## Approvals & Disclaimer



The information contained herein is offered in good faith and is believed to be accurate. However, because conditions and methods of use of our products are beyond our control, this information should not be used in substitution for customer's tests to ensure that Chroma-Q products are safe, effective, and fully satisfactory for the intended end use. Suggestions of use shall not be taken as inducements to infringe any patent. Chroma-Q sole warranty is that the product will meet the Chroma-Q sales specifications in effect at the time of shipment. Your exclusive remedy for breach of such warranty is limited to refund of purchase price or replacement of any product shown to be other than as warranted.

Chroma-Q reserves the right to change or make alteration to devices and their functionality without notice due to on-going research and development.

The Chroma-Q Studio Force has been designed specifically for the lighting industry. Regular maintenance should be performed to ensure that the products perform well in the entertainment environment.

If you experience any difficulties with any Chroma-Q products please contact your selling dealer. If your selling dealer is unable to help please contact support@chroma-q.com. If the selling dealer is unable to satisfy your servicing needs, please contact the following for full factory service:

Outside North America: North America: Tel: +44 (0)1494 446000 Tel: +1 416-255-9494 Fax: +44 (0)1494 461024 Fax: +1 416-255-3514 support@chroma-q.comsupport@chroma-q.com

For further information please visit the Chroma-Q website at www.chroma-com.

Chroma-Q is a trademark, for more information on this visit www.chroma-q.com/trademarks.

The rights and ownership of all trademarks are recognised.

# Quick Start Guide Chroma-Q<sup>®</sup> Studio Force II™ 72/48/12





For a full product manual please visit www.chroma-q.com
Part Number: CHSF2V12, CHSF2V12LR, CHSF2V12W,
CHSF2V48, CHSF2V48LR, CHSF2V48W, CHSF2V72, CHSF2V72LR, CHSF2V72W
Model: 652-1150, 652-1650, 652-1250/
641-4000, 641-4100, 641-4500 / 641-5000, 641-5100, 641-5500
Software version 1.4

#### 1. Overview

The Chroma-Q Studio Force II<sup>TM</sup> LED batten range is a powerful lineup of professional lighting industry, specifically designed for TV Broadcast and film applications but also performs particularly well in other situations demanding high quality tunable white light such as touring key lights, exhibitions, corporate events and theatre lighting.

In addition, the advanced control management technologies to evenly washing large areas, units are suitable for a wide range of, lighting applications, including key-lighting, uplighting, backlighting and wash applications, together give you a radically increased color palette, a high CRI and theatrical grade dimming, all in the same fixture.

Available in 6 ft/1.8m, 4 ft./1.2m, 1 ft./0.3m versions.

The Studio Force features built-in power supplies which can operate as a standalone unit or remotely controlled through ANSI E1.11 USITT DMX 512-A protocol, via a cable or a Lumen Radio wireless connection, when using the optional radio module.

## 2. Safety

1. This product is for professional use only. It is NOT intended for domestic or outdoor use.



- 2. The bright flash of light during power-up and continuous strobe effect may cause epileptic seizure.
- 3. This product must be used with safety cable.

## 3. Cabling

The Studio Force II™ use Neutrik powerCon TRUE1 connectors for power input and through. The DMX control data input and through connections from an external control console are via XLR 5-pin connectors. The chassis are ground bonded.

Note: The maximum number of Studio Force 72 fixtures running off a single power input cable is 2 at 120V AC or 4 at 240V AC. The maximum number of Studio Force 48 fixtures running off a single power input cable is 3 at 120V AC or 6 at 240V AC. The maximum number of Studio Force 12 fixtures running off a single power input cable is 12 at 120V AC or 22 at 240V AC. Please refer to ANSI and AWG standards for the maximum data and power cable lengths.

## 4. Mounting

The Studio Force IITM are equipped with built-in adjustable mounting brackets for floor, wall and truss mounting applications. Use the pair of quick release levers for easy tilt adjustment. Secure the fixture with a safety bond through the fixing hold that is built into the end plates of the fixture.

#### 5. Orientation

The Studio Force II<sup>TM</sup> are using symmetrical lenses and can be used in any orientation.

## 6. Cvc & Border Lens

"Cyc Lens" and "Border Lens" are slide-in optical accessories available to adjust the light output. An accessory slot is available for locking. Spring Plungers are pre-installed at the far ends of both accessory slots to lock in-place the slide-in panels. The height of the spring plungers are preset and fixed with no need for further adjustment.

#### 7. Control

The control functions of the Studio Force 72, 48 & 12 are accessed through the touchscreen display on the rear of the fixture. For more details on all of the settings, please refer to the user manual located on the Chroma-Q website: http://www.chroma-q.com/support/downloads.asp

A Focus button is provided on the back of the fixture to turn the fixture on full for focusing. Press the button a second time to return to normal operation.

From the Home/Main Menu, press one of the four buttons located at the bottom of the screen to adjust the user settings.

#### → DMX

- 1. To set the DMX start address, press DMX from the home screen.
- 2. Enter the DMX start address using the numeric buttons.
- 3. Press Apply to save.

