LITEDIMMER™ STUDIO SERIES

STUDIO 5X8V2

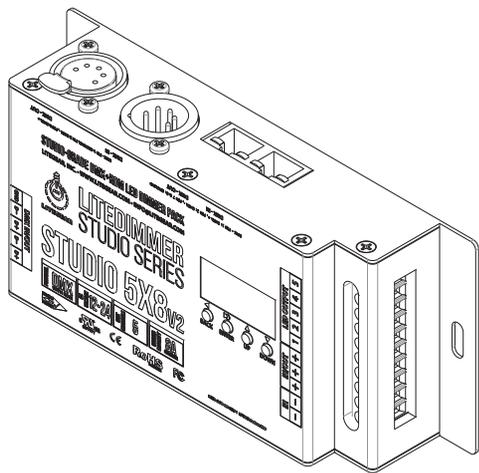| LiteRibbon, LiteMat, or LiteTile	Recommended DMX Decoding Profile*	A	B	C	D	E	F
Single	dP1:1 or dP2:1	CH1+, CH2+, CH3+, CH4+, CH5+	CH1-	CH2-	CH3-	CH4-	CH5-
Hybrid	dP3:1 or dP3:2	TUN1+, DAY1+, TUN2+, DAY2+	TUN1-	DAY1-	TUN2-	DAY2-	
RGB	dP4:1 or dP4:2	R1+, G1+, B1+	R1-	G1-	B1-		
RGB(A/W) + Single	dP6:5 or dP7:5	R1+, G1+, B1+,A1/W1+	R1-	G1-	B1-	A1-/W1-	
RGBA + W	dP6:5 or dP7:5	R1+, G1+, B1+, A1+, W1+	R1-	G1-	B1-	A1-	W1-

ABOUT LITEDIMMER STUDIO 5X8V2
The 5x8 belongs to the LiteDimmer Studio family, making it one of the most advanced DMX-controlled LiteDimmers available. A 5-channel unit with 8-amps max. per channel, the 5x8 has adjustable PWM frequencies, 8 or 16 bit DMX operation, selectable dimmer curves, and specialized software modes that allow for true cinema and TV-style action. The 5x8 works best with LiteGear LED products.

Features:
- Single, Hybrid, RGB+Hybrid, and RGB(A/W)+Single Modes
- DMX Control (run1)
- Test Operation (run2)
- Adjustable PWM Frequency (5~30 kHz)
- Flicker-Free
- Variable Dimmer Response (Gamma) Curve
- 8-bit and 16-bit Operation
- RDM-Capable
- Ultra Capacity (32A Continuous; 40A Max.)

POWER REQUIREMENTS
Capable of taking 12-24 VDC, make sure power supply voltage matches load voltage.

LOAD REQUIREMENTS
Recommended use with LiteGear LED products for best results, but dimmer can be used with other brands. Make sure load and power supply voltage match.

CONNECTING POWER AND LOAD
Connect power supply with bare wire into the "Input." Make sure positives line up. Connect load using bare wire as shown below.

See Image below for reference.
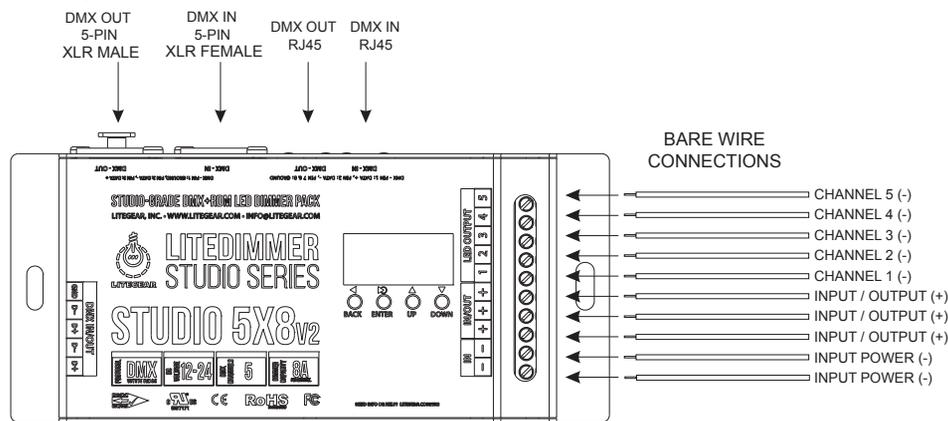
Dimmer Navigation:
- [up] and [down] scroll through options
- [enter] opens menu options
- [back] selects menu options (one exception to this rule: see "*Activating Chase Sequences*"

