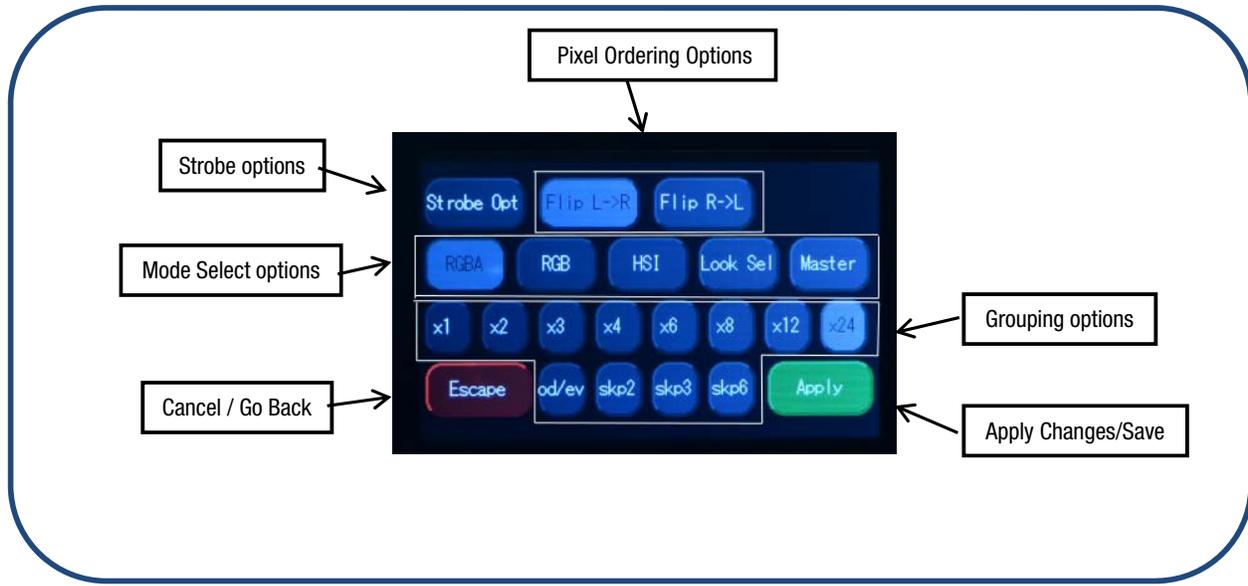


9. Mode



9.1 Mode Select Options

RGBA (Red, Green, Blue and Amber) provides 4 control channels that directly affect the intensity of each color within a group. Color is mixed by adjusting the levels of each of the four channels. The DMX footprint will be determined by the grouping option selected. White (of about 4,000K) is achieved with all channels at full. Refer to the table below for detail on grouping and DMX footprints. This mode assigns 4 DMX channels to set Red, Green, Blue and Amber levels in each cell, or group of cells.

To set the fixture to RGBA mode,

1. On the Main Menu, tap Mode
2. On the Mode screen, tap RGBA
3. Tap Apply to save or Escape to cancel

RGB (Red, Green, Blue with *Magic Amber™) gives 3 control channels directly affecting the intensity of the corresponding group. Color is mixed by adjusting the levels of the three primary colors in each group. The DMX footprint will be determined by grouping option selected. White is achieved with all channels at full including Magic Amber.

To set the RGB mode,

1. On the Main Menu, tap Mode
2. On the Mode screen, tap RGB
3. Tap Apply to save or Escape to cancel

HSI (Hue, Saturation and Intensity) gives 3 control channels to each group; 2 color channels for hue and saturation and one intensity channel. A separate definable intensity channel is particularly useful when creating intensity chases or when the grand master is used. The hue channel has 255 different colors available and the saturation channel specifies the saturation level of that color. The saturation channel is fully saturated at full. White is achieved with the intensity channel to full and the saturation channel at zero.

*Magic Amber is the term used for the unit's ability to bring in amber when mixing colors that require it.

Look Sel (Look Select) gives 1 control channel to select a preset look based on the DMX value. Refer to the table below for factory presets.

MASTER sets the fixture to output a DMX stream for control of any fixtures connected "downstream".

Color Force II™ 12		L→R			
Group Selected	Group Number(s)				
x4	1	1	1	1	1
x2	1	1	2	2	2
x1	1	2	3	4	4
Od/Ev	1	2	1	2	2

Group DMX address examples:
 Group 1: Fixture DMX address
 Group 2: Fixture DMX address + 4 (RGBA) or +3 (RGB or HSI)
 Group 3: Fixture DMX address + 8 (RGBA) or +6 (RGB or HSI)
 ...
 Group X: Fixture DMX address + (X - 1) x 4 (RGBA) or + (X - 1) x 3 (RGB or HSI)
 ...
 Group 24: Fixture DMX address + 92 (RGBA) or + 69 (RGB or HSI)

9.3 Flip Options

The starting DMX address can be selected to be on the right or left of the fixture as indicated on the display. "Left" is defined as the side where the power & data enter the fixture, "right" is the side where power and data exit. Shown below is the example of address ordering for a Color Force II™ 72 with x1 Grouping selected.

