

Light-O-Rama



Quick Start Guide

Cosmic Color Bulbs (CCB)

www.lightorama.com

The Cosmic Color Bulbs are two 50 LED lamp bulb strings that include a controller with a built-in power supply. Because of the number of full color pixels, integrating this device into shows using conventional methods requires a bit of effort. To make the device easier to integrate, the controller implements macro and color effect modes. These modes allow the bulb string to be manipulated at its full resolution using a small number of channels rather than the 50 RGB channels required to manipulate each bulb string in its raw form. This guide shows you how to experiment with the macro and color modes in real time so that you can best determine what you want to use in your show.

1 Install your RS485 Adapter

You should have your RS485 adapter installed and working. If your adapter (USB495, USB485B or USB485ISO) is not installed, follow the instructions that came with the adapter to install it.



2 S3 ShowTime Software version 3.1.4 or later

If the Light-O-Rama Control Panel is not running (no little light bulb down by the clock) start it: Start -> All Programs -> Light-O-Rama -> Light-O-Rama Control Panel. Right click the little light bulb and select the Hardware Utility. Click away any errors for now. If the version in the title bar of the Hardware Utility is less than 3.1.4, you need to get newer software. Follow the directions carefully to download the latest software here:

www.lightorama.com ► Software ► Download

3 Attach ONLY the CCB device to the RS485 Adapter

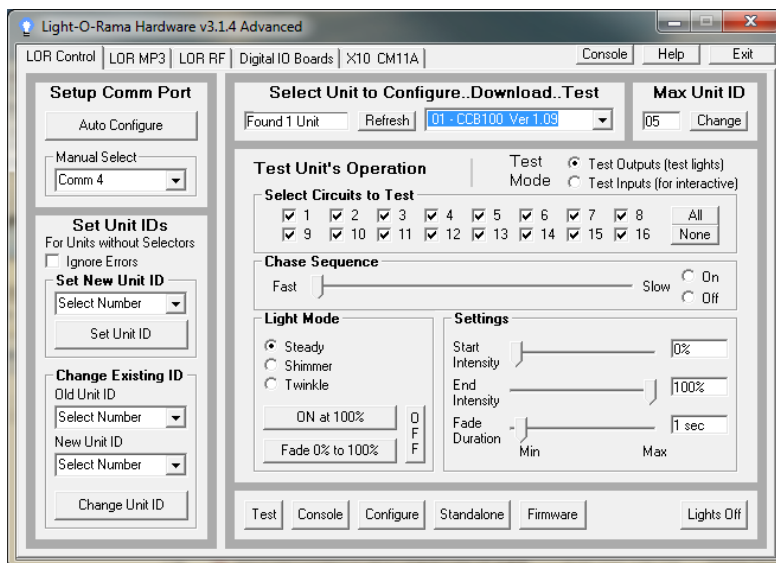
Use a Cat5e LAN cable to connect only one Color Bulb controller to the USB RS485 adapter. Do not daisy-chain any other controllers off of the Color Bulb controller. Start the Hardware Utility.

Click the Auto Configure button on the upper left. The Hardware Utility will search all COM ports on your PC for the one connected to the Color Bulb controller. When it finds it the Hardware Utility will select that COM port. Stop and restart the Hardware Utility.

Within a few seconds the Status LED on the Color Bulb controller should go from flashing to steady on. This means the Color Bulb controller sees the Hardware Utility.

Now click the Refresh button at the center top of the Hardware Utility window. The search will take quite a while unless you change the Max Unit ID down to a smaller number like 20. The Hardware Utility will search for the one Color Bulb controller. It will find it and fill in the box to the right of the Refresh Button.

You should see "01—CB100 Ver ..."



4 Select a Unit ID for your Color Bulb Controller

On the lower left of the Hardware Utility window you can change the Unit ID of your Color Bulb controller so it does not conflict with any of your other Light-O-Rama equipment. If you are happy with the current Unit ID, skip to step 5.

