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Scroller Addendum Tutorial for Version 2.8.6
With Console Screen Examples

This addendum tutorial covers the 500 series console software version 2.8.6 for the operation of standard scrollers only.   It is designed as the second instructional tutorial to follow the *Strand 500 Series Console Tutorial – Conventionals (with screen capture) V2.8.5.* If you haven't done so, I recommend going through the conventional tutorial *first.* If you haven't gone through the conventional tutorial but feel comfortable enough with conventional control then feel free to continue here. This version includes console screen examples as visual aids.

This tutorial is setup to give the operator a place to start as a hands-on training session.

The tutorial will cover setup and operation geared toward the Broadway market which has been dominated by Light Palette friendly consoles such as the Light Palette series and the Obsession series. This workbook will go through all operational functions that are considered both normal and advanced for a Broadway-style programming session. This does not intend to mimic any one designer's style of language used for programming but is intended to get the programmer familiar with all programming features of these consoles that are typical of theatre, opera, and dance. Experience is still the best teacher, but this should get anyone, not previously familiar with the 500 series consoles, on their way to being able to program any conventional lighting show.

Table of Contents

Tutorial Syntax

> *This font and box indicates the syntax for standard hard key input.*

Any > indicates a soft key that is a level below the previous soft key.

Any **{bracketed}** text indicates a **hard display** key that should be pressed. The display tile is at the upper right hand portion of the console.

Any **(enclosed)** text indicates a soft key that should be pressed.

Any **"quoted"** text indicates keyboard entry that will label a cue, group, or the like.

On the screen captures, I will also draw a circle around the area of the screen that has the appropriate information.

During the tutorial, perform the keystrokes when listed. This will keep you in the proper screen as you go through the text and allow you to maximize your benefit from the lesson.

Even with the powerful features of the 500 Series consoles, it must be simple to operate the simple things. Here is where we will start…

Another thing, the screen shots that you will see here are for a single monitor system. This is done for simplification of the tutorial. Most 500 series desks will have 2 monitors; one for channel display and one for the cue list.

Introduction to Attributes

One of the first things to understand about scrollers on the Strand 500 series is that it is controlled as an attribute. An attribute is any controllable aspect of a fixture that is not intensity.   With automated luminaires, there are many attributes…pan, tilt, gobo, focus but a standard scroller has only one attribute…color. Yes there are color changers that do color mixing in a variety of ways depending on the manufacturer. This tutorial will concentrate on standard scrollers…ones that use gel strings.

There is a list of attributes that are consistent within the Strand console vocabulary. All of these relate to specific attribute channels that can be accessed for different types of attributed fixtures. All you need to know about this list is that color is the second attribute or *point two* (.2) for any channel. So if a scroller is patched to an ellipsoidal that is channel 12 then the scroller is channel 12.2.

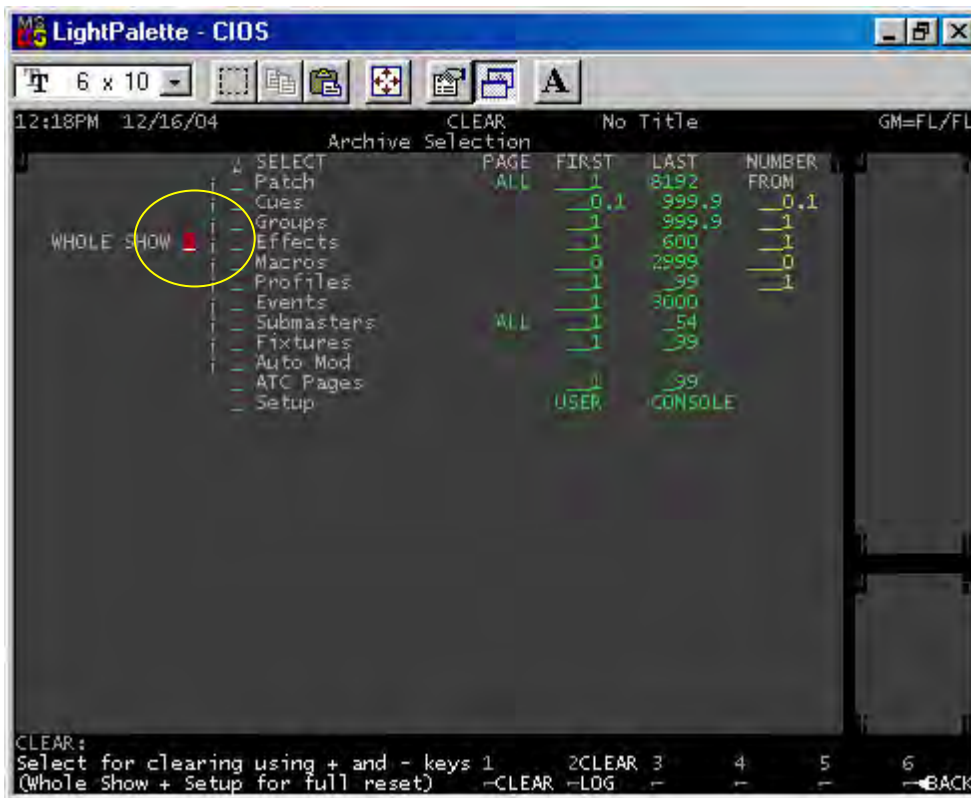At this point, let's just jump in, and get ready to patch a few scrollers and get started!

Preparation

Clearing the Old Show

I'll make the assumption that you are not starting with a clean show file. If you need to default the desk before we get started, then…

{ARCHIVE}

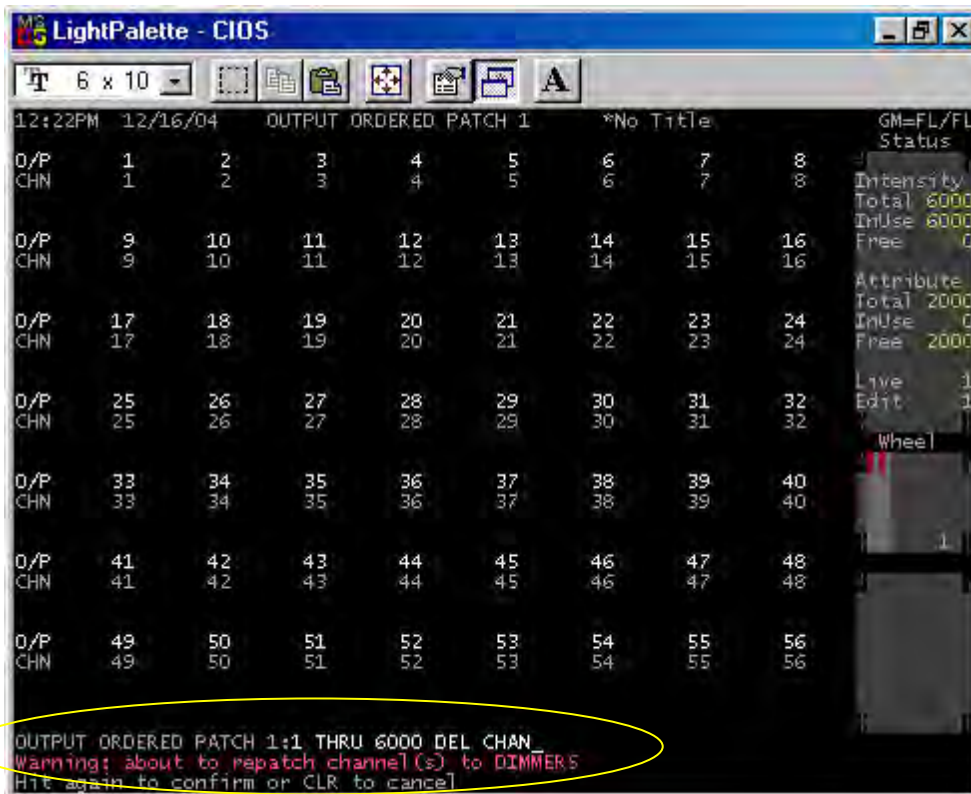*(CLR>) + (CLEAR LOG)*

This will get us back to a defaulted show file with a 1 to 1 patch, no cues, groups or FXs. Now let's go to patch.

Deleting All Channels

The next step that I like to do is to delete all channels so that we can patch just what we need.

