

Appendix 1

Creation of Effects (moving colors) within Elan g!

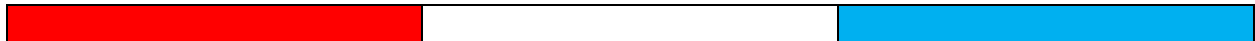
The associated Tech Note detailed the creation of 32 buttons that could represent NFL colors and when pushed could trigger custom color effects.

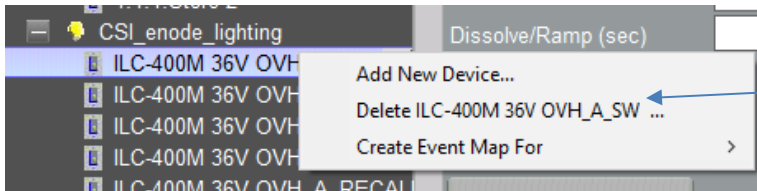
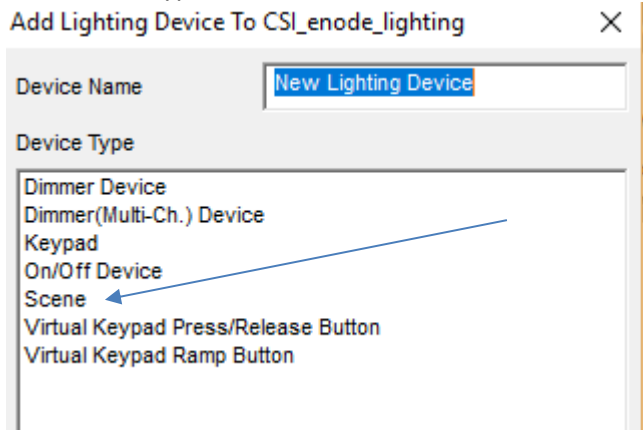
The current Converging Systems Elan Driver (V.31 can be used to create such customized effects).

The documentation below serves to summarize the steps involved in the creation of this type of macro operation

Background on creating customized Themes to be loaded into Effect 1

Determine how many “anchor” colors will be use to frame a custom effect. Specifically, if you wanted to select a (US) Patriotic theme the anchor colors would be Red, White and Blue



Step	Procedure	Detail
1	Create a new Scene Device into which the 1 st color of your new Effect will be entered (i.e. Red in this case)	<p>-Select an entry under the e-Node to which the LED controller is connected and create a new Scene Device as shown for the color Red.</p>  <p>-Select the Scene device type</p> 

-Enter the appropriate **Address** in Z/G/N format, and then

-Enter the appropriate **Command** as shown in Blue below, and then

Table 1

Scene Device Cheat Sheet			
	RGBW Device	RGB Device	Monochrome Device*
Address (Z/G/N)			
Command Entry	RGBW	RGB	
Level Entry	rrr,ggg,bbb,www	Rrr,ggg,bbb	
Dissolve/Ramp	0	0	

*Note: Effects only are implemented for RGB and RGBW devices.

-Enter the appropriate definition for that color in the VALUE color space (RGB, RGBW format)

Note: the range is 0 to 240 for each entry

-Enter a **Dissolve/Ramp Rate** of **0** to display the color quickly in this case to create the macro in the fastest time.

-Name this Device something logical such that you can include this “step’ in a macro to be created later. We have called it AmericanMode1 here.

Here is an example for the color **RED** in RGBW mode for a device with Z/G/N address of 200.2.1

You have now quickly created the 1st color that will be used in a macro below to create a customized Effect 1.