run1 vs run2
The Studio 5x8 operates with DMX control. A test function is included to allow for LED output during the LiteRibbon installation process without the need for DMX signal. DMX operation is referred to as run1 on the display while the test function is run2. The default for the dimmer is run1, however depending on previous use it may be set to run2 upon start up.

Switching Between run1 and run2:
1. Press [enter] on screen "run1".
2. "run1" begins flashing.
3. Press either [up] or [down] button.
4. "run2" appears on screen.
5. Press [back] to lock in selection.
6. Cycle power.
7. Dimmer now set to "run2".
8. When dimmer powers back on run2 will appear as the first screen.
9. Perform same procedure to set back to "run1" (*first screen for run1 is A001*)

Factory Reset:
1. Hold [back] and [enter] buttons down for about 5 seconds, or until the screen flickers and screen resets to "A001"
2. Dimmer is now reset

run2:
1. Connect the LED load
2. Provide DC power
3. "A001" appears on the screen
4. Press down arrow once to find "run1" screen
5. Press [enter]
6. Press [down] to find "run2" screen
7. Press [back]
8. Cycle power
9. Device should restart with screen "run2"
10. Device now in run2

Chase Sequence: (run2)
A single chase sequence with the following sequence is included to troubleshoot and assist set up:
a. Dimmer Channel 1 (fade in → fade out)
b. Dimmer Channel 2 (fade in → fade out)
c. Dimmer Channel 3 (fade in → fade out)
d. Dimmer Channel 4 (fade in → fade out)
e. Dimmer Channel 5 (fade in → fade out)
f. All Dimmer Channels (fade in → fade out)
This sequence will repeat until you choose to stop running the chase sequence

Activating Chase Sequence:
1. Press [up] or [down] to navigate to screen "CHA5"
2. Press [enter]
3. Chase sequence will run and repeat
4. Press [back] to exit chase sequence

Setting Chase Sequence Speed:
1. Press [up] or [down] to navigate to screen "SP##"
2. Press [enter] "SP##" will begin flashing
3. Use [up] or [down] arrows to select desired speed
   a. SP01 = slowest
   b. SP09 = fastest
4. Press [back] to confirm selection

Changing Channel Intensity: (run2)
There are 5 channels, 1 - ##, 2 - ##, 3 - ##, 4 - ##, 5 - ##.
Each channel has its own intensity settings: 0% (00) to 100% (FL)
1. Press [up] or [down] to find desired channel
2. Press [enter] screen will start flashing
3. Use [up] and [down] buttons to select desired intensity
4. Press [back] to lock in selection
5. Press [up] or [down] arrow to find the next channel you need to adjust
6. Repeat steps 2 - 4 per channel

run1:
1. Connect dimmer to DMX signal*
2. Set DMX Master intensity to 100%, set all other channels to 0%
3. Provide DC power

*Set up of DMX not covered here. Please see respective manuals for the devices you are using.

Supported RDM Commands:
DISC_UNIQUE_BRANCH
DISC_MUTE
DISC_UN_MUTE
DEVICE_INFO
DMX_START_ADDRESS
IDENTIFY_DEVICE
SOFTWARE_VERSION_LABEL
DMX_PERSONALITY
DMX_PERSONALITY_DESCRIPTION
SLOT_INFO
SLOT_DESCRIPTION
MANUFACTURER_LABEL
SUPPORTED_PARAMETERS

DMX CHANNEL ASSIGNMENT SETTING run1:

Channel	Bit Rate	# of DMX Addresses	Description
CH01	8-bit	1	The outputs of all 5 dimmer channels are paralleled and controlled by one (1) DMX address
CH05 (Default)	8-bit 16-bit	5 (8-bit) 10 (16-bit)	The outputs of all 5 dimmer channels are discrete and controlled by as few as 5 and as many as 10 DMX addresses