{PATCH}

(CHAN>)

1 THRU 6000 (DELETE CHAN) (DELETE CHAN)

Note: 6000 represented the last channel or the highest channel number that is patched in your console. Please adjust this number according to your intensity channel capacity in the top right hand corner of the patch screen.
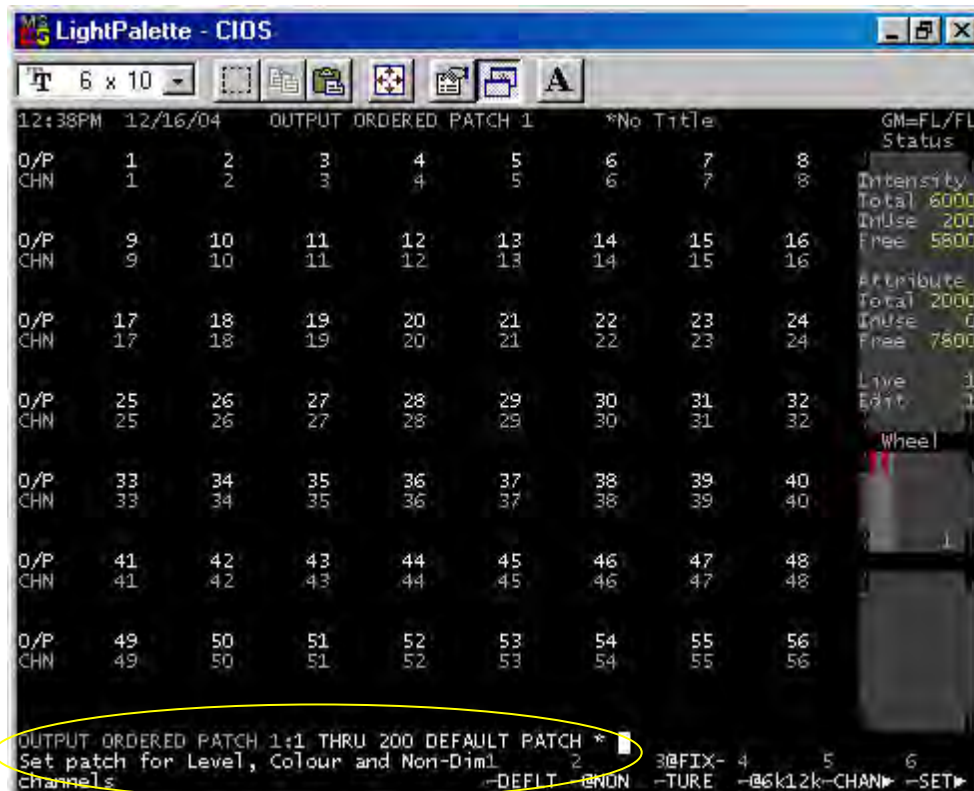
Now that we have a clear channel list, let's patch up only what we need.

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Patch Conventional Dimmers to Channels

Let's say that we have a small show of 200 channels that are going to be defaulted to a 1 to 1 patch.

> *(<BACK)*
>
> *1 THRU 200 (DEFLT)*

*Note: Watch the channel screen through all of this and you'll see the channels get deleted and added again.*

Here you can see that you have 200 channels in your system. Notice in your channel status screen (top right) that only 200 channels are used out of your total intensity capacity. If you can only see 100 channels on your screen, you might want to change the channel display to LP+.

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Change Channel Display for 200 Channels per Screen (LP+)

{SETUP}

SCROLL TO CHANNEL DISPLAY

SET TO LP+
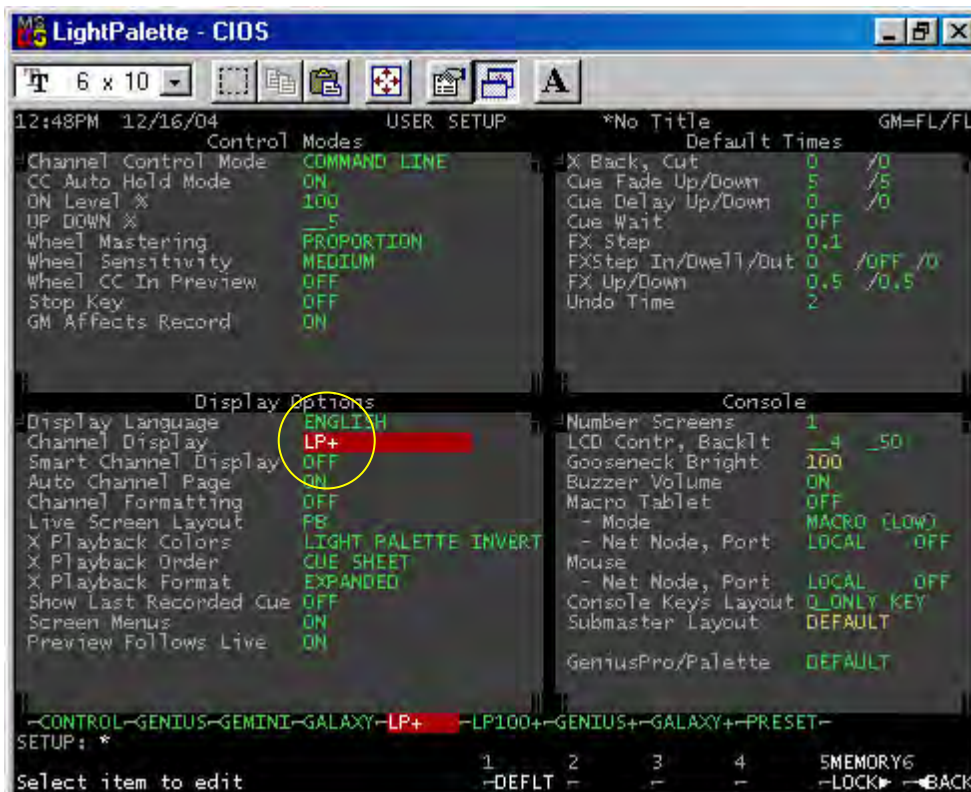
Note: I recommend using the trackball to navigate and the + and – keys to change selections.

Now let's go to *LIVE* and see that we now have all 200 channels on 1 screen.

{LIVE}

Most of the production electricians that I work with like to keep any intelligent component to the lighting rig on a separate universe from the dimmers. This will, most likely, default to having dimmers on universe one and scrollers and such on universe two.   Before we go forward, let's check our setup and make sure that we have two DMX universes setup properly.

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DMX Universe Setup

{REPORT} (ADV SETUP>) (CONSOLE SETUP)
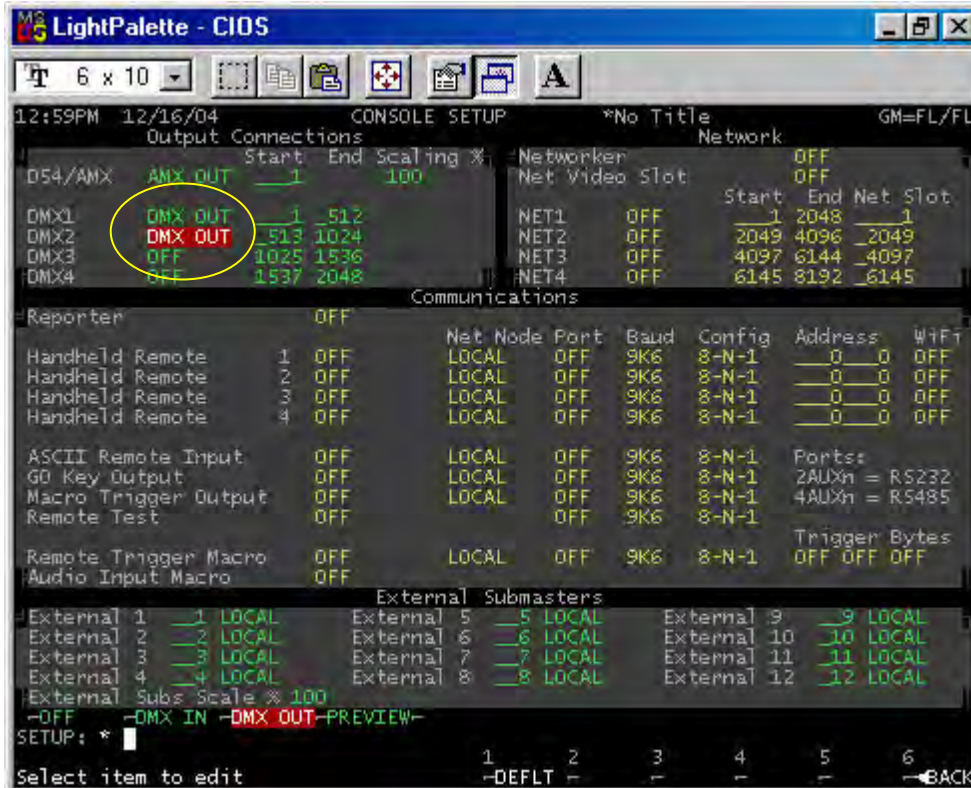
If you cleared the show at the beginning of the tutorial, then the console defaulted to having 2 DMX universes turned on and outputting. DMX 1 is set to 1 through 512 while DMX 2 is set to 513 through 1024. Just what we want. If not, then just make any changes necessary. So it's back to patch…