2 Now create subsequent colors that you will create identically as

Here is an example of a White created in **RGBW** mode (as well as **RGB** mode)

Note: White is a special color which we will discuss in Step 3 below. It is a surrogate for a jump instruction so if you wish **White**, enter a value for its RGB definition with at least one entry off by “1” (i.e. 240.240.239--which will be indistinguishable to anyone watching the color or effect). Typically, for RGBW,

above and name each appropriately to be included in Step # 4 below into a macro.

all values are never set to all on (i.e. 240.240.240.240) but if in the event you require all values to be full on for White, just alter one value by one and you will be safe (i.e. 240.239.240.240). **We recommend that you never set all Red, Green, Blue and White values to 240 for White for the generated color will be kind of muddy.** Instead, with RGBW ILC-400 controllers, use the alternative Color Temperature command (CCT,n) to get just the White you desire (shown below).

Lighting Device: AmericanMode2

Name	AmericanMode2
System #	86113
Device Type	Scene
Hide Device from Scheduler	No
Address (Z.G.N)	200.2.1
Command	RGB
Level	0.0.0.239
Dissolve/Ramp (sec)	0

“White” in RGB mode

Lighting Device: AmericanMode2

Name	AmericanMode2
System #	86113
Device Type	Scene
Hide Device from Scheduler	No
Address (Z.G.N)	200.2.1
Command	RGBW
Level	0.0.0.240
Dissolve/Ramp (sec)	0

White in RGBW mode

Lighting Device: AmericanMode2

Name	AmericanMode2
System #	86113
Device Type	Scene
Hide Device from Scheduler	No
Address (Z.G.N)	200.2.1
Command	CCT
Level	2700
Dissolve/Ramp (sec)	0

Better way to define White in RGBW mode

And finally, here is Blue entered as the 3rd new Scene Device

Lighting Device: AmericanMode3

Name	AmericanMode3
System #	86120
Device Type	Scene
Hide Device from Scheduler	No
Address (Z.G.N)	200.2.1
Command	RGBW
Level	0.0.240.0
Dissolve/Ramp (sec)	0

3 Finally you will need to create a special **End of Sequence** entry to include in your macro to instruct the Effect to “jump” back to the top of the stack to play all color as an infinite loop.

-Create a new Scene Device and load in a special identifier to represent the GOTO command

IMPORTANT: Note: this special GOTO command must be placed immediately after the last color that you desire to be displayed in order to instruct the system to GOTO top of list to replay sequence of colors

Depending upon the type of device, the GOTO command is different.

CS Bus Devices ILC-100c/ ILC-400C		e-Node/dmx device	
RGB Mode	RGBW Mode	RGB Mode	RGBW Mode
240.240.240	240.240.240.240	255.255.255	255.255.255.255

As an example, for normal non-dmx Converging Systems controllers here is the appropriate setup.

For **RGBW** devices (non DMX) enter

Lighting Device: AmericanModeEOF P4

Name	AmericanModeEOF P4
System #	86127
Device Type	Scene
Hide Device from Scheduler	No
Address (Z.G.N)	200.2.1
Command	RGBW
Level	240.240.240.240
Dissolve/Ramp (sec)	0

For **RGB** devices (non DMX) enter

Lighting Device: AmericanModeEOF P4	
Name	AmericanModeEOF P4
System #	86127
Device Type	Scene
Hide Device from Scheduler	No
Address (Z.G.N)	200.2.1
Command	RGB
Level	240.240.240
Dissolve/Ramp (sec)	0

For **RGB** devices (e-Node/DMX only) enter

Lighting Device: AmericanModeEOF P4	
Name	AmericanModeEOF P4
System #	86127
Device Type	Scene
Hide Device from Scheduler	No
Address (Z.G.N)	200.2.1
Command	RGB
Level	255.255.255
Dissolve/Ramp (sec)	0