DMX Decoding Profiles: run1

Changing DMX Decoding Profiles:
1. Start at screen "A001" - usually the default screen for dimmer
2. Use [up] or [down] to find screen "dP#, #"
3. Press [enter], display begins flashing
4. Press [up] or [down] to navigate through profile options
5. Press [back] to confirm profile selection
6. Dimmer now set to selected profile

CH01: (*see "Changing Channel Intensity"*)

Profile	Bit Rate	# of DMX Addresses	Description
dP 1.1 (Default)	8-bit	1	Recommended LiteRibbon: Single Assumes DMX start address of A001 Maps all dimmer channels to 1 DMX address DMX Address 1 controls Dimmer Channel 1 - 5

CH05: (*see "Changing Channel Intensity"*)

| Profile	Bit Rate	# of DMX Addresses	Description
dP 1.1 (Default)	8-bit	1	Recommended LiteRibbon: Single Assumes DMX start address of A001 Maps all dimmer channels to 1 DMX address DMX Address 1 controls Dimmer Channel 1 - 5
dP 2.1	16-bit	10	Recommended LiteRibbon: Single Recommended Adapter: Phoenix 7 Male Provides 2 to 1 DMX address mapping using 2 DMX addresses per 1 Dimmer Channel DMX Address 1 = Dimmer Channel 1 (Coarse) DMX Address 2 = Dimmer Channel 1 (Fine) DMX Address 3 = Dimmer Channel 2 (Coarse) DMX Address 4 = Dimmer Channel 2 (Fine) DMX Address 5 = Dimmer Channel 3 (Coarse) DMX Address 6 = Dimmer Channel 3 (Fine) DMX Address 7 = Dimmer Channel 4 (Coarse) DMX Address 8 = Dimmer Channel 4 (Fine) DMX Address 9 = Dimmer Channel 5 (Coarse) DMX Address 10 = Dimmer Channel 5 (Fine)
dP 3.1	8-bit	3	Recommended LiteRibbon: Hybrid Allows control of 1 strip of Hybrid Ribbon (Circuit 1) DMX Address 1 = Master Intensity DMX Address 2 = Tungsten LEDS (Channels 1 and 3) DMX Address 3 = Daylite LEDS (Channels 2 and 4)
dP 3.2	8-bit	6	Recommended LiteRibbon: Hybrid Allows control of 2 strips of Hybrid Ribbon (Circuit 1, Circuit 2) DMX Address 1 = Master Intensity, Circuit 1 DMX Address 2 = Tungsten LEDS C1 CH1 DMX Address 3 = Daylite LEDS C1 CH2 DMX Address 4 = Master Intensity, Circuit 2 DMX Address 5 = Tungsten LEDS C2 CH3 DMX Address 6 = Daylite LEDS C2 CH4 No output over CH5
dP 4.1	8-bit	7	Recommended LiteRibbon: RGB + Hybrid Allows control of 1 strip of RGB and 1 strip of Hybrid LiteRibbon DMX Address 1 = RGB Master Intensity DMX Address 2 = RED CH1 DMX Address 3 = GREEN CH2 DMX Address 4 = BLUE CH3 DMX Address 5 = Hybrid Master Intensity DMX Address 6 = Tungsten LEDS CH4 DMX Address 7 = Daylite LEDS CH5
dP 6.5	8-bit	6	Recommended LiteRibbon: RGBX + Single Allows control of 1 strip of RGBX and 1 strip of Single LiteRibbon DMX Address 1 = RGBX + Single Master Intensity DMX Address 2 = RED CH1 DMX Address 3 = GREEN CH2 DMX Address 4 = BLUE CH3 DMX Address 5 = AMBER/WHITE CH4 DMX Address 6 = Single CH5
dP 7.5	8-bit	7	Recommended LiteRibbon: RGBX + Single Allows control of 1 strip of RGBX and 1 strip of Single LiteRibbon DMX Address 1 = Master Intensity DMX Address 2 = RED CH1 DMX Address 3 = GREEN CH2 DMX Address 4 = BLUE CH3 DMX Address 5 = X CH4 DMX Address 6 = Single CH5 DMX Address 7 = Preprogrammed Effect

PWM FREQUENCY:

The pulse width modulation (PWM) frequency of the Studio 5x8 determines the degree to which the device appears to be "flicker free" on camera. The default PWM frequency is 30 kHz. To Adjust the PWM frequency set dimmer to run1. Run1 PWM frequency selection carries over to run2.