L→R	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
R→L	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1

9.4 Strobe Options

These options allow LED's to flash at different frequency, duration and density depending on the selection and application requirements. All these factors can be varied using a DMX console. Current mode on Main Screen will display sRGBA or sRGB / sHSI, where the "s" indicates a Strobe function is ON. Multiple strobe options can be selected at the same time.



OFF: Select this and the Press Apply to disable strobe option.

Strobe On: Press this button and then select Apply to enable strobe options. This will add 2 control channels at the beginning of the current channel footprint; first channel for flash frequency and second channel for flash duration. This setting will be indicated on Main menu touch screen.

ON TOP: Selecting Strobe On with On Top option will add 5 or 6 channels at the beginning of the fixture DMX footprint based on current mode selected. For RGBA – 6 extra channels and for RGB/HSI – 5 extra channels as follows: flash, frequency, flash duration, On Top strobe color. On Top color will be 3 or 4 channels depending on control mode.

RANDOM: Choosing this option LED's flashing frequency and duration can be randomized allowing unit to have a base color with strobe enabled adding another 1 extra channel for density (how may pixels are flashed at a time). Lowest density value is 1, highest is all 24 pixels.

Strobe Summary

Strobe Mode	Additional Channels	Notes
On	Frequency, Duration	Color of strobe flash determined by DMX values following control channels and Mode & Grouping selected by user
On Top	Frequency, Duration, Color	Color of strobe flash On Top determined by color selected in Additional Channels, base color determined by DMX values following and Mode & Grouping selected
Random	Frequency, Duration, Density	Color of strobe flash determined by DMX values following Additional Channels and Mode & Grouping selected by user
On Top + Random	Frequency, Duration, Density, Color	Color of strobe flash On Top determined by color selected in Additional Channels, base colour determined by DMX values following and Mode & Grouping selected

DMX Footprints - *Number of DMX Channels used in Mode/Grouping Combinations*

Color Force II™ 72												
	Strobe Off			Strobe On			Strobe on Top			Strobe Random		
Control Mode	RGBA	RGB	HSI	RGBA	RGB	HSI	RGBA	RGB	HSI	RGBA	RGB	HSI
Grouping												
x24	4	3	3	6	5	5	10	8	8	11	9	9
x12	8	6	6	10	8	8	14	11	11	15	12	12
x8	12	9	9	14	11	11	18	14	14	19	15	15
x6	16	12	12	18	14	14	22	17	17	23	18	18
x4	24	18	18	26	20	20	30	23	23	31	24	24
x3	32	24	24	34	26	26	38	29	29	29	30	30
x2	48	36	36	50	38	38	54	41	41	55	42	42
x1	96	72	72	98	74	74	102	77	77	103	78	78
Od/Ev	8	6	6	10	8	8	14	11	11	15	12	12
Skp2	12	9	9	14	11	11	18	14	14	19	15	15
Skp3	16	12	12	18	14	14	22	17	17	23	18	18
Skp6	24	18	18	26	20	20	30	23	23	31	24	24
Look Sel	1											

Color Force II™ 48												
	Strobe Off			Strobe On			Strobe on Top			Strobe Random		
Control Mode	RGBA	RGB	HSI	RGBA	RGB	HSI	RGBA	RGB	HSI	RGBA	RGB	HSI
Grouping												
X16	4	3	3	6	5	5	10	8	8	11	9	9
X8	8	6	6	10	8	8	14	11	11	15	12	12
X4	16	12	12	18	14	14	22	17	17	23	18	18
X2	32	24	24	34	26	26	38	29	29	39	30	30
x1	64	48	48	66	50	50	70	53	53	71	54	54
Od/Ev	8	6	6	10	8	8	14	11	11	15	12	12
Skp3	16	12	12	18	14	14	22	17	17	23	18	18
Skp7	32	24	24	34	26	26	38	29	29	39	30	30
Look Sel	1											