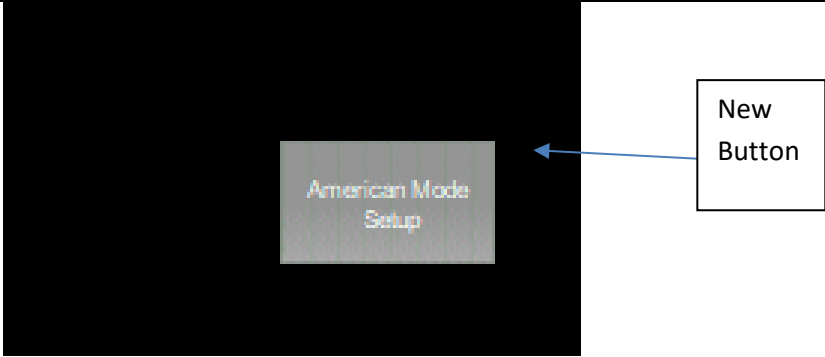
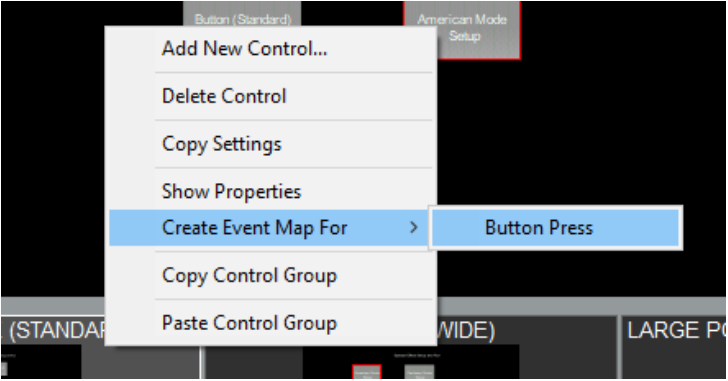
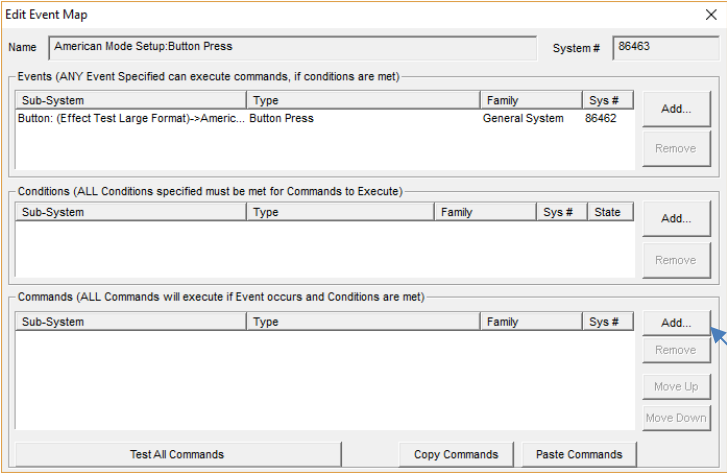
For **RGBW** devices (e- Node/DMX only) enter

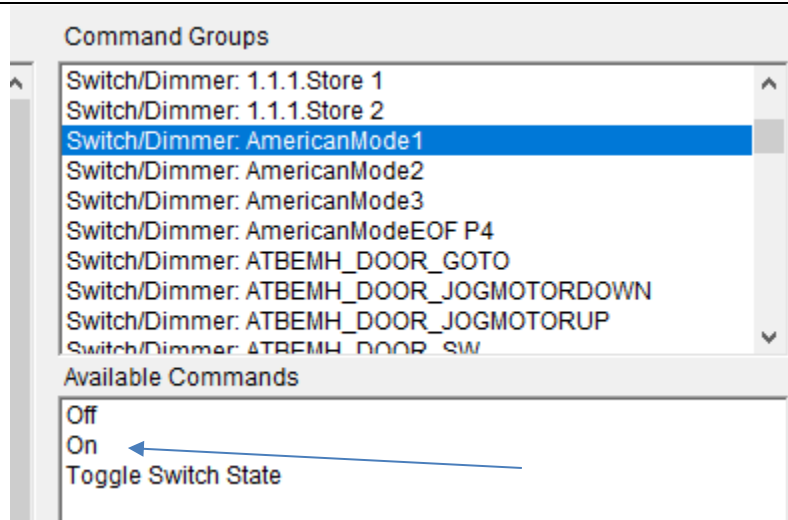
Lighting Device: AmericanModeEOF P4	
Name	AmericanModeEOF P4
System #	86127
Device Type	Scene
Hide Device from Scheduler	No
Address (Z.G.N)	200.2.1
Command	RGBW
Level	255.255.255.255
Dissolve/Ramp (sec)	0