Switching the Patch Screen from DMX to Output

I hate having to do math so I let the console do it for me. My production electrician has informed me that the scrollers that I want to patch up start with DMX address 1. Since we are patching them to the 2nd universe, that means adding 512 to every number to know what address I'm really dealing with. Strand has a great little feature that helps me with this. First, scroll down so that your screen shows dimmer 513 somewhere on the page.

| |
| --- |
| {PATCH}

SCROLL DOWN WITH THE WHEEL

(SET>) (DMX/OUTPUT) |
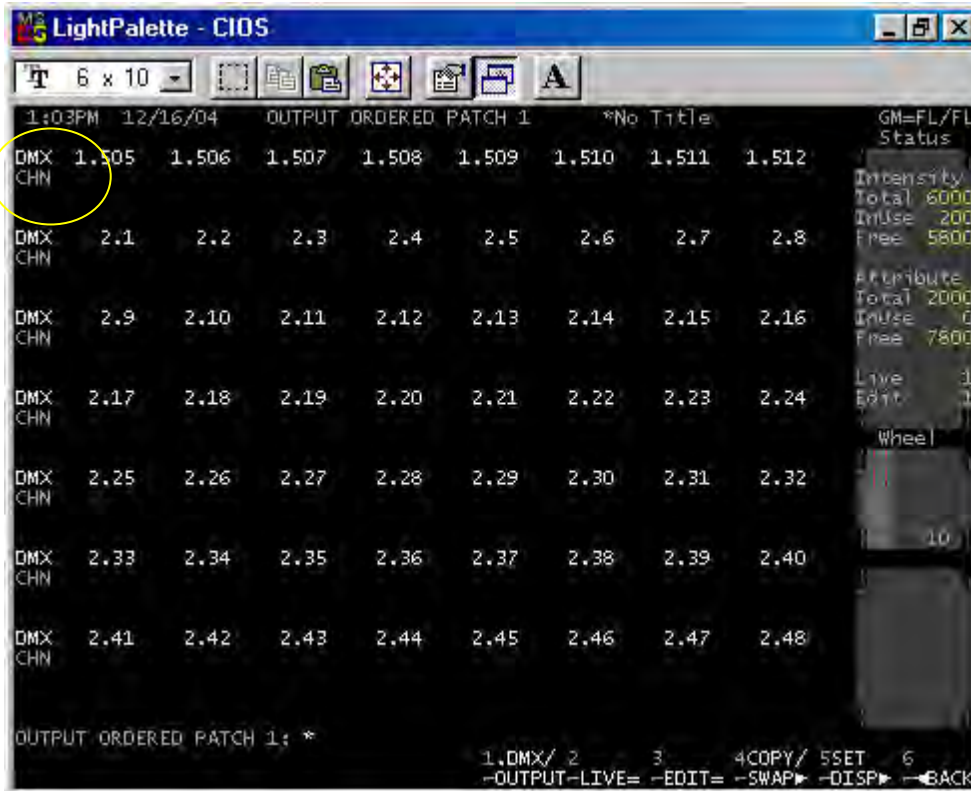
Now you are looking at the patch screen ordered by DMX universe rather than a straight numerical output. Instead of seeing 513 as my first address on the 2nd universe now it gives me the universe number on the left side of the decimal point and the actual DMX address on the other. Much easier to deal with.

Patching Scroller Channels

With our conventional rig we have 12 ellipsodials that have scrollers and they all have 24 frames of color and we want them to be patched to channels 101 through 112.

(<BACK)

2.1 THRU 2.12 @ 101 THRU 112 @ATT 23 ENTER
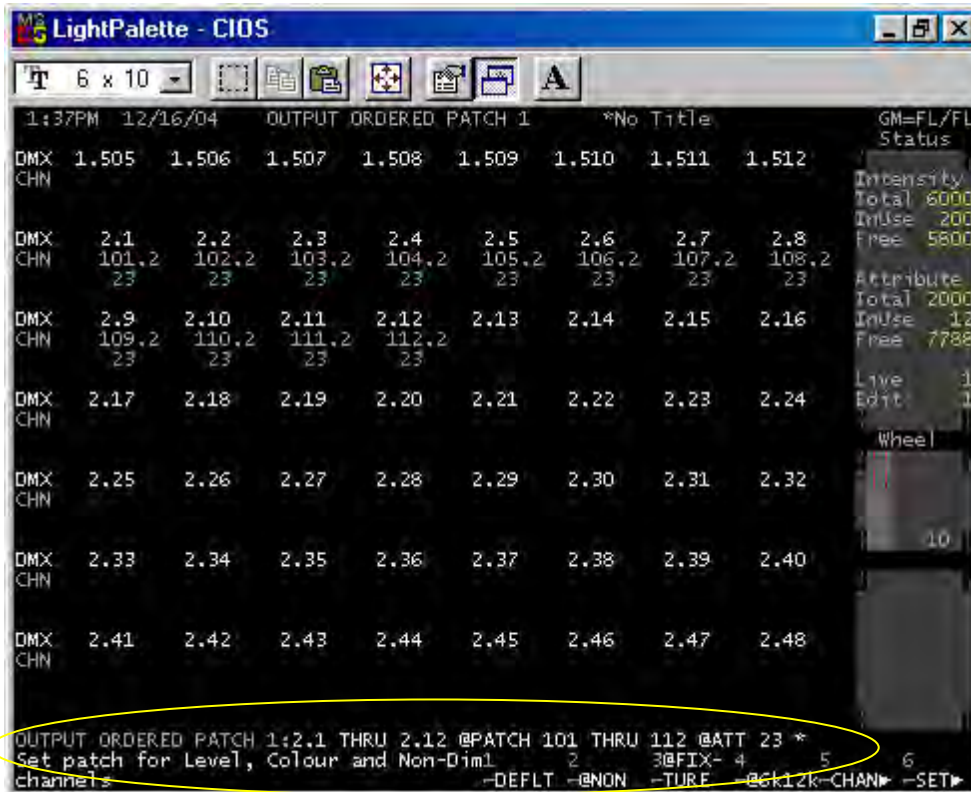
Let's talk about the syntax that was just entered. *2.1 THRU 2.12* this is the dimmer range. *@PATCH 101 THRU 112* pressing the @ key gives you the @PATCH. Then *@ATT 23* is telling the console that you have 24 frames of color. The reason why you input 23 is simple. Unlike intensity, an attribute can never be off. It is always in a position and "zero" is a position so 0 is your first frame or more likely your leader.

Other possible correct syntaxes are…

2.1 THRU 2.12 @ 101.2 THRU 112.2 @ATT 23 ENTER

Here you are just being very specific about the attribute number.

*2.1 THRU 2.12 @ 101 THRU 112 @ATT ENTER*

Here you are telling the console to patch for the default number of attributes.

Note: Don't get confused about the dimmer and channel for the intensity. This still has to be patched separately.