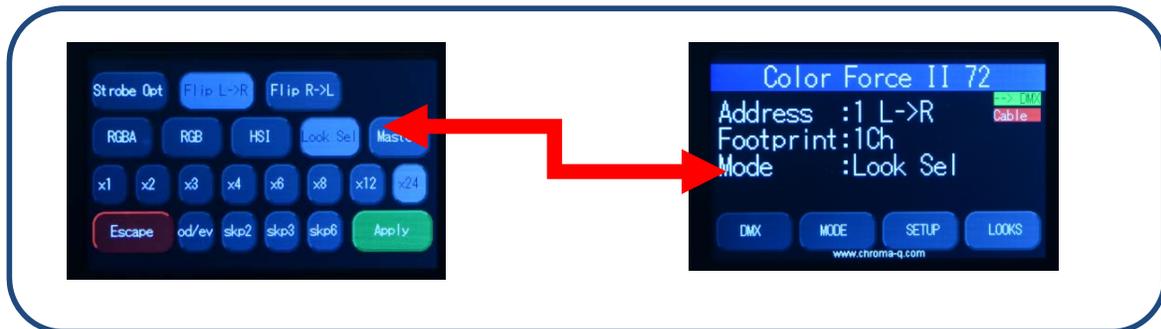
Color Force II™12												
	Strobe Off			Strobe On			Strobe on Top			Strobe Random		
Control Mode	RGBA	RGB	HSI	RGBA	RGB	HSI	RGBA	RGB	HSI	RGBA	RGB	HSI
Grouping												
X4	4	3	3	6	5	5	10	8	8	11	9	9
X2	8	6	6	10	8	8	14	11	11	15	12	12
x1	16	12	12	18	14	14	22	17	17	23	18	18
Od/Ev	8	6	6	10	8	8	14	11	11	15	12	12
Look Sel	1											

9.5 Look Select

The Color Force II™ has 31 internal preset Looks for recall using the Look Sel mode. Looks can also be used for the stand-alone Master mode, or for recall in the event of loss of DMX described elsewhere in this manual. Looks can be recorded to the internal flash memory and will be preserved on power down. Note that looks will be returned to factory default settings if a Default Reset is performed.

The Look Sel mode assigns 1 DMX channel to access the saved Looks. To access a look using the Look Sel mode,

1. From the Main Menu, tap Mode.
2. From Mode screen, tap Look Sel.
3. Tap Apply to save or Escape to cancel.
4. If enabled, the user can then select one of the stored looks using a DMX value from an external DMX console. The DMX values and associated looks are shown on the table below. Note that transitions between looks are “bumps” not fades.



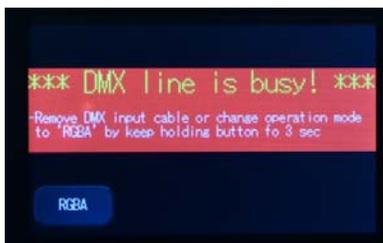
www.chroma-q.com

Color Force II™		
Channel levels and the corresponding Default Look numbers:		
Channel Level (%)	Look	Description
0	OFF	OFF
1-2	1	Red Full
3-5	2	Pink Full
6-9	3	Orange Full
10-11	4	Light Orange Full
12-15	5	Yellow Full
16-19	6	Light Yellow Full
20-22	7	Green Full
23-25	8	Light Green Full
26-27	9	Cyan Full
29-32	10	Light Cyan Full
33-35	11	Blue Full
36-38	12	Light Blue Full
39-42	13	2800 White
43-45	14	3200 White
46-48	15	4000 White
49-51	16	5600 White
52-54	17	Empty
56-58	18	Empty
59-61	19	Empty
62-64	20	Empty
65-68	21	Empty
69-71	22	Empty
72-74	23	Empty
75-78	24	Empty
79-81	25	Empty
83-85	26	Empty
86-88	27	Empty
89-91	28	Empty
92-94	29	Empty
95-97	30	Empty
98-100	31	Empty

9.6 Master Mode

Color Force II™ fixtures can operate without DMX input and can act as a standalone master control for other fixtures. Once master mode is selected, Color Force II™ fixtures will transmit DMX data so other connected units can be controlled by the master Color Force II™ fixture.

Note: The connection of a DMX console is not allowed for this mode of operation. If a DMX source connection is detected, the following screen appears:



- Remove the DMX cable.
- Change the mode to Master.

When the warning screen appears, follow the display text prompts.

Color Force II Generic DMX Map for RGBA Control Mode

Color Force II DMX Map

Mode = RGBA										
Strobe Off		Strobe On		Strobe On Top		Strobe Random		Strobe On Top + Random		
DMX		Pixel/Cell		Pixel/Cell		Pixel/Cell		Pixel/Cell		Pixel/Cell
1	R	Repetition based on Grouping Selected <<<<	Strobe Frequency		Strobe Frequency		Strobe Frequency		Strobe Frequency	
2	G		Strobe Duration		Strobe Duration		Strobe Duration		Strobe Duration	
3	B		R	Repetition based on Grouping Selected <<<<	R - Intensity Strobe		Strobe Randomization		Strobe Randomization	
4	A		G		G - Intensity Strobe		R	Repetition based on Group Selected <<<<	R - Intensity Strobe	
5		B	B - Intensity Strobe		G	G - Intensity Strobe				
6		A	A - Intensity Strobe		B	B - Intensity Strobe				
7			R	Repetition based on Grouping Selected <<<<	A - Intensity Strobe		A		A - Intensity Strobe	
8			G					R	Repetition based on Grouping Selected <<<<	
9			B					G		
10			A					B		
11							A			