## \_\_\_ MODE

There are 5 DMX control modes featuring and 4 grouping options to maximize your creative control. Access and select control modes and grouping by pressing the Mode button from the Main Menu. Press Apply once you have selected the settings for your show.

- 1. Press the Mode button on the Main Menu.
- 2. Select your control mode: RGBW, RGB, KHI, HSI, Cine-Q, Mode Options
- 3. Select your Grouping (X1, X4, All, od/ev)
- 4. Set the options such as the extra control channel
- 5. Press Apply to save the settings.

#### \_\_\_ SETUP

Press Setup to access the technical settings for the fixture. From the Setup screen, you can set and/or view the following parameters:

**DMX Data:** View the DMX data being received relevant to the fixture.

Fan Speed: Set the fan mode to Quiet. Studio. Live or Live Quiet

Rotate Display: Rotates the display.

Frequency: Allows setting of the PWM frequency from 750Hz to 24kHz. Note that lower PWMs result in smoother fades

**DMX Lost:** Selects what happens when the control signal is lost: Hold last look. Off, or plays back a prerecorded Look.

Lock: Locks the screen.

**Reset:** Provides for fixture processor reset to factory, or user recorded settings.

**Upload Engine**: Provides access to upload software revisions for the light engines.

**Fw Version**: Displays installed versions of processor and light engine firmware.

**DMX Source:** Select whether DMX data is being read from a wired or wireless source.

**Eng Temp**: Displays the light engine temperatures.

Note: Always remember to press Apply to store the settings

#### \_\_\_ LOOKS

From the Looks screen you can record and playback looks.

## **Factory Default Settings**

	SFII 72	SFII 48	SFII 12
DMX	1	1	1
Foot Print	3ch (1-3)	3ch (1-3)	3ch (1-3)
Mode	KHI	KHI	KHI
Lock	Disabled	Disabled	Disabled
Pixels	All	All	All
DMX Lost	Last data	Last data	Last data
Fan Speed	Live	Live	Live
Frequency	750Hz	750Hz	750Hz
Reset	Default	Default	Default
Legacy HSi	Disabled	Disabled	Disabled
Flip	L→R	L→R	L→R
Cine-Q 8b	Enabled	Enabled	Enabled

## 8. Grouping Options

Studio Force II<sup>TM</sup> offers a powerful, wide variety of grouping options for the individual cells (or pixels) within each fixture.

Grouping & DMX Addressing:

Group	ing	ing: Studio Force II <sup>™</sup> 72						Flip: L→R																
Group Selected		Group Number(s)																						
All	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
х4	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6
x1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Od/Ev	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2

Studio Force II <sup>™</sup> 12	L→R						
Group Selected	Group Number(s)						
All	1	1	1	1			
x1	1	2	3	4			
Od/Ev	1	2	1	2			

Grouping:	Grouping: Studio Force II <sup>™</sup> 48				Fli	Flip: L→R										
Group Selected		Group Number(s)														
All	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
x4	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4
x1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Od/Ev	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2

Grouping mode			of individual ce	ells control
		Studio Force II 12	Studio Force II 48	Studio Force II 72
All	Entire fixture as one	1	1	1
X4	Group by 4 cells	1	4	6
Odd/Even	Fixture is alternating cells	2	2	2
Single	Individual cell control	4	16	24

## 9. DMX Map

RGBW	Value	Function	Fade Status	Default Value
1		Red		
'	0 - 255	Minimum → Maximum Intensity	Fade	0
2		Green		
2	0 - 255	Minimum → Maximum Intensity	Fade	0
3		Blue		
3	0 - 255	Minimum → Maximum Intensity	Fade	0
4		White		
4	0 - 255	Minimum → Maximum Intensity	Fade	0
5**		Extended Controls		
5""	0 - 255	See Control channel table for details	Snap	0

**Note:** Channel 1 through 4 will repeat for each cell control according to the selected grouping mode

Control parameter is only present when Extended mode is enabled
 Control parameter is always last, its position will change according the grouping mode.
 For example, in odd/even grouping mode, the control parameter would be on 9

RGB	Value	Function	Fade Status	Default Value
		Red		
1	0 - 255	Minimum → Maximum Intensity	Fade	0
		Green		
2	0 - 255	Minimum → Maximum Intensity	Fade	0
		Blue		
3	0 - 255	Minimum → Maximum Intensity	Fade	0
		Extended Controls		
4**	0 - 255	See Control channel table for details	Snap	0

**Note:** Channel 1 through 3 will repeat for each cell control according to the selected grouping mode

\*\* Control parameter is only present when Extended mode is enabled Control parameter is always last, its position will change according the grouping mode.

For example, in odd/even grouping mode, the control parameter would be on 7

HSi	Value	Function	Fade Status	Default Value
		Hue*		
1	0 - 255	Color Spectrum $0 \rightarrow 360 \text{ Red} \rightarrow \text{Red}$	Fade	0
2		Saturation		
	0 - 255	Fade	0	
3		Intensity		
3	0 - 255	Minimum → Maximum Intensity	Fade	0
		Extended Controls		
4**	0 - 255	See Control channel table for details	Snap	0

**Note:** Channel 1 through 3 will repeat for each cell control according to the selected grouping mode

- \* With Legacy hue mode enabled, the Hue channel is from Blue to Blue
- Control parameter is only present when Extended mode is enabled Control parameter is always last, its position will change according the grouping mode.