Setting Default Number of Frames

If you go into the *Show Setup* screen, you can change the default number of frames for faster scroller patching.
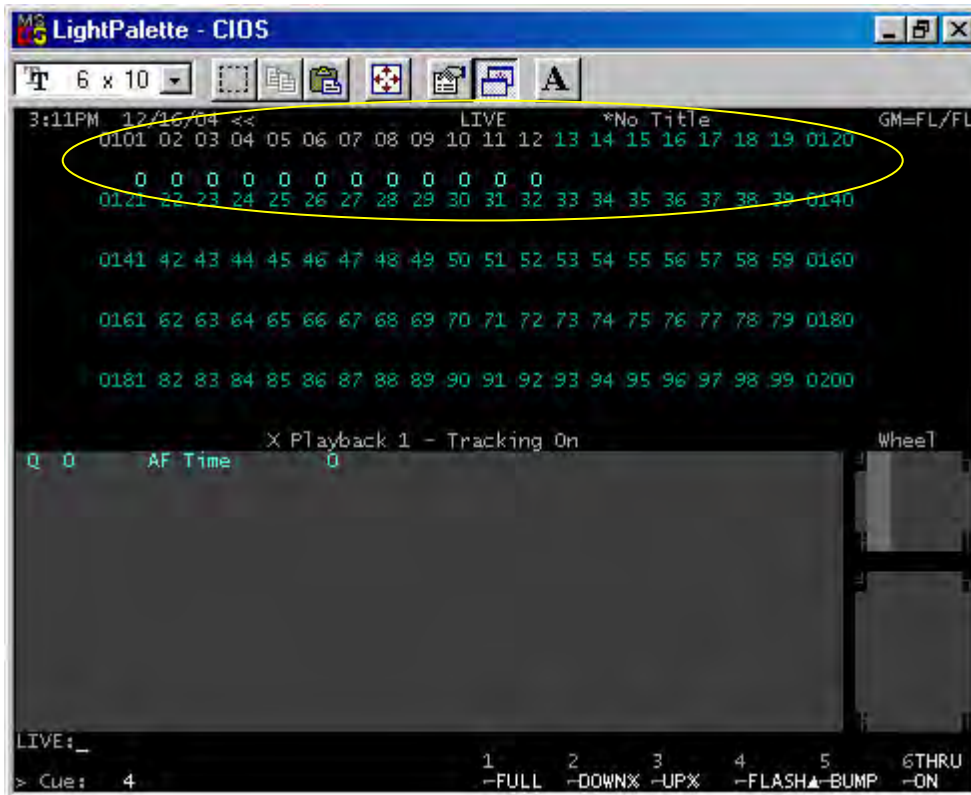
{REPORT} (ADV SETUP) (SHOW SETUP)
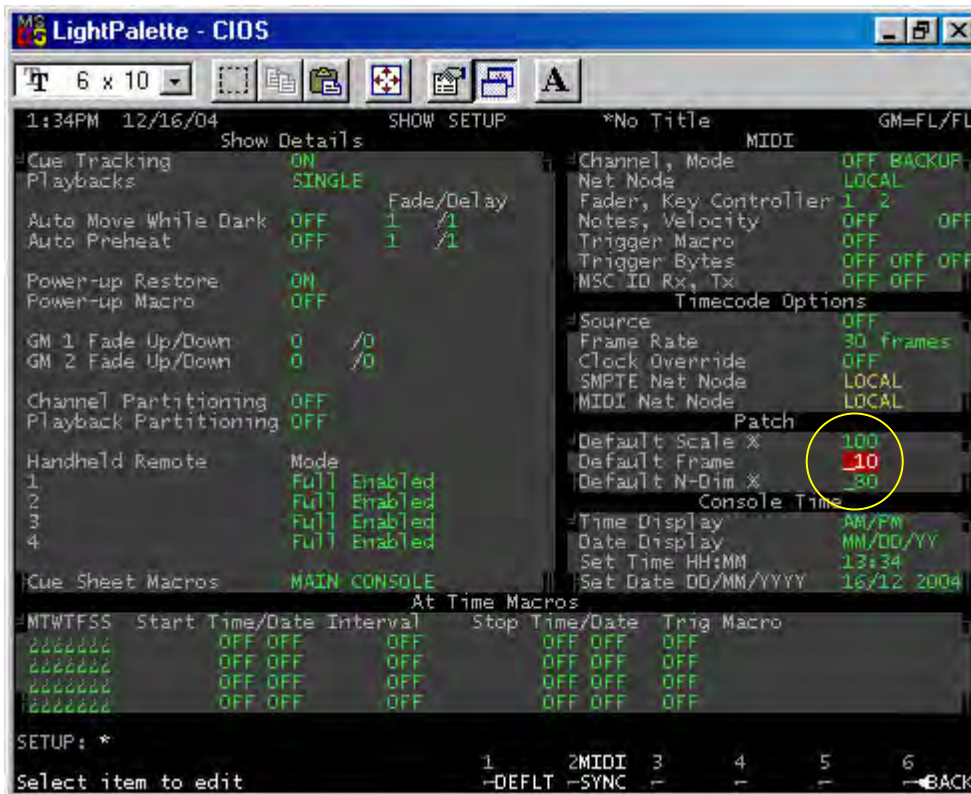
Set this to a default frame number that will work for your scrollers and you can use the simpler command line from above.

Learning about the Live Screen with Scrollers

Now that the scrollers are patched for 24 frames, let's take a look at the *LIVE* screen.

Notice the screen colors. A cyan channel number is a standard intensity channel. A light grey channel number is an intelligent channel. The zero underneath represents the frame number. So if we want to bring up a scroller channel, just give a channel intensity as you normally would.

> *101 ON*
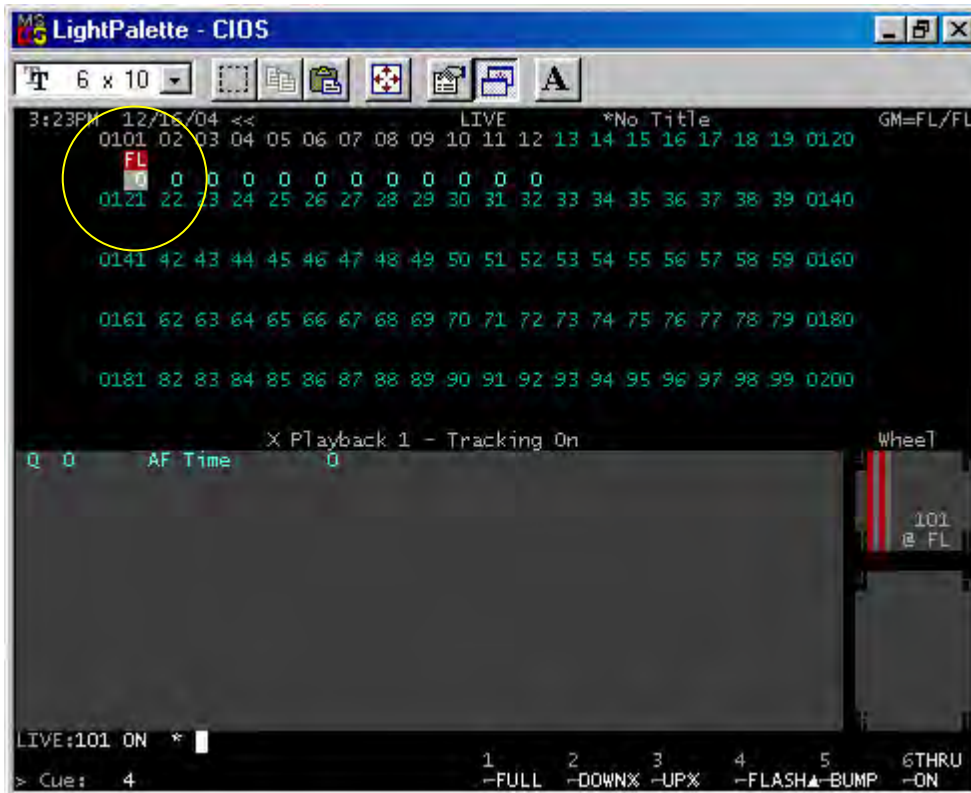
The intensity is captured normally and is on the wheel. The scroller is captured as well and can be controlled by the top encoder wheel that has the white thumb indention. This matches the color of the text. The encoder wheel will allow you to scroll from one end of the scroll to the other. If you want to be more precise…


@ATT 5 ENTER

This will take the captured channel to the desired frame. This can be repeated for any active channel and, of course, any valid channel syntax can be used for any grouping of channels.

