

STUDIO COLOR®

Automated Wash Luminaire Quick Reference Card

Power Requirements

The following items must be used to provide power to Studio Color:

- 12 AWG stranded THHN or equivalent if hard wired
- Branch Circuit Protection (circuit breaker)
- 20 A, high-surge thermal breaker (GE THQB, THQL, or equivalent)

	575-S	575-M
Voltage	Number of Fixtures per 20 A Breaker	
110	3	n/a
208	5	3
230	6	4

Note: *do not use magnetic type circuit breakers.*

Electrical Specifications

575-S
 Rated voltage: 100-230 V.A.C.¹
 Rated frequency: 50/60 Hz
 Rated current: 7.0 A @ 100 V/60 Hz,
 3.0 A @ 230 V/50 Hz

Rated power: 700 W max

575-M
 Rated voltage: 208/230 V.A.C.¹
 Rated frequency: 50/60 Hz
 Rated current: 3.2 A @ 208 V/60 Hz,
 3.0 A @ 230 V/50 Hz

Rated power: 700 W max

¹Note: *fixtures can operate with international 200, 240 and 250 V.A.C. supplies. 575-M fixtures must be re-tapped for some voltages. To re-tap 575-M fixtures, contact High End Systems Service.*

Communication

Protocol: USITT DMX-512
 Maximum load: 32 fixtures per DMX link
 Required channels: 16
 Termination: 120 ohm

Truss Mounting

To mount the fixture on a truss, you will need the following equipment:

- (2) Safety cables
- (2) Cheeseborough clamps (recommended) or other mounting hardware

Complete the following procedure to mount the fixture to a truss:

1. Lay the fixture on its side and attach the mounting hardware to the center holes on the base. Refer to Figure 1.

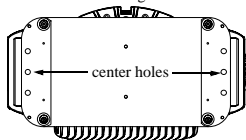


Figure 1. Attaching Mounting Hardware

2. Install the fixture on the truss.
3. Loop the safety cables through an outer hole on the base of the unit, around the handle, and out the other outer hole. Refer to Figure 2.

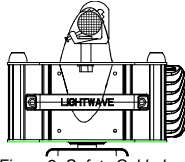


Figure 2. Safety Cable Installation

Setting the Starting Channel by DMX Channel or Fixture Number

1. Hold <MENU> until the display changes to **A d d R .**
2. Using the up and down buttons, scroll down to the **S E T** field and press <ENTER>.
3. Using the up and down buttons, scroll down to the **C H N L** field and press <ENTER>.
4. Using the up and down buttons, select either **A d d R .** (fixture number) or **d M X** (DMX channel) and press <ENTER>.

Setting the Fixture's Starting Channel

1. Hold <MENU> until the display changes to **A d d R .** Press <ENTER> to edit the address field.
2. Using the up and down buttons, set a starting channel. The display will flash when the value is different from the stored value.
3. Press <ENTER> to store the appropriate channel. The display will stop flashing.

Note: *if <ENTER> is not pressed, the unit will not store the channel.*

Setting Display Output

1. Hold <MENU> until the display changes to **A d d R .**
2. Using the up and down buttons, scroll down to the **S E T** field and press <ENTER>.
3. Using the up and down buttons, scroll down to the **d S P L** field and press <ENTER>.
4. Using the up and down buttons, select either **O N**, **O F F**, or **d I M** and press <ENTER>.

Cross-Loading Fixtures

1. Disconnect the data cable between controller and the first fixture.
2. Hold <MENU> until the display changes to **A d d R .**
3. Using the up and down buttons, scroll down to the **M O d E** field and press <ENTER>.
4. Using the up and down buttons, scroll down to the **X L d** field and press <ENTER>. The fixture will cross-load its software version to all connected fixtures on the link.

Viewing Lamp Hours†

1. Hold <MENU> until the display changes to **A d d R .**
2. Using the up and down buttons, scroll down to the **I N F O** field and press <ENTER>. The display will indicate **L / H R .**
3. Press <ENTER> to enter the field and display the lamp hours.

Resetting Lamp Hours†

1. Hold <MENU> until the display changes to **A d d R .**
2. Using the up and down buttons, scroll down to the **I N F O** field and press <ENTER>.
3. Using the up and down buttons, scroll down to the **L / R S** field and hold down <ENTER> until the lamp hours reset to **0 0 0 0 .**

Note: *resetting lamp hours automatically resets lamp strikes.*

Viewing Fixture Hours

1. Hold <MENU> until the display changes to **A d d R .**
2. Using the up and down buttons, scroll down to the **I N F O** field and press <ENTER>.
3. Using the up and down buttons, scroll down to the **F / H R** field and press <ENTER>. The fixture will display the fixture hours.

