Mode.
1. To change brightness you will use Button 3 (Bright). In RGB Control Mode this will cycle through the brightness of your colors, with 0 (zero) being 0% brightness, 1 (one) being the lowest (dim) brightness level, and 9 (nine) being the brightest.
1. To change brightness, simply press the Button 3 (speed) to change the brightness one setting higher.

**Button 1**

0-5
Speed

Pressing Button 2 Changes Mode. Pressing Again will Pause mode. Repeat to select new mode.

## Note: Your Controller will remember all of your settings even in the event of power loss.

# PRODUCT MANUAL
# 4 Channel DMX to RGB-W LED Controller

## Choosing a specific static color or white to display.

1.  While running through a program in RGB Control Mode, you can pause the program at a desired color.
2.  To start, go into program 1 (one) by pressing Button 2 until the number "1" is displayed in the middle of your display screen. Make sure the program is running, and not paused.
3.  Now, set the speed to 6 (six). Your program should now be fading in between colors, with a visible white color present.
4.  To select any color, simply press Button 2 once as described above. This will pause your program at the color your RGB LED Lighting fixtures are currently displaying.
5.  To select a bright white light for your RGB colors to display, simply repeat steps 1-4, and pause on the white color included in program 2.

**Button 1**

**●**

0-5
Speed
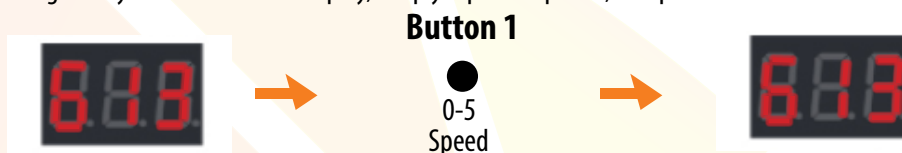
## Troubleshooting

### DMX signal not received

1.  First Check to make sure your DMX wires are connected to the DMX IN, and not to the DMX OUT ports on the left side of your controller. The DMX OUT ports do not receive signal and will not work as inputs from a DMX controller (Refer to Figures 1 & 2).
2.  Note that your 4 Channel DMX-RGB-W LED Controller will not automatically detect DMX signal inputs in, so it could still be in RGB Control Mode (standalone mode) when you attach it to a DMX Control System. Therefore, be sure to follow the steps outlined on pages 3 and 4 to first set your 4 Channel DMX-RGB-W LED Controller in DMX Mode, set it to the Correct 3-Channel or 4-Channel operation based on your RGB LED Lighting Fixture, and finally have a proper DMX address.

### Color Changing Program Staying Paused

1.  Double Check to make sure you are in RGB Control Mode. If you controller is displaying a solid color and not changing when you press Button 2 (mode), it is probably set in DMX Mode, and won't change unless there is DMX signal input. Follow the Steps on pages 4 and 5 to first get in RGB Control Mode (standalone mode), and then press Button 2 repeatedly. Pressing Button 2 should cycle through all of your color changing programs, indicating you are indeed in RGB Control Mode.

### White LED Light Channel Not Functioning.

1.  Your 4 Channel DMX-RGB-W LED Controller will only send signals to the white Channel in DMX Mode. Therefore if it is set in RGB Control Mode, and it is cycling through colors, you will not be able to utilize the White Channel.
2.  If you are in DMX Mode, and your white channel is not being utilized, make sure it is set to "4ch" mode as described on page 3. If it is in "3ch" mode (3-channel mode) it is only receiving signals for the Red, Green and Blue Channels of your RGB portion of your RGB-W Lighting Fixture(s).

# PRODUCT MANUAL
# 4 Channel DMX to RGB-W LED Controller

™

**Solid Apollo**
*Where light meets perfection*
Toll Free. 866-592-3873
www.SolidApollo.com
sales@SolidApollo.com

## Technical Information

### 4 Channel DMX to RGB-W LED Controller

• 12-36V DC Operation
• Up to 5A per channel
• 3 or 4 Channel Operation (RGB/RGB-W)
• Max 240 Watts of power @ 12V DC
• Max 480 Watts of power @ 24V DC
• IP55
• DMX 512 Operation
• DMX Channels: 512
• Size: 8X1.5X1.7 Inches
• Weight: .3 Pounds
• 30-115°F

**SKU: CTRL-001-V2**