LITEDIMMER
PRO CHROMA

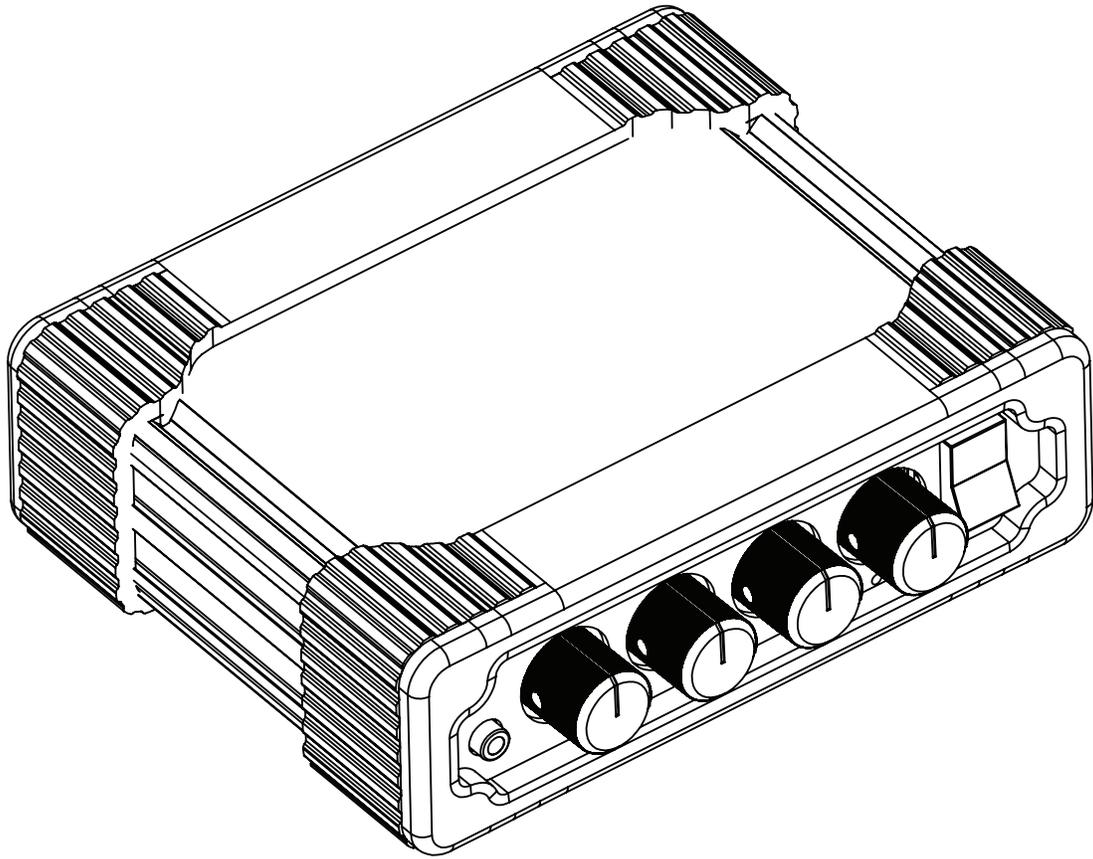LITEGEAR™

LITEDIMMER PRO CHROMA

ABOUT
LiteDimmer Pro Chroma is a flicker-free LED dimmer that may represent our best work so far. Developed in-house, the unit features a genuine LiteDimmer circuit known for smooth low-end dimming, flicker-free operation, and rock solid reliability. We set out to provide tactile and simple control of our ChomaCorrect, four-color LiteRibbon such as RGB-Tungsten and RGB-Daylite. Of course RGB-Amber, RGB, and Hybrid LiteRibbon modes are included as well. And, as a first for locally controlled LiteDimmers, this Chroma unit includes DMX signal output that streams formatted DMX that matches the mode of your LiteDimmer Pro Chroma. Several advanced operating modes include multi-channel Fire along with Paparazzi flash effects. The LiteDimmer Pro Chroma is a well rounded and feature-packed LED dimmer for LiteRibbon, LiteMat, LiteTile, and LiteStix.