For example, in odd/even grouping mode, the control parameter would be on 7

KHi	Value	Function	Fade Status	Default Value
		Kelvin		
	0 - 255	Warm → Cold		
	0	2800K	Fade	
1	64	3200K		128
	128	4400K		120
	192	5600K		
	255			
2		Hue		
	0 - 255	Minus Green → Plus Green	Fade	128
3		Intensity		
J	0 - 255	Minimum → Maximum Intensity	Fade	0
		Extended Controls		
4**	0 - 255	* See Control channel table for details	Snap	0

**Note:** Channel 1 through 3 will repeat for each cell control according to the selected grouping mode

\*\* Control parameter is only present when Extended mode is enabled Control parameter is always last, its position will change according the grouping mode.

For example, in odd/even grouping mode, the control parameter would be on 7

Cine-Q i- KH-RGBW	Value	Function	Fade Status	Default Value
1		Intensity		
1	0 - 255	Minimum → Maximum Intensity	Fade	0
		Kelvin		
	0 - 255	Warm → Cold		
	0	2800K		
2	64	3200K	Fade	128
	128	4400K	1 aue	120
	192	5600K		
	255	6500K		
3		Hue (Tint)		
3	0 - 255	Minus Green → Plus Green	Fade	128
4		Red		
4	0 - 255	Minimum → Maximum Intensity	Fade	0
5		Green		
ວ	0 - 255	Minimum → Maximum Intensity	Fade	0
6		Blue		
0	0 - 255	Minimum → Maximum Intensity	Fade	0
7		White		
,	0 - 255	Minimum → Maximum Intensity	Fade	0
8		Q-Fade		
Ö	0 - 255	$KH \rightarrow RGBW$	Fade	0
9**		Extended Controls		
9	0 - 255	* See Control channel table for details	Snap	0

Note: Channel 1 through 8 will repeat for each cell control according to the selected grouping mode

\* Control parameter is only present when Extended mode is enabled Control parameter is always last, its position will change according the grouping mode. For example, in odd/even grouping mode, the control parameter would be on 17

Cine-Q i-KH- RGBW 16bit	Value	Function	Fade Status	Default Value	
1		Intensity			
ı	0 - 255	Minimum → Maximum Intensity	Fade	0	
		Kelvin			
0 - 255 0 64 128 192 255		Warm → Cold 2800K 3200K 4400K 5600K 6500K	Fade	128	
0		Hue (Tint)			
3	0 - 255	Minus Green → Plus Green	Fade	128	
4		Red			
4	0 - 255	Minimum → Maximum Intensity	Fade	0	
5		Green			
Э	0 - 255	Minimum → Maximum Intensity	Fade	0	
6		Blue			
O	0 - 255	Minimum → Maximum Intensity	Fade	0	
7		White			
,	0 - 255	Minimum → Maximum Intensity	Fade	0	
8		Q-Fade (msb)			
0	0 - 65535	$KH \rightarrow RGBW$	Fade	0	
9	0 - 0000	Q-Fade (Isb)	i auc		
9		$KH \rightarrow RGBW$			
10**		Extended Controls			
10	0 - 255	* See Control channel table for details	Snap	0	

**Note:** Channel 1 through 9 will repeat for each cell control according to the selected grouping mode

\*\* Control parameter is only present when Extended mode is enabled Control parameter is always last, its position will change according the grouping mode.

For example, in odd/even grouping mode, the control parameter would be on 19

## **Further Information**

Please refer to the Chroma-Q Studio Force II<sup>TM</sup> manual for more detailed information. A copy of the manual can be found at the Chroma-Q website – <a href="http://www.chroma-q.com/support/downloads.asp">http://www.chroma-q.com/support/downloads.asp</a>

Extended Control Channel	Default	From	То	Description
Function Name				
No Function		0	2	
Reserved		3	40	Reserved for future feature
Fan Speed Off (if possible)		41	42	Fan will never start, fixture output can be reduced or limited
Fan Speed Low		43	44	Slow fan speed (fixture output can be reduced or limited)
Fixed fan speed = full		45	46	Maximum speed on fan
Fixed fan speed = full, regulated light output intensity	X	47	48	Maximum speed on fan but only when needed
Reserved		49	70	Reserved for future feature
PWM 750		71	72	Set PMW rate
PWM 1500		73	74	Set PMW rate
PWM 3000		75	76	Set PMW rate
PWM 6000	X	77	78	Set PMW rate
PWM 12000		79	80	Set PMW rate
PWM 24000		81	82	Set PMW rate
Reserved		83	150	Reserved for future feature
DMX Lost default Fixture stay to the last state	Х	151	152	
DMX Lost default Fixture goes black		153	154	
Reserved		155	156	Reserved for future feature
DMX Lost default fixture to selected look		157	158	
Reserved		159	248	Reserved for future feature
No Function		249	255	

Note: Values must be held for 5 second before its function is activated