Assigning Profiles to Scroller Channels

If, at this point, you notice that the scrolls aren't framing up properly, you may need to adjust the profile on the scrolls. If this is the case, glow the channel then assign a profile to the scroll first…
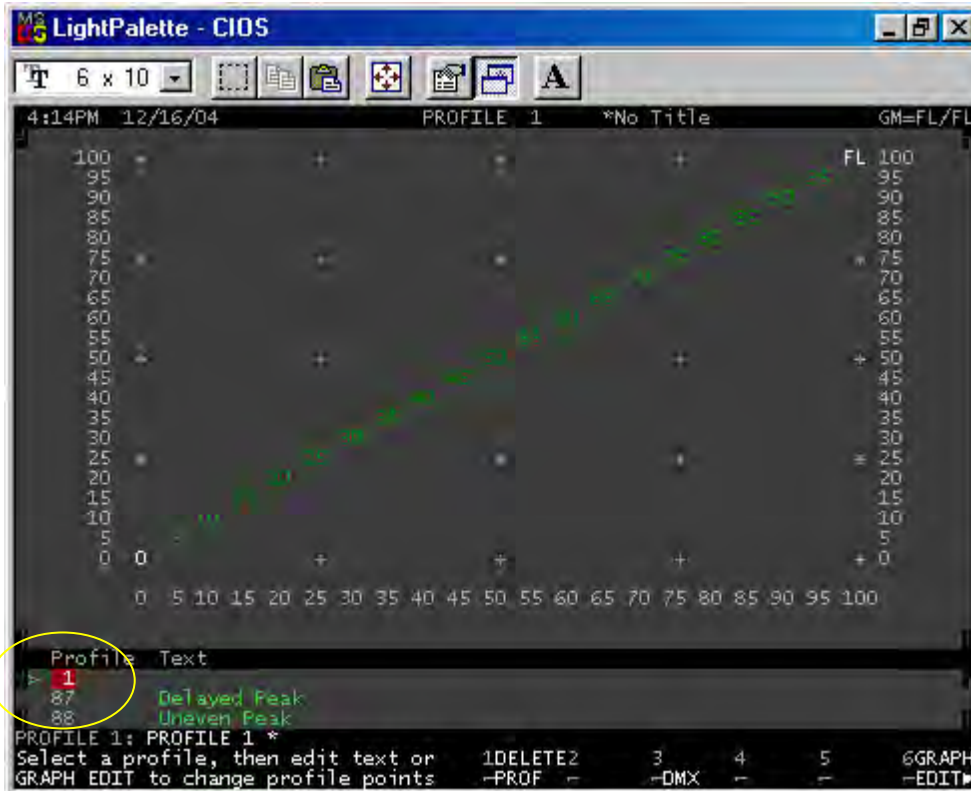

{PATCH}

2.1 THRU 2.12 PROFILE 1 ENTER
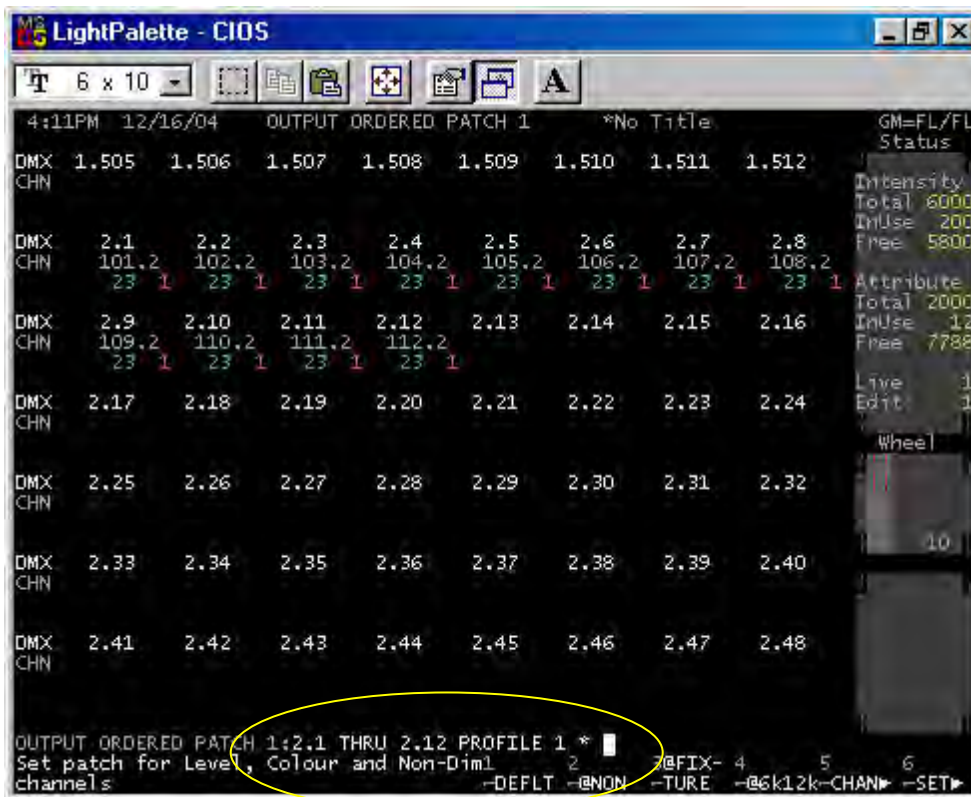
Then go to the profile page, create the profile and then edit the profile.

{MORE} (PROF DISP)

PROFILE 1 ENTER ENTER

You may have to experiment a little bit but I usually start with the first frame and work my way through until I find the problem frame, then I started adjusting the part of the profile that will affect the problem frame output. Then I go back and check from the first frame and continue until I find another frame output problem and I continue the adjustments until all are adjusted.

I find that 1 profile will work for all scrollers that are the same size and have the same frame quantity.
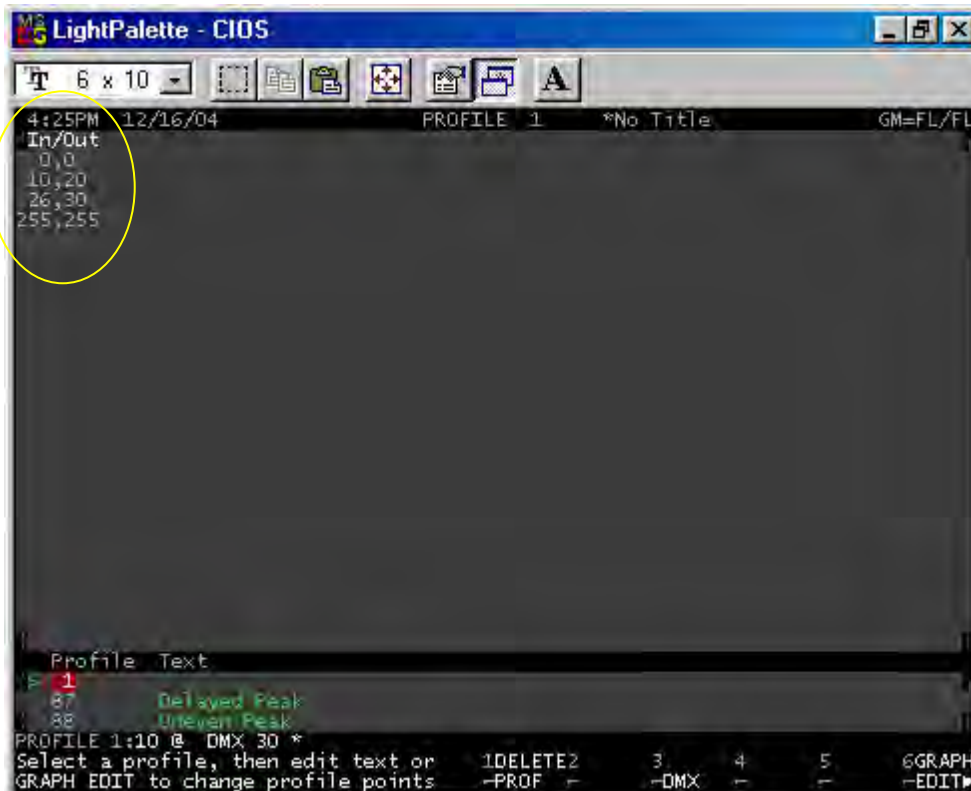
When I'm working with scrolls that have more than 24 frames, I often find that I need to be very specific with my profile adjustments. This can be done by entering very specific DMX values.