Features:
• Hybrid, RGBW, and RGBA Profiles with Advanced Modes
• Integrated LiteEFX Modes
• Manual Operation with DMX Output
• "Aaaaand Action!" Cueing with Local and Remote Triggers
• Flicker-Free
• Magnetized Rubber Bumpers for Mounting
• Cold Shoe Slot for Mounting
• High Capacity (16A Max.) and Ultra Capacity (32A Max.) Models

CONTROLS & CONNECTIONS
1. The Chroma dimmer has the following controls:
2. (4) Hideaway rotary knobs
3. Three-position rocker switch (ON, OFF, ALT.)
4. Three-position slide switch to change profiles (Hybrid, RGBW, RGBA)
5. Local Trigger button for cueing and changing settings
6. Program (PROG) button for Factory Reset

The Chroma dimmer has the following connections:
DC Power Input: PC2 Connector (Ultra Capacity version); PH2 Connector (High Capacity version)
DC LED Output: PH6 Connector
DMX Output: 3.5 mm TRS Jack
Remote Trigger: 2.5 mm TRS Jack

POWER
The Chroma dimmer runs off of DC voltage. The input voltage range is 10VDC to 50VDC, but most LiteGear LED products require either 12VDC (nominal) or 24VDC (nominal).

The input voltage must match the voltage rating of the LiteRibbon, LiteMat, or LiteTile being used!

HOW TO INSTALL
To install the Chroma dimmer, complete the following:
Set the three-position rocker switch to the center (OFF) position.
Connect the load to the PH6 output connector. Be sure you observe wattage requirements for both the LED load and the LiteDimmer Pro Chroma.
Turn all knobs ("Hue Course," "Hue Fine," "Desaturation," and "Level") fully counterclockwise.
Provide DC power to the PC2 or PH2 DC voltage input (specific connector depends on the specific dimmer model). See "POWER" above, observing voltage requirements.

You are now ready to operate your LiteDimmer Pro Chroma.

When installing the Chroma dimmer, be sure to exploit the various mounting options available, including slots for cold shoe adapters (by removing the rubber bumpers) and the embedded rubber bumper magnets.

PROFILES & MODES
The Chroma dimmer includes three profiles, each with their own advanced modes. Moving the three-position slide switch on the rear panel of the dimmer selects one of the three different profiles - Hybrid, RGBW, or RGBA. Once a profile is selected, several modes become available that are specific to that profile. Moving the three-position rocker switch on the front panel to the ON position turns the dimmer on in the normal Compensated mode for the respective profile. Moving the switch down to the ALT position accesses one of several additional advanced software modes at any given time. See the tables below for more information on each profile's specific modes.

PROFILES & MODES (Continued)

The RGBW profile allows for better desaturation with a dedicated white channel while the RGBA profile adds a dedicated amber channel to hue, resulting in a greater range of resolution in the orange and yellow hue ranges.

Before changing profiles, the three-position rocker switch must be in the OFF position!