PWM Frequencies	Instructions	Notes
Frequencies in kHz: 5, 6, 8, 9, 10, 12, 14, 16, 18, 20, 25, 30	1. Use [up] or [down] to navigate to screen "PF ##" 2. Press [enter], screen begins flashing 3. Press [up] or [down] to scroll through available frequencies 4. Press [back] to confirm selection	• output smoothing available in 5 kHz • dimmer runs hotter with higher PWM • higher PWM = greater flicker free effect 1

CHANGING DIMMER RESPONSE (GAMMA) CURVE:

Profile	Bit Rate
1. Press [up] or [down] to navigate to "gA#.#" screen 2. Press [enter], display begins flashing 3. Press [up] or [down] to find desired gamma value 4. Press [back] to select gamma value 5. Gamma value has been set until either factory reset or you change it	The dimmer response (gamma) curve determines what the output of the LEDs will be based on the DMX signal coming in. The higher the gamma value, the higher the resolution on the low end of the dimming range; the lower the gamma value, the higher the resolution on the high end of the dimming range. A gamma value of 1 represents a linear curve in which the resolution is the same at the high end and the low end of the dimming range. The default gamma value is 1.5. You can adjust this when you're in **run1**.

Dimmer Response Gamma Curve:
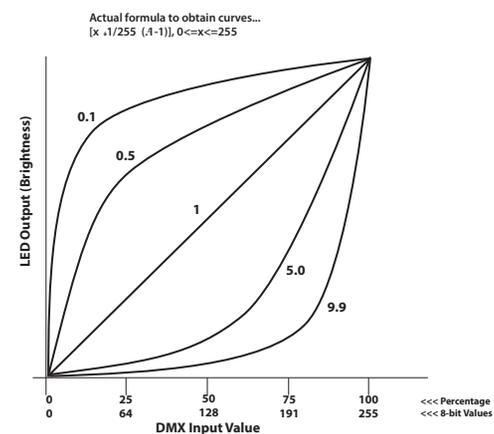
TROUBLESHOOTING:

If your LiteDimmer 5x8 seems to be experiencing irregular operation, a factory reset may be needed. Resetting the operating system can restore normal operation in many cases. Resetting the device as follows may fix the problem.

FACTORY RESET:

1. Hold [back] and [enter] buttons down for about 5 seconds, or until the screen flickers and screen resets to "A001"
2. Dimmer is now reset
   If your dimmer is still experiencing irregular operation after a factory reset, contact LiteGear Technical Support for assistance.

Defaults:
Default operation of 5x8 is run1 (DMX)
Defaults: run1
Start Address: A001
Channel Assignment Setting: CH05
PWM Frequency: PF30
Dimmer Response (Gamma) Curve: gA1.5
DMX Decoding Profile: dP1.1
Defaults: run2
Dimmer Channel 1 Intensity: 1 - 00
Dimmer Channel 2 Intensity: 2 - 00
Dimmer Channel 3 Intensity: 3 - 00
Dimmer Channel 4 Intensity: 4 - 00
Dimmer Channel 5 Intensity: 5 - 00
Chase Effect: CA05
Chase Effect Speed: SP04

WARNINGS

Stage and Studio Use Only; Risk of Electrical Shock; Dry Location Only; Disconnect Power Before Servicing; Hazardous Voltage; Not for Residential Use
Any Questions? Comments? Concerns? Contact us at +1 (818) 358-8542

LITEDIMMER STUDIO 5X8V2 Specifications

RATING: 40 amps max. total (32 amps continuous), 8 amps max. per channel
INPUT: 12~24VDC
OUTPUT: Constant Voltage, PWM
SIZE: 6.5 in. x 2.875 in. x 1.5 in. (165.1mm x 73.0mm x 38.1mm) (LxWxH)
WEIGHT: 13.41 oz, 380 g
Input voltage must match load voltage requirements!

LITEGEAR™

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