DMX 10 DMX 20
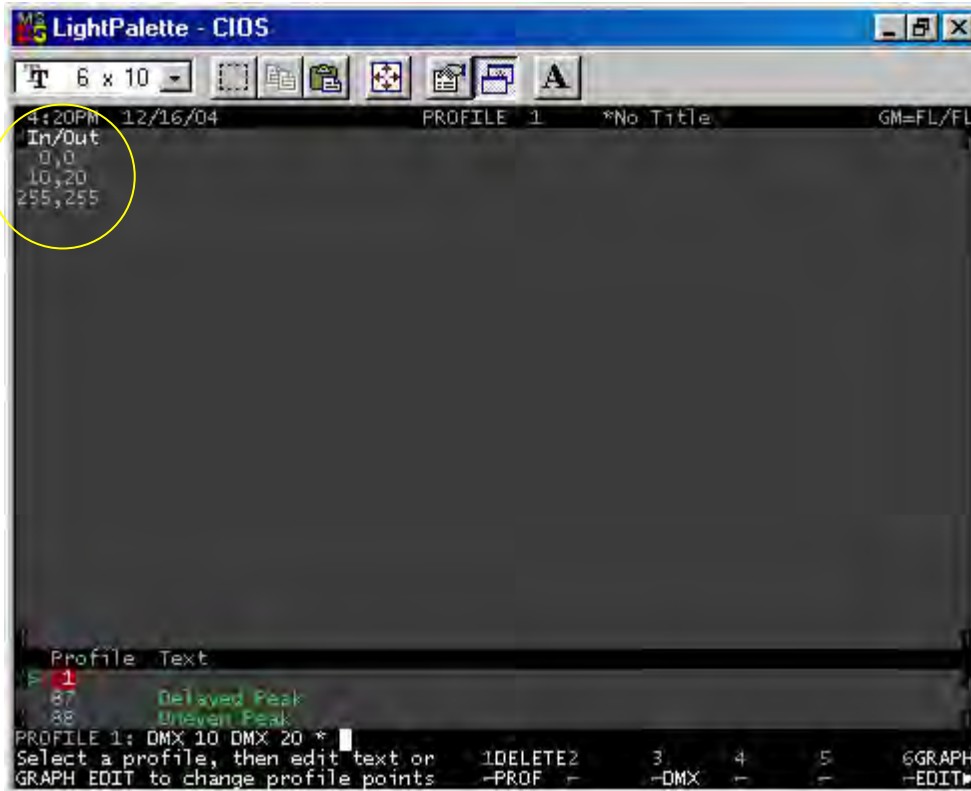
Or you could enter a percentage value followed by a DMX value.

10 @ DMX 30 ENTER

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Each frame requires a value entered to be properly calibrated. Once your scrollers are properly calibrated, let's look at how we can have quick access to your color frames.

Recording Color Groups

I often want quick access to my colors for different reasons. Sometimes I want my colors on macro buttons; sometimes I want to be able to access my colors by the gel number. We'll look at how you do both of these. The first step is to record our color frames into groups.
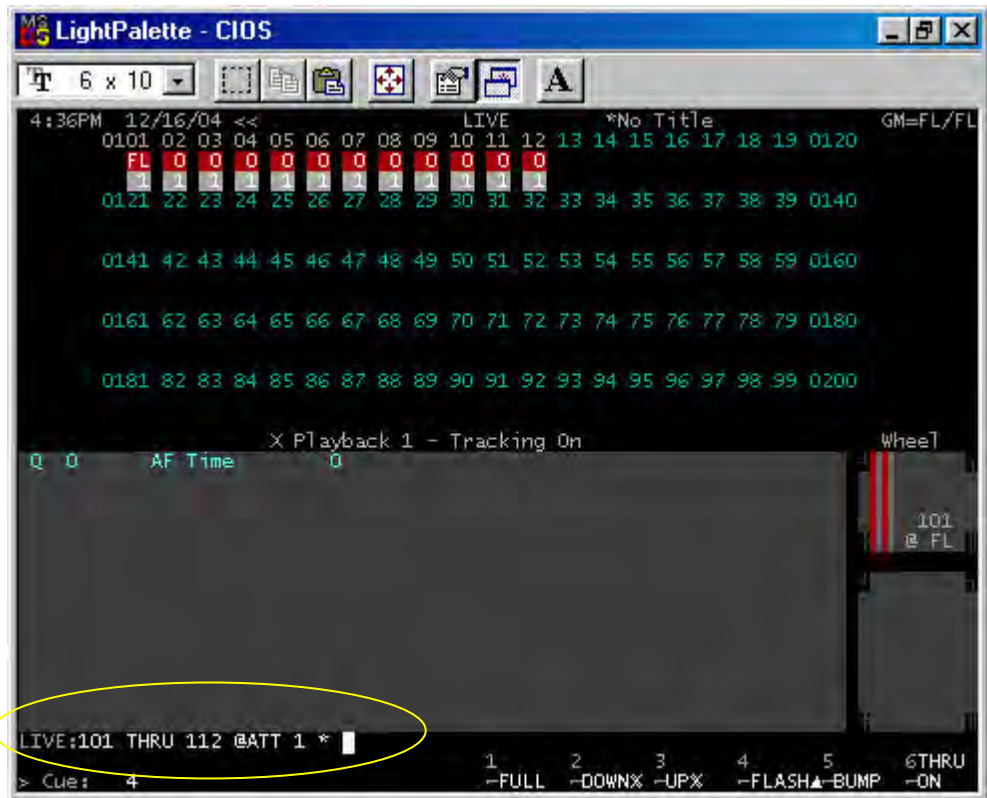
There are 1000 groups on the console and 1 through 750 are preset focus groups. We'll use the power of preset focus groups for our color groups. In fact, let's use groups 1 through 24.

Live

For live recording, the first step is to get our scrollers in frame 1.
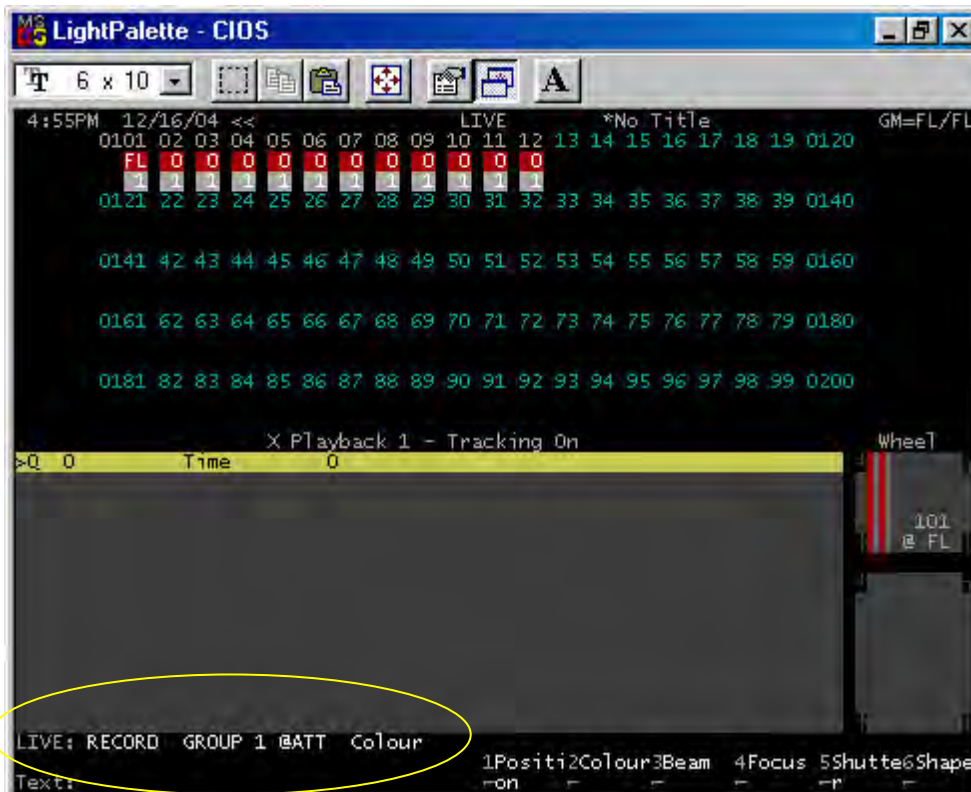

{LIVE}

101 THRU 112 @ATT 1 ENTER

Note: Intensity levels don't affect color recording.

Since these 12 scrollers are the only color attributed fixtures in our system, we don't have to use a channel list prior to pressing record.

RECORD GROUP 1 @ATT (COLOR) ENTER

Note: The screen is showing the previous command line example prior to pressing ENTER for attribute filter visibility.

Notice that when you pressed *@ATT* the soft keys changed. These are your attribute filters. These are primarily used for automated luminaires but the color attribute filter works great for scrollers.

Let's take a look at the content of the group in the group preview screen.