Profile: HYBRID	
Mode	**Description**
Compensated (2-circuit)	This mode ensures that the selected brightness of the LEDs does not change even if the Kelvin temperature changes after setting the brightness. Two separate Hybrid fixtures or circuits can be controlled independently of each other. **The indicator light on the front panel will be yellow.** *To access this mode:* *1) Position the three-position slide switch to the HYBRID position.* *2) Position the three-position rocker switch to the up (ON) position.*
Overdrive* (2-circuit)	This provides the absolute maximum output for a desired Kelvin temperature. Two separate Hybrid fixtures or circuits can be controlled independently of each other. **The indicator light on the front panel will be alternating yellow and white.** *To access this mode:* *1) Position the three-position slide switch to the HYBRID position.* *2) Ensure that Overdrive (2-circuit) mode is the selected ALT mode. To do this, see "**Changing ALT Modes**" below.* *3) Position the three-position rocker switch to the down (ALT.) position.*
Compensated (1-circuit)	This mode is similar to Compensated (2-circuit) mode (above) but parallels LED outputs 1 and 3 (Tungsten) and outputs 2 and 4 (Daylite), using only two knobs, the "Desaturation/Kelvin 2" and "Level/Level 2" knobs. **The indicator light on the front panel will be alternating yellow and blue.** *To access this mode:* *1) Position the three-position slide switch to the HYBRID position.* *2) Ensure that Compensated (1-circuit) mode is the selected ALT mode. To do this, see "**Changing ALT Modes**" below.* *3) Position the three-position rocker switch to the down (ALT.) position.*
Overdrive (1-circuit)	This mode is similar to Overdrive (2-circuit) mode (above) but parallels LED outputs 1 and 3 (Tungsten) and outputs 2 and 4 (Daylite), using only two knobs, the "Desaturation/Kelvin 2" and "Level/Level 2" knobs. **The indicator light on the front panel will be alternating yellow and cyan.** *To access this mode:* *1) Position the three-position slide switch to the HYBRID position.* *2) Ensure that Overdrive (1-circuit) mode is the selected ALT mode. To do this, see "**Changing ALT Modes**" below.* *3) Position the three-position rocker switch to the down (ALT.) position.*
Paparazzi	This mode allows for the LOCAL TRIGGER or the REMOTE TRIGGER to trigger a paparazzi effect with adjustable decay (see "**Adjusting the Fade Time**" below). For more information on the Paparazzi effect, see "**Paparazzi Effect**" below. **The indicator light on the front panel will be alternating yellow and magenta.** *To access this mode:* *1) Position the three-position slide switch to the HYBRID position.* *2) Ensure that Paparazzi mode is the selected ALT mode. To do this, see "**Changing ALT Modes**" below.* *3) Position the three-position rocker switch to the down (ALT.) position.*
Fire	This mode allows for the the LOCAL TRIGGER or the REMOTE TRIGGER to trigger a fire effect with a variable low threshold and speed (see "**Adjust Fire Effect Parameters**" below). For more information on the Fire effect, see "**Fire Effect**" below. **The indicator light on the front panel will be alternating yellow and orange.** *To access this mode:* *1) Position the three-position slide switch to the HYBRID position.* *2) Ensure that Fire mode is the selected ALT mode. To do this, see "**Changing ALT Modes**" below.* *3) Position the three-position rocker switch to the down (ALT.) position.*
*indicates the default ALT mode	

PROFILES & MODES (Continued)

Profile: RGBW	
Mode	**Description**

Compensated	This mode ensures that once the brightness of the LEDs has been selected the total amount of current being drawn does not change even if the Hue and Desaturation changes after setting the brightness. When desaturating, only the white channel will be used. **The indicator light on the front panel will be white.**
	
	To access this mode:
	  1) Position the three-position slide switch to the RGBW position.
	  2) Position the three-position rocker switch to the up (ON) position.

Overdrive*	This provides the absolute maximum output for a desired color. When desaturating, all channels will be used. **The indicator light on the front panel will be alternating bright white and dim white.**
	
	To access this mode:
	  1) Position the three-position slide switch to the RGBW position.
	  *2) Ensure that Overdrive mode is the selected ALT mode. To do this, see "**Changing ALT Modes**" below.*
	  3) Position the three-position rocker switch to the down (ALT.) position.

4-Channel	This mode results in each rotary knob controlling the intensity of an individual channel — of which there are four — allowing you to set the individual intensities of red, green, blue, and white separately from each other. You may also use this mode for single color LiteRibbon, LiteMats, or LiteStix. **The indicator light on the front panel will be alternating white and blue.**
	
	To access this mode:
	  1) Position the three-position slide switch to the RGBW position.
	  *2) Ensure that 4-Channel mode is the selected ALT mode. To do this, see "**Changing ALT Modes**" below.*
	  3) Position the three-position rocker switch to the down (ALT.) position.

RGB	This mode allows for a simple, 1:1 control of RGB LiteRibbon, allowing you to set the individual intensities of red, green, and blue with a submaster to control the overall color mix intensity. The "Hue Course/Kelvin 1" knob sets the brightness of red; the "Hue Fine/Level 1" knob sets the brightness of green; the "Desaturation/Kelvin 2" knob sets the brightness of blue; and the "Level/Level 2" knob sets the overall brightness of the RGB mix. **The indicator light on the front panel will be alternating white and cyan.**
	
	To access this mode:
	  1) Position the three-position slide switch to the RGBW position.
	  *2) Ensure that RGB mode is the selected ALT mode. To do this, see "**Changing ALT Modes**" below.*
	  3) Position the three-position rocker switch to the down (ALT.) position.