Naming Convention: Name this device something like **End of File** to that you know that this preset is the preset that will send us a GOTO (top of stack) command and even though it will “Play” during the programming mode, it will never play again.

3 Now you are ready to create an

-Create a button that you wish to trigger this customized Effect 1

	<p>Event Map (macro) which will play back Color 1, (RED, Color 2 (White) and Color 3 (BLUE) as a sequence</p>	
<p>4</p>	<p>Right click on that button to Create an Event Map for that button</p>	
<p>5</p>	<p>Edit that Event Map as shown here</p>	<p>Edit the Event Map as shown below</p>  <p>-Add the first color of your new Sequence (AmericanMode1)</p>



-Continue adding the 2nd and 3rd color plus add the Terminator color (jump to back to the top) color

Commands (ALL Commands will execute if Event occurs and Conditions are met)

Sub-System	Type	Family	Sys #
Switch/Dimmer: AmericanMode1	On	Lighting System	86107
Switch/Dimmer: AmericanMode2	On	Lighting System	86114
Switch/Dimmer: AmericanMode3	On	Lighting System	86121
Switch/Dimmer: AmericanModeEOF P4	On	Lighting System	86128

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Now enter the action "Effect 1" that will actually cause the above colors to start cycling

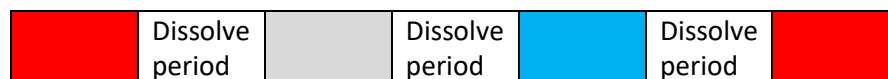
-Either create or use an existing Effect 1 Device.

Lighting Device: ILC 400C A_EFFECT1

Name	ILC 400CA_EFFECT1
System #	82160
Device Type	Scene
Hide Device from Scheduler	No
Address (Z.G.N)	200.2.1
Command	EFFECT
Level	1
Dissolve/Ramp (sec)	

Note: Make sure that the Address is properly entered in **Z/G/N** format

-Enter a **Dissolve/Ramp** rate in seconds to instruct the system how long the dissolve time between displayed colors should be set. There is one other command called **Seq Rate** that impacts how long the displayed color will be active before the dissolve rate occurs.



Note: **Seq Rate** is currently only able to be set using the Pilot or web-based Pilot app.

Properties		UID: 55
PRESET (20)		240.240.240.240
PRESET (21)		240.240.240.240
PRESET (22)		240.240.240.240
PRESET (23)		240.240.240.240
PRESET (24)		240.240.240.240
DISSOLVE (1)		1
DISSOLVE (2)		1
DISSOLVE (3)		1
DISSOLVE (4)		1
SEQRATE		1
COLOR		160.0.0
CCR		0
NOTIFY		BOTH