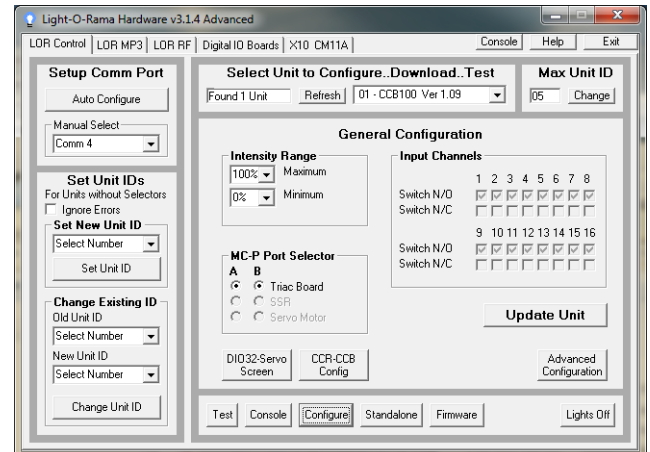
To change the Unit ID, use the drop down menu under Old Unit ID to select Any Unit (since there is only one controller connected, this is OK to do.) Use the New Unit ID drop down menu to select a Unit ID for this Color Bulb controller. Then click the Change Unit ID button. If you have set the Max Unit ID to a number lower than the ID you want for your Color Bulb, increase it so you can select the Unit ID you want.

5 Configure your Color Bulb Controller for use

If you changed the Unit ID in the previous step, click the Refresh button again to find the Color Bulb controller at its new unit ID.

With the Color Bulb controller selected in the box next to the Refresh button, click the Configure button at the bottom of the screen. You will see the window to the right.

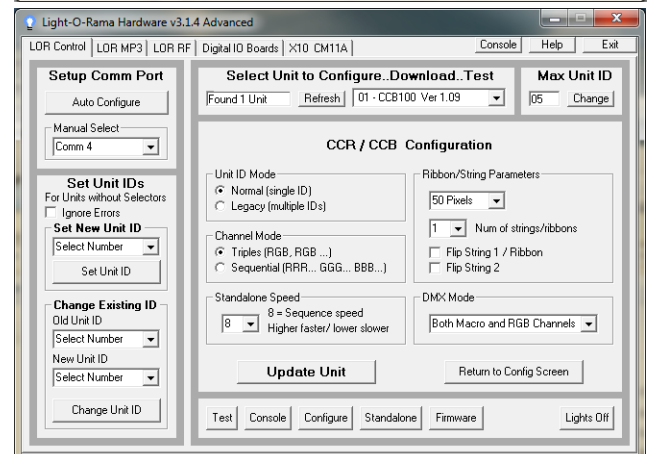
Click the CCR-CCB Config button to change to the Color Bulb Configuration Screen. You will see the screen below the one to the right.



Select the following options using the screen to the right:

- Unit ID Mode: Normal
- Channel Mode: Triples (RGB, RGB,...)
- Standalone Speed: 8 (doesn't matter)
- Resolution: 50 Pixels
- Num of strings/ribbons: 1 (Do not use any other number)
- DMX Mode: Both Macro and RGB Channels

Then click the Update Unit button to send this configuration to the Color Bulb Controller. These parameters must be set for the demonstrations that follow.



6 Using the Hardware Utility to test the Color Bulbs

Click the Console button at the bottom of the Hardware Utility screen and you will see the window to the right.

Use the Select Unit ID drop down menus to select the unit ID of your Color Bulb controller.

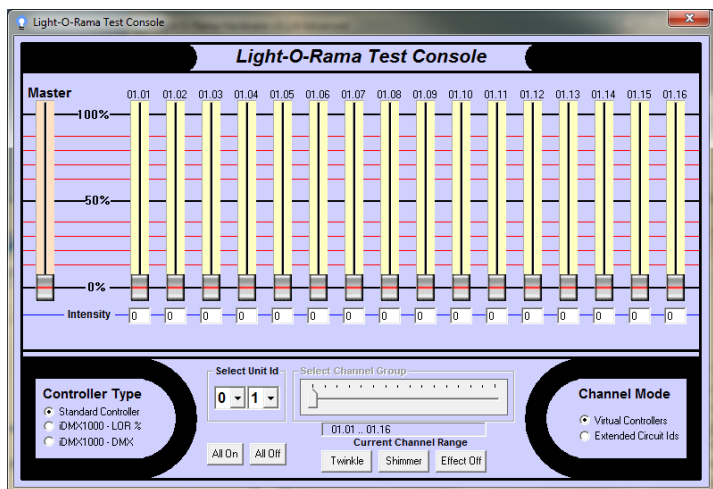
Choose Extended Circuit Ids on the lower right.