Paparazzi	This mode allows for the LOCAL TRIGGER or the REMOTE TRIGGER to trigger a paparazzi effect with adjustable decay (see "**Adjusting the Fade Time**" below). For more information on the Paparazzi effect, see "**Paparazzi Effect**" below. **The indicator light on the front panel will be alternating white and magenta.**
	
	To access this mode:
	  1) Position the three-position slide switch to the RGBW position.
	  *2) Ensure that Paparazzi mode is the selected ALT mode. To do this, see "**Changing ALT Modes**" below.*
	  3) Position the three-position rocker switch to the down (ALT.) position.

Fire	This mode allows for the the LOCAL TRIGGER or the REMOTE TRIGGER to trigger a fire effect with a variable low threshold and speed (see "**Adjust Fire Effect Parameters**" below). For more information on the Fire effect, see "**Fire Effect"** below. **The indicator light on the front panel will be alternating white and orange.**
	
	To access this mode:
	  1) Position the three-position slide switch to the RGBW position.
	  *2) Ensure that Fire mode is the selected ALT mode. To do this, see "**Changing ALT Modes**" below.*
	  3) Position the three-position rocker switch to the down (ALT.) position.

*indicates the default ALT mode	

RGBA	
Mode	**Description**
Compensated	This mode ensures that once the brightness of the LEDs has been selected the total amount of current being drawn does not change even if the Hue and Desaturation changes after setting the brightness. **The indicator light on the front panel will be orange.** *To access this mode:* *1) Position the three-position slide switch to the RGBA position.* *2) Position the three-position rocker switch to the up (ON) position.*
Overdrive*	This provides the absolute maximum output for a desired color. **The indicator light on the front panel will be alternating orange and white.** *To access this mode:* *1) Position the three-position slide switch to the RGBA position.* *2) Ensure that Overdrive mode is the selected ALT mode. To do this, see "**Changing ALT Modes**" below.* *3) Position the three-position rocker switch to the down (ALT.) position.*
4-Channel	This mode results in each rotary knob controlling the intensity of an individual channel — of which there are four — allowing you to set the individual intensities of red, green, blue, and amber separately from each other. You may also use this mode for single color LiteRibbon, LiteMats, or LiteStix. **The indicator light on the front panel will be alternating orange and blue.** *To access this mode:* *1) Position the three-position slide switch to the RGBA position.* *2) Ensure that 4-Channel mode is the selected ALT mode. To do this, see "**Changing ALT Modes**" below.* *3) Position the three-position rocker switch to the down (ALT.) position.*
RGB	This mode allows for a simple, 1:1 control of RGB LiteRibbon, allowing you to set the individual intensities of red, green, and blue with a submaster to control the overall color mix intensity. The "Hue Course/Kelvin 1" knob sets the brightness of red; the "Hue Fine/Level 1" knob sets the brightness of green; the "Desaturation/Kelvin 2" knob sets the brightness of blue; and the "Level/Level 2" knob sets the overall brightness of the RGB mix. **The indicator light on the front panel will be alternating orange and cyan.** *To access this mode:* *1) Position the three-position slide switch to the RGBA position.* *2) Ensure that RGB mode is the selected ALT mode. To do this, see "**Changing ALT Modes**" below.* *3) Position the three-position rocker switch to the down (ALT.) position.*
Paparazzi	This mode allows for the LOCAL TRIGGER or the REMOTE TRIGGER to trigger a paparazzi effect with adjustable decay (see "**Adjusting the Fade Time**" below). For more information on the Paparazzi effect, see "**Paparazzi Effect**" below. **The indicator light on the front panel will be alternating white and magenta.** *To access this mode:* *1) Position the three-position slide switch to the RGBW position.* *2) Ensure that Paparazzi mode is the selected ALT mode. To do this, see "**Changing ALT Modes**" below.* *3) Position the three-position rocker switch to the down (ALT.) position.*
Fire	This mode allows for the the LOCAL TRIGGER or the REMOTE TRIGGER to trigger a fire effect with a variable low threshold and speed (see "**Adjust Fire Effect Parameters**" below). For more information on the Fire effect, see "**Fire Effect**" below. **The indicator light on the front panel will be alternating white and orange.** *To access this mode:* *1) Position the three-position slide switch to the RGBW position.* *2) Ensure that Fire mode is the selected ALT mode. To do this, see "**Changing ALT Modes**" below.* *3) Position the three-position rocker switch to the down (ALT.) position.*
*indicates the default ALT mode	