{GROUP}

Note: Don't confuse the group preview screen button with the group item key.
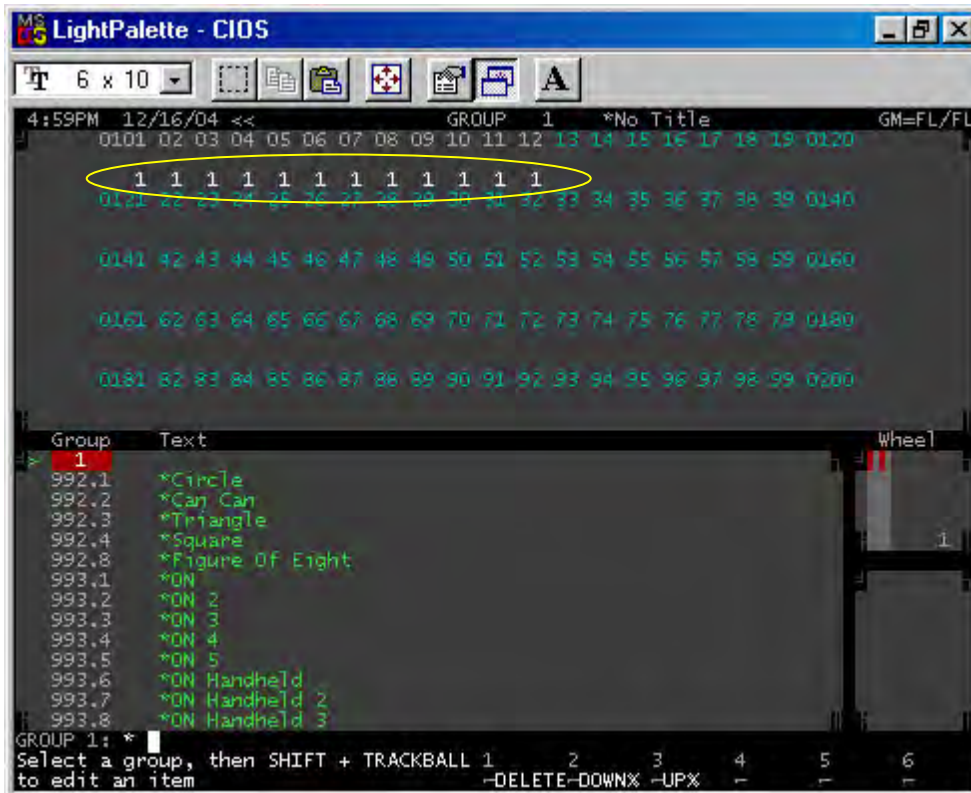
Now let's go back to *LIVE* and continue to record all of the groups…one for each frame.

I'll show you some of the different command line options that might apply depending on the lighting rig that you have.

{LIVE}

@ATT 2 ENTER

RECORD GROUP 2 (ATTS ONLY) ENTER

Notice that I didn't reenter the channel list; this assumes that the channels are still captured. And the *ATTS ONLY* key just selects the attributes only. Since color is our only attribute then this works fine.
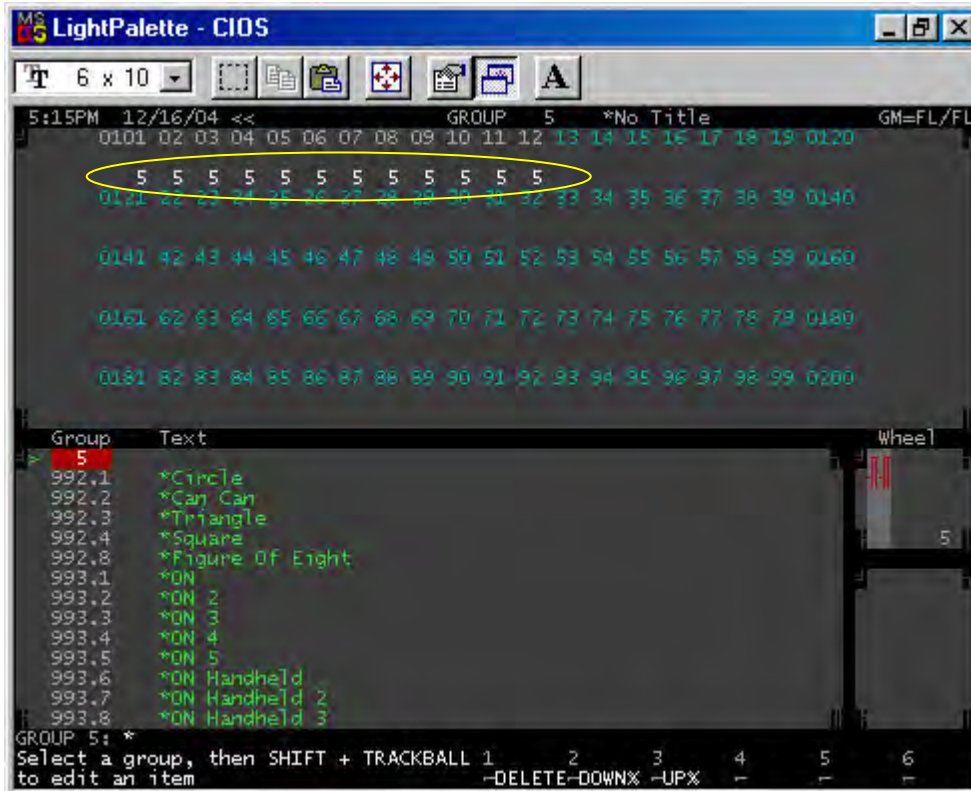

@ATT 3 ENTER

101 THRU 112 RECORD GROUP 3 (ATTS ONLY) ENTER

This is the syntax that I would use if I have other scrollers or automated fixtures and I only wanted to affect channels 101 through 112.

@ATT 4 ENTER

101.2 THRU 112.2 RECORD GROUP 4 ENTER

This example uses the preceding channel list to limit the record to only attribute 2 of channels 101 through 112. You can get as specific as you want!

In Preview

To record these color groups in the group preview screen, it's a two step process. The first step is to create the group.

> ***{GROUP}***
>
> ***GROUP 5 ENTER ENTER***

Note: Notice that all the values are grey. This indicates that there are no active information in this group.

Now we would put the proper info in the group.

> ***101 THRU 112 @ATT 5 ENTER CLR***

Note: Clear at the end of this command line let's me see the actual values in the group.

I'll let you repeat this process for the rest of the 24 frames.

Texting the Color Groups

I like to text the color groups based on the manufacturer's gel number and name. The gel number gives me quick access and the name helps me when in the group preview screen.

You can text the information from the group preview screen just by pressing *TEXT* and then typing the label that you want. Just make sure that the red box is on the correct group.

You can scroll over to the text column of the correct group and begin typing your label.

Or you can be in the *LIVE* screen and press *GROUP (#) TEXT (LABEL INFO) ENTER*.

I'll let you experiment but here is what I usually do.
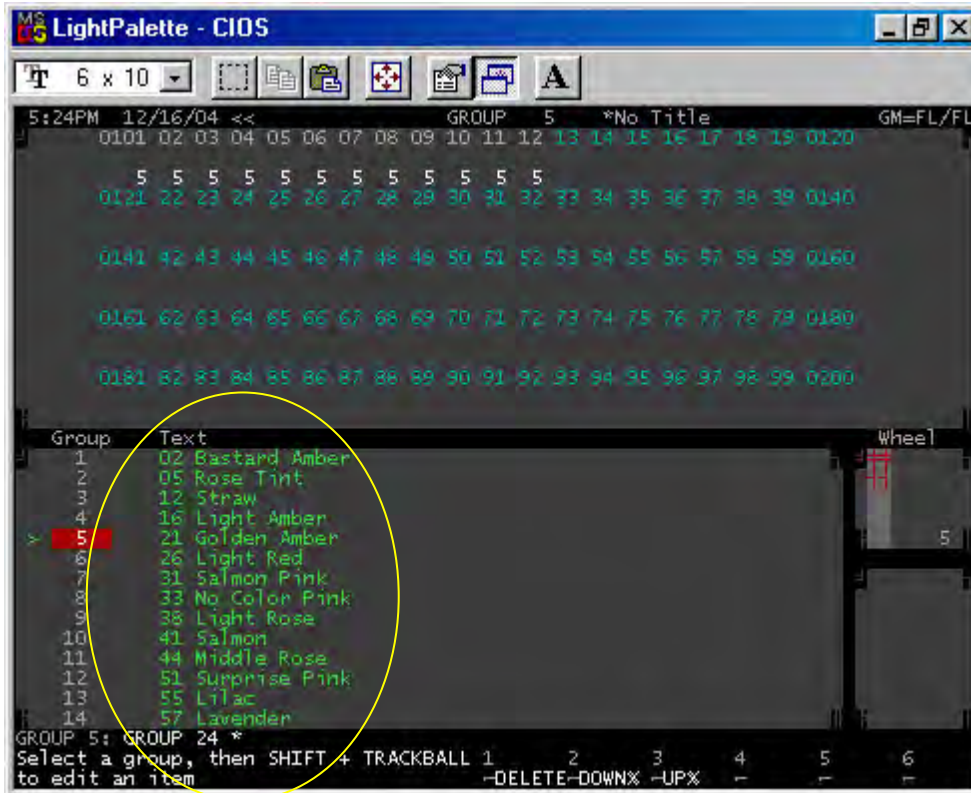
Once you have this information inputted, go LIVE and let me show you what you can do now.