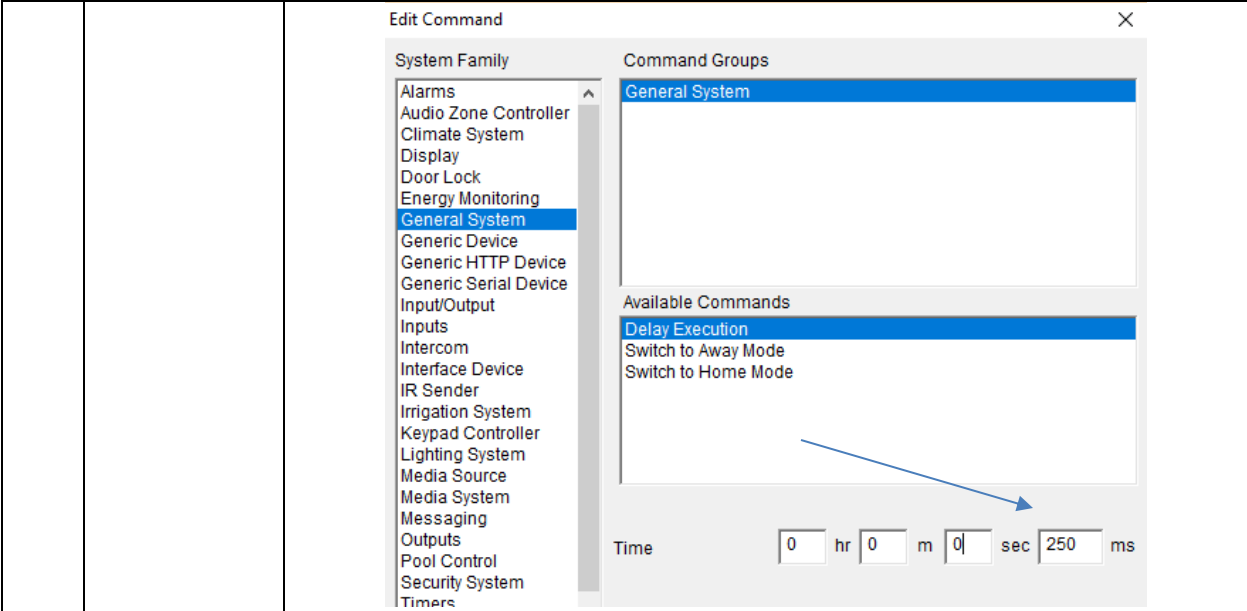
-Add that Device just created to play back Effect 1 as the next step in your Event map.

Sub-System	Type	Family	Sys #
Switch/Dimmer: AmericanMode1	On	Lighting System	86107
Switch/Dimmer: AmericanMode2	On	Lighting System	86114
Switch/Dimmer: AmericanMode3	On	Lighting System	86121
Switch/Dimmer: AmericanModeEOF P4	On	Lighting System	86128
Switch/Dimmer: ILC 4 COLOR CONTROL_E...	On	Lighting System	86389

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Finally let's enter some wait states so the macro can properly execute

-Enter a wait state after each of the commands leading up to the final Execute Effect 1 so enable the colors to stabilize before they are stored into memory. To do this, go to you event map and add the following wait sate. (set for 250 ms)



Your event map should look like this.

Commands (ALL Commands will execute if Event occurs and Conditions are met)

Sub-System	Type	Family	S...	▲	Add...
Switch/Dimmer: AmericanMode1	On	Lighting System	86...		Remove
Delay Execution	00:00:00:250	General System	1043		
Switch/Dimmer: ILC 400C A_STORE1	On	Lighting System	82...		Move Up
Switch/Dimmer: AmericanMode2	On	Lighting System	86...		
Delay Execution	00:00:00:250	General System	1043		
Switch/Dimmer: ILC 400C A_STORE2	On	Lighting System	82...	▼	Move Down
Switch/Dimmer: AmericanMode3	On	Lighting System	86...		Remove
Delay Execution	00:00:00:250	General System	1043		
Switch/Dimmer: ILC 400C A_STORE3	On	Lighting System	86...		Move Up
Switch/Dimmer: AmericanModeEOF P4	On	Lighting System	86...		
Delay Execution	00:00:00:250	General System	1043		
Switch/Dimmer: ILC 400C A_STORE4	On	Lighting System	86...	▼	Move Down
Delay Execution	00:00:00:250	General System	1043		
Switch/Dimmer: ILC 400C A_EFFECT1	On	Lighting System	82...	▼	Move Down

Test All Commands Copy Commands Paste Commands