PROFILES & MODES (Continued)

Adjusting the Fade Time
The Chroma dimmer is programmed with the ability to set an adjustable fade time. To edit the fade time, complete the following steps:
1) Place the three-position rocker switch in the up (ON) position, regardless of the profile.
2) Turn the "Level/Level 2" knob to 0%.
3) Press and hold the LOCAL TRIGGER until the LED indicator begins flashing green rapidly. (Alternatively, you may use the REMOTE TRIGGER instead of the LOCAL TRIGGER.)
4) Using the "Level/Level 2" knob, set the fade time (0% = fastest fade time; 100% = slowest fade time). The indicator light will flash with a frequency relative to the desired fade time.
5) Confirm your selection with a 1-second press of the LOCAL TRIGGER.

You're all set! This newly selected fade time is applied anytime the LEDs turn on or off and is the same as the decay time for the Paparazzi effect, *except in the Hybrid profile* (see "**Paparazzi Effect**" below).

"Aaaaand Action!" Cueing
After setting the fade time, this dimmer function allows for your LiteRibbon, LiteMat, LiteTile, or LiteStix to be brought up on cue. To invoke this effect, complete the following steps:
1) Set the Kelvin temperature and intensity (Hybrid profile) or the hue, desaturation, and intensity (RGBW and RGBA profiles) to the desired levels.
2) Press and hold the LOCAL TRIGGER. (Alternatively, you may use the REMOTE TRIGGER instead of the LOCAL TRIGGER.)
3) When the cue is given, release the LOCAL TRIGGER, and your LEDs will fade on or off (with the set fade time) to or from the desired brightness.

*This feature is **not** available in any of the Paparazzi modes.*

Changing ALT Modes
To change ALT modes, complete the following steps:
1) Place the three-position rocker switch in the center (OFF) position.
2) Turn the "Level/Level 2" knob to 0%.
3) Press and hold the LOCAL TRIGGER until the LED indicator begins flashing green rapidly. (Alternatively, you may use the REMOTE TRIGGER instead of the LOCAL TRIGGER.)
4) Turn the "Level/Level 2" knob until the flashing indicator shows the color that corresponds to the desired mode.
   See the "**PROFILES & MODES**" table above to check for color correspondence.
5) Confirm selection by depressing the LOCAL TRIGGER again until the LED indicator begins flashing green rapidly.

After these steps have been completed, placing the switch in the down (ALT) position will operate the dimmer in the selected mode. The mode will remain until changed or until factory default settings are initiated.

Paparazzi Effect
To invoke the Paparazzi effect, complete the following steps:
1) Activate Paparazzi mode (see "Changing ALT Modes" above).
2) With the switch in the down (ALT.) position, tap the LOCAL TRIGGER. (Alternatively, you may use the REMOTE TRIGGER instead of the LOCAL TRIGGER.)

And that's it! Your LiteRibbon, LiteMat, LiteTile, or LiteStix will turn on according to the position of the "Level" knob.

Adjusting the Decay

Hybrid Profile
You can adjust the decay time of the Paparazzi effect instantaneously by adjusting the Hue Fine knob. Fully counterclockwise is the quickest decay while fully clockwise is the slowest decay.

RGBW & RGBA Profiles
You can adjust the decay time of the Paparazzi effect by adjusting the dimmer's fade time
(see "**Adjusting the Fade Time**" above).

Fire Effect
There are two settings within the Fire effect that can be adjusted:
1) The first parameter is the threshold of the output, or brightness ratio, between the high point and the low point. Because the high point is always live and adjustable during the effect playback, only the "low" threshold must be set, which locks in the ratio between high and low.
2) The second parameter is the speed of the fire flicker. You may choose between "barely noticeable" to "very rapid."