Use the Select Channel Group slider at the center near the bottom to allow access to channels 145 to 160. You will see the <unit id>.<channel number> change above each vertical slider as you move the Select Channel Group slider.

Move the vertical slider for channel 151 (resolution) to Intensity 1. This sets the first bulb string to 1 pixel. This means that the first 3 channels (1, 2 & 3) will control Red, Green & Blue for the first bulb string. Note that vertical sliders send commands only when they are moved.

Move the Select Channel Group slider back to the left so you can change channels 1, 2 & 3. When you move one of these three vertical sliders, the entire first bulb string will take on that color. You can use these 3 sliders to mix colors. If you were to go back and change channel 151 to 2, then the bulb string would be divided in half and channels 1, 2 & 3 would control one half and 4, 5 & 6 would control the other half. If you change 151 to 50, then 1, 2 & 3 would only control the first bulb of the 50 bulb string and you would have individual control of each bulb using then next 3 channels up to channels 148, 149 & 150 for the end most bulb.

Once you have a color your like, proceed to step 7 to experiment with macros.



7 Using Color Bulb Macros

At this point, the entire first bulb string should be some color you selected in step 6 and channel 151 should be set to 1.

Move the Select Channel Group slider so you can affect channels 145 to 160.

Move channel 152 (Macro Mode) to 1 to select macro 1. This macro is used to fill the first bulb string from the controller to the end. You can look in the manual to see what other macro mode numbers do.

Leave channel 153 at 0. This is the macro submode — we'll use it in a minute.

Now move the channel 154 slider (macro effect.) This channel controls how much of the pattern set by the current macro mode is exposed. You can see that moving the slider up fills the first bulb string with the color you selected from the controller to the end. In your sequence, you would set channels 1, 2, 3, 151, 152 & 153 as we did and then do fades from 0 to 99% or from 99% to 0 to make an arch leap.

Now set channel 153 (macro submode) to 2. With channel 152 (macro mode) set to 1, the submode controls how many pixels move when you fade channel 154. Setting the submode to 2 means two pixels move rather than the first bulb string filling. Try it by sliding channel 154 and then change 153 to 10 pixels and try again.

You can experiment with all the other macro modes to see what they do and whether they are useful to you.

On the next page we experiment with Color Effects.

8 Using Color Bulb Color Effects

There are two ways to set the colors of the bulbs. One is to use the RGB channels another is to use a Color Effect. You should not use the RGB channels at the same time you are using a Color Effect because Color Effects write into the RGB channel slots in the controller..

A Color Effect is affected by the setting of channel 151 (resolution.) A Color Effect sets the RGB channels. If you have the resolution set to 1 pixel, then you will only use the first RGB triple for the entire first bulb string even though the Color Effect is setting all the RGB triples. This may be what you want. In our demo, we will set the resolution (channel 151) to 0 which selects the default resolution. We configured this to be the full resolution of 50 pixels in step 5.

Move the slider for channel 151 (resolution) back to 0 to select the default resolution.

Move sliders 152 (macro mode), 153 (macro submode) and 154 (macro effect) to 0. If you left the first set of RGB channels at some values, then the first bulb (nearest the controller) of string 1 should be the only one lit because the resolution is now set to 50 pixels, so you would have to fill in all 150 RGB channels to light the entire bulb string.

Set channel 155 (color mode) to 17 which is Dazzle in Red, Green & Blue.

Set channel 156 (color speed) to 50. You'll see what this does later.

Bring channel 157 (color intensity) up.

The first bulb string should be randomly changing colors. Move the color speed slider to change the speed.

Now you can select a macro effect and put it on top of this color effect by changing channels 152, 153 & 154.

That's it.

NOTE WELL:

The vertical sliders on the Hardware Utility's Console only send data when they are moved. If you left a slider in a certain position and then moved the Select Channel Group slider to a different set of channels, you will have to move a vertical slider to send a value to the current channel set. Just because a vertical slider is at some value when you change the change channel group does not mean that channel is at that value.