LIVE

101 @ GROUP 1 ENTER

Channel 101 is at Full in Group 1.

---

102 ON @ TEXT 05 ENTER

Notice how when you started entering the label information, the text line at the bottom started text matching. When this gives you the info that you want, you can stop typing and just press enter!

This is a very user friendly way to communicate with the console. Just think about it. Not only do I not have to worry about what percent value equals what frame, I don't have to worry about what frame number holds a particular color. I can speak to the console the way that many designers would prefer to….by color.

If you choose, you could just go straight to "Rose Tint" rather than "05 Rose Tint". I prefer to limit the need for the keyboard as much as possible.

Setting Submaster Buttons for Macro Firing

This will allow the sub bump buttons to be converted over to macro buttons and each button will "fire" a macro that tells the selected channels to activate the group.

There are 3 steps to the process but the first step, recording the groups, is done.

The second step is to turn the sub bump buttons into macros.

{SUB}

SCROLL TO THE BUMP COLUMN

+ +

Note: Repeat this process until all 24 bump buttons are set to MAC
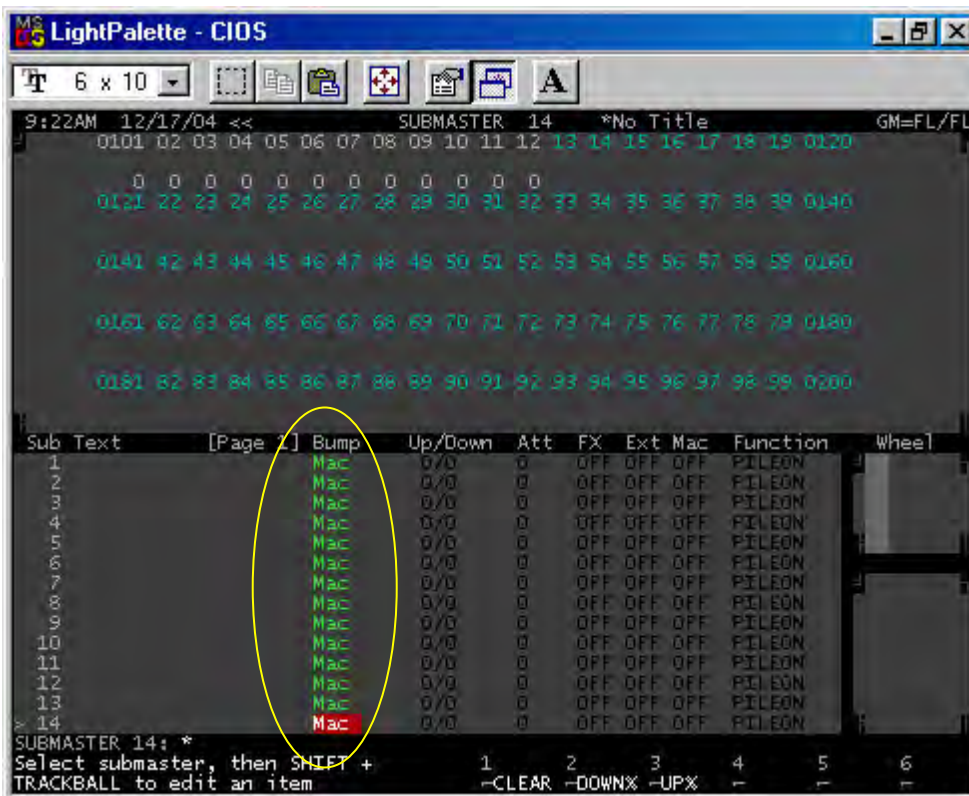
Remember that the sub bump buttons will now fire the macro that equals the sub plus 100. So the bump button for Sub 1 will fire Macro 101, Sub 2 Macro 102 and so on.

Now let's record the macros.

Writing Macros for Submaster Buttons

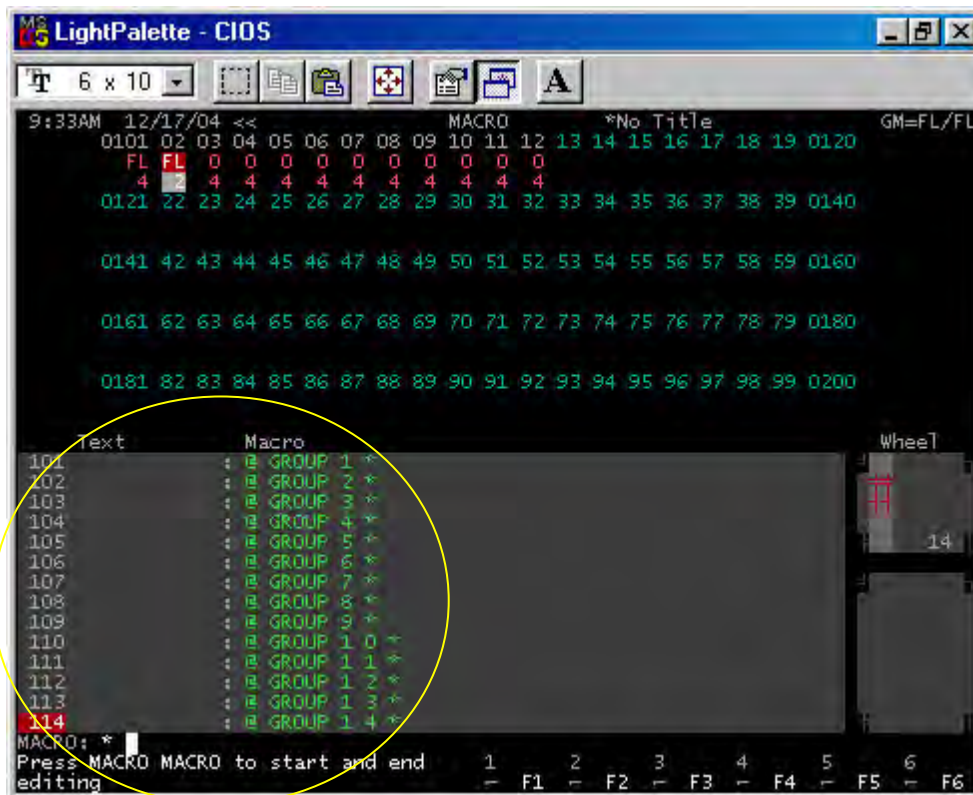This is the final step in this process. Let's go to the macro screen and write some macros!

{MACRO}

MACRO 101 ENTER ENTER

@ GROUP 1 ENTER

MACRO MACRO

Repeat this syntax increasing the macro number by one as you increase the group number by one until all 23 macros are written.

After all the macros are written, go back to *LIVE* and try them out.

The cool thing about this is it works with whatever channels are captured. So experiment and find the most efficient way for you to control scrollers. Whichever way you choose, you can't beat the intelligent way that Strand controls scrollers.

And by the way, *Auto Move While Dark* will preset your scrollers for you before they are needed. I'll let you see if you can find this one on your own.

Hint: Look in the Show Setup screen.

Summary

This completes the scroller addendum tutorial. I'm sure this didn't answer all of your questions about scroller operations. In fact, in some areas, it may have created more questions than it answered, but it will get you familiar with some of the basic programming features of the 500 series consoles and get you on your way to a more comprehensive understanding of these boards.

Good luck and good programming!