Resetting Fixture Hours

1. Hold <MENU> until the display changes to **A d d R .**
2. Using the up and down buttons, scroll down to the **I N F O** field and press <ENTER>.
3. Using the up and down buttons, scroll down to the **F / R S** field and hold down <ENTER> until the fixture hours reset to **0 0 0 0 .**

Performing Self Tests

1. Hold <MENU> until the display changes to **A d d R .**
2. Using the up and down buttons, scroll down to the **T E S T** field and press <ENTER>.
3. Using the up and down buttons, scroll to the desired test and press <ENTER>. The fixture will perform the desired test.
4. To exit the test in progress, press <MENU>.

Viewing DMX Data By Channel Number

1. Hold <MENU> until the display changes to **A d d R .**
2. Using the up and down buttons, scroll down to the **I N F O** field and press the <ENTER>.
3. Using the up and down buttons, scroll down to the **d M X** field and press <ENTER>.
4. Using the up and down buttons, scroll down to the **d A T A** field and press <ENTER>.
5. Using the up and down buttons, scroll to the desired channel and press <ENTER> to view the DMX value.

Inverting or Swapping Pan and Tilt

1. Hold <MENU> until the display changes to **A d d R .**
2. Using the up and down buttons, scroll down to the **S E T** field and press <ENTER>.
3. Using the up and down buttons, scroll to **P / I N** (pan invert), **T / I N** (tilt invert), or **S W A P** (swap pan and tilt) and press <ENTER>.

†Available only on the 575-S.

DMX Control

Studio Color may be controlled by either by 8- or 16-bit DMX controllers. Use the following table to control Studio Color functions.

DMX Control

Chan.	Function	Notes	DMX	Fader %
1	Pan MSB	<i>coarse positioning, 8 bit; 8-bit controllers use only high byte</i>	0-255	0-100%
2	Pan LSB	<i>fine positioning</i>	0-255	0-100%
3	Tilt MSB	<i>coarse positioning, 8 bit; 8-bit controllers use only high byte</i>	0-255	0-100%
4	Tilt LSB	<i>fine positioning</i>	0-255	0-100%
5	Color functions	<i>default- color wheel continuous F1- allows the color mixing wheels to make two complete rotations F2- locks all motors to MSpeed F3- forw. color spins/ color mix sequences F4- revs. color spins/ color mix random F5- color wheel color lock and quick path</i> default F3 0 0% F4 16 8% F5 32 14% F1 48 20% F1 and F3 64 26% F1 and F4 80 33% F1 and F5 96 39% F2 112 45% F2 and F3 128 51% F2 and F4 144 58% F2 and F5 160 64% F1 and F2 176 70% F1, F2, and F3 192 76% F1, F2, and F4 208 83% F1, F2, and F5 224 89% 240 95%		

DMX Control

Chan.	Function	Notes	DMX	Fader %
6	Color wheel	<i>default- continuously variable pos 0 - open pos 1 - CTO pos 2 - pink pos 3 - magenta pos 4 - red pos 5 - aqua</i> <i>F3- variable forward spin/color sequences spin stop spin forward slowest spin forward fastest color seq. slowest color seq. fastest</i> <i>F4- variable reverse spin/color random spin stop spin reverse slowest spin reverse fastest color random slowest color random fastest</i> <i>F5- color lock and quickest path pos 0 - open pos 1 - CTO pos 2 - pink pos 3 - magenta pos 4 - red pos 5 - aqua</i>	0 & 255 44 86 128 170 213 0-3 4 127 128 255 0-3 4 127 128 255 0-43 44-85 86-127 128-169 170-212 213-255	0 & 100% 17% 34% 50% 66% 83% 0-1% 2% 48% 50% 100% 0-1% 2% 48% 50% 100% 0-17% 18-33% 34-50% 51-66% 67-83% 84-100%
7	Cyan mix	<i>red subtractive cyan in cyan out</i>	0 255	0% 100%
8	Magenta mix	<i>green subtractive magenta in magenta out</i>	0 255	0% 100%
9	Yellow mix	<i>blue subtractive yellow in yellow out</i>	0 255	0% 100%

DMX Control

Chan.	Function	Notes	DMX	Fader %
10	Lens wheel	<i>Full rotation, continuously variable open wide angle filter narrow horizontal shaping center axis wide vertical shaping center axis</i>	0 & 255 64 128 192	0 & 100% 25% 50% 75%
11	Frost wheel	<i>full rotation, continuously variable open frost narrow vertical shaping center axis wide horizontal shaping center axis</i>	0 & 255 64 128 192	0 & 100% 25% 50% 75%
12	Shutter	<i>closed strobe slow strobe fast random strobe-low saturation random strobe-high saturation open</i>	0-7 8 127 128 247 248-255	0-2% 3% 49% 50% 96% 97-100%
13	Dim	<i>closed open</i>	0 255	0% 100%
14	MSpeed	<i>movement speed controller cross-fade slowest fastest</i>	0-3 4 255	0-1% 2% 100%
15	Control ¹	<i>safe home shutdown²</i>	0 64 128	0% 25% 50%
16	Checksum	<i>set to default value (00)</i>	00	0%

¹Note: the shutter must be closed and the value sent for 0.5 seconds

²Note: available only on the 575-S.