PROFILES & MODES (Continued)

To make adjustments to these two parameters, complete the following steps:

Hybrid Profile
1) Activate Fire mode (see "**Changing ALT Modes**" above), and position the three-position rocker switch to the down (ALT.) position.
2) Use the "Hue Course/Kelvin 1" knob to adjust the threshold of the output. Fully counterclockwise yields the most dramatic fire effect while fully clockwise yields the most subtle fire effect.
3) Use the "Hue Fine/Level 1" knob to adjust the speed of the fire flicker. Fully counterclockwise yields the slowest flicker while fully clockwise yields the fastest flicker.

RGBW & RGBA Profiles
1) Activate Fire mode (see "**Changing ALT Modes**" above), and position the three-position rocker switch to the down (ALT.) position.
2) Press and hold the LOCAL TRIGGER.
3) While pressing and holding the LOCAL TRIGGER, use the "Hue Fine/Level 1" knob to adjust the threshold of the output. Fully counterclockwise yields the most dramatic fire effect while fully clockwise yields the most subtle fire effect.
4) While pressing and holding the LOCAL TRIGGER, use the "Desaturation/Kelvin 2" knob to adjust the speed of the fire flicker. Fully counterclockwise yields the slowest flicker while fully clockwise yields the fastest flicker.

Advanced Note: After adjusting the fire parameters in either the RGBW or RGBA profiles, the effective range of the knobs used for adjustment becomes more limited. For example, when you use "Hue Fine/Level 1" to adjust the threshold of the output by turning it clockwise to 25%, the range of the knob is now 25% to 100%. To regain the full resolution of the knob, rotate the knob counterclockwise past the point you used to set the parameter(s).

DMX OPERATION
The Chroma dimmer is constantly streaming DMX signal, mirroring the functionality and output of the Chroma dimmer. Simply plug in LiteGear's DMX adapter (TRS to RJ45) to the 3.5 mm DMX output on the rear panel of the device and connect to the DMX input on one of LiteGear's DMX controllers, and that's it!

The Chroma dimmer broadcasts four channels of DMX across six different circuits, up to twenty-four DMX channels. For example, DMX channels 1, 5, 9, 13, 17, and 21 all do the same thing at all times. The same pattern applies to DMX channels 2, 3, and 4, up to DMX channel 24.

You cannot change the DMX channels being broadcast.

TROUBLESHOOTING
If the Chroma dimmer seems to be experiencing irregular operation, a factory reset may be needed. Resetting the operating system can restore normal operation in many cases. To perform a factory reset, perform the following steps:
1) Set the "Level/Level 2" knob to 50% and all remaining knobs to 0%.
2) Press and hold the LOCAL TRIGGER.
3) While pressing and holding the LOCAL TRIGGER, provide DC power to the dimmer, at which point the indicator light will begin flashing red very rapidly. See "POWER" above, observing voltage requirements.
4) Release the LOCAL TRIGGER. The indicator light will still flash red rapidly but slightly slower than before.
5) Wait 5 seconds.
6) Disconnect the DC power source.
7) Reconnect the DC power source.

Your preferences and settings may now have to be reset.

If the Chroma dimmer is still experiencing irregular operation after a factory reset, contact LiteGear Technical Support for assistance.

SPECIFICATIONS
High Capacity (16A) Version
RATING: 16A max. total; 16A max. per channel
INPUT : 10~50VDC (Connector: PH2.M)
OUTPUT: Constant Voltage, PWM (Connector: PH6.M)
PROTOCOL: DMX512
DMX OUTPUT JACK: 3.5 mm TRS
TRIGGER JACK: 2.5 mm TRS
SIZE: 90.2 mm (3.55 in.) length, 121.4mm (4.78 in.) width, 44.5 mm (1.75 in.) height
WEIGHT: 0.74 lb, 11.9 oz, 0.337 kg

When connecting to the Phoenix-6 Male (PH6.M) LED output connector, Phoenix-5 Female (PH5.F) or Phoenix-6 Female (PH6.F) connectors and adapters may be used on the LED output.

Input voltage must match load voltage requirements!
Does not provide "Current Limiting." For use with LiteGear products only.

WARNINGS
Stage and Studio Use Only
Dry Location Only
Hazardous Voltage
Risk of Electrical Shock
Disconnect Power Before Servicing
Must Be Serviced by a Trained Technician
Not For Residential Use
Made in California