LITE**DIMMER+**PLUS
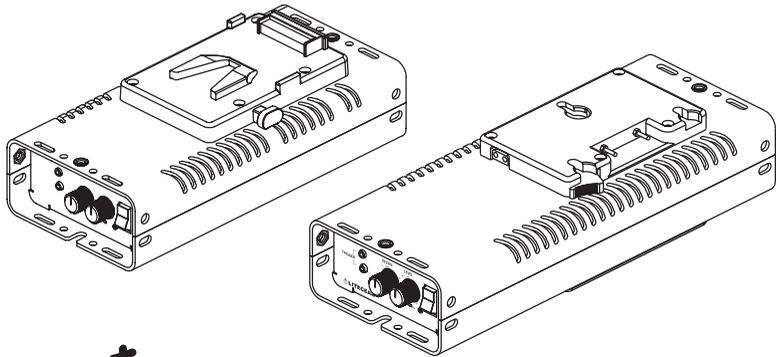## DC100/DC200 USER GUIDE

LITEGEAR

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ABOUT

LiteDimmer+ Plus DC100 and DC200 units are the ideal portable companions to power +Series light fixtures. With a focus on DC input power, the 100W and 200W units can be powered using typical Gold-mount or V-mount style camera batteries. Optionally, an external AC powered, 12 volt DC supply is available and can be attached to a battery mount with the included adapter bracket. The LiteDimmer+ Plus rugged housing includes several mounting options including four ¼-20 threads for attaching clamps or brackets. The internal electronics include genuine LiteDimmer circuits known for smooth low end dimming, flicker-free operation, and rock solid reliability. Control is provided by our hideaway rotary knobs allowing you to lock settings such as CCT. These controls have set the industry standard for tactile Hybrid control along with the "Aaaaand Action!" trigger switch for easy cueing.
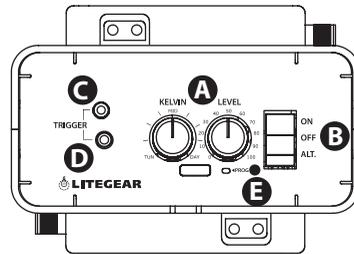
POWER

The DC100 and DC200 operate with DC voltage. When using Gold-mount or V-mount batteries, the input voltage should not exceed 14.4VDC (nominal). The alternate DC input voltage through the PL4 connector varies depending on the model of LiteDimmer+ Plus. The DC100 PL4 input range is 9VDC to 40VDC. The DC200 PL4 input range is 10VDC to 18VDC.

- DC100 & DC200 (Gold-mount or V-mount batteries): 14.4VDC (nominal) (10VDC to 16VDC)
- DC100 (through alternate PL4): 9VDC to 40VDC
- DC200 (through alternate PL4): 10VDC to 18VDC

CONTROLS

A) Two Hideaway rotary knobs
B) Three-position rocker switch (ON, OFF, ALT.)
C) Local Trigger button for cueing and changing settings
D) Remote Trigger Jack, 2.5 mm TRS (For use with included trigger)
E) Program (PROG) button for Factory Reset

CONNECTIONS

1) DC Power Input: Gold-Mount Plate* or V-Mount Plate* (one or two)
2) DC Power Input (alternate): PowerLock 4 (PL4) Connector
3) DC LED Output: PowerLock 7 (PL7) Connector
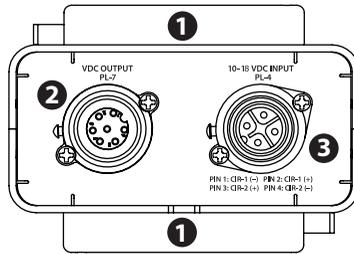
SAFETY AND MAINTENANCE
Before operation, inspect the cables and enclosure for any damage. Also, inspect the installation for short circuits, damage, water, or similar.

OPERATING

1) Position the three-position rocker switch to the center (OFF) position.

2) Connect the load to the PL7 output connector.
   Be sure you observe wattage requirements for both the LED load and the LiteDimmer+ Plus unit being used.

3) Turn the "Level" knob to 0%.

4) Turn the "Kelvin" knob counterclockwise to TUN.

5) Provide DC power to either battery plate(s) or the alternate PL4 DC voltage input.
   See "POWER" section, observing voltage requirements.

You are now ready to operate the DC100 and/or DC200.

When installing the DC100 or the DC200, be sure to make use of the various rigging points available, including slots for zip ties, Velcro® wraps, drywall screws, rigging points to allow for hanging, and ¼-20 screws for attaching clamps or other mounting hardware or even for attaching two or more units together.

MODES

The DC100 and DC200 include several advanced software features. Moving the three-position rocker switch to the ON position turns the dimmer on in normal Hybrid mode. Moving the switch down to the ALT position accesses one of several additional advanced software modes at any given time.

Mode	Description
Hybrid	This mode ensures that the selected brightness of the LEDs does not change even if the Kelvin temperature changes after setting the brightness level. The indicator light will be green. **The indicator light will be green.** *To access this mode:* *1) Set the three-position rocker switch to the up (ON) position.*
Low*	This mode is similar to normal Hybrid mode but decreases the maximum output of the dimmer, enabling fine-adjustment of brightness for low level requirements. The level to which the maximum output is reduced can be adjusted. See "Variable Low Mode." **The indicator light will be blue.** *To access this mode:* *1) Ensure that Low mode is the selected ALT mode. To do this, see "Changing ALT Modes" below.* *2) Position the three-position rocker switch to the down (ALT) position.*
Bump	This mode allows for instantaneous full output when the LOCAL TRIGGER or the REMOTE TRIGGER is pressed and held and no output when any of the three buttons are released. **The indicator light will be purple.** *To access this mode:* *1) Ensure that Bump mode is the selected ALT mode. To do this, see "Changing ALT Modes" below.* *2) Position the three-position rocker switch to the down (ALT) position.*
Paparazzi	This mode allows for the LOCAL TRIGGER or the REMOTE TRIGGER, when pressed, to trigger a paparazzi (flash) effect with adjustable decay (see "Adjusting the Fade Time" below). For more information on the Paparazzi effect, see "**Paparazzi Effect**" below. **The indicator light will be alternating purple and white.** *To access this mode:* *1) Ensure that Paparazzi mode is the selected ALT mode. To do this, see "Changing ALT Modes" below.* *2) Position the three-position rocker switch to the down (ALT) position.*
Fire	This mode randomizes the dimmer output to mimic a flame with a variable low threshold and speed (see "**Adjust Fire Effect Parameters**" section). For more information on the Fire effect, see "**Fire Effect**" section. The indicator light will be orange. *To access this mode:* *1) Ensure that Fire mode is the selected ALT mode. To do this, see "Changing ALT Modes" below.* *2) Position the three-position rocker switch to the down (ALT) position.*

indicates the default ALT mode

Adjusting the Fade Time

The DC100 and DC200 units are 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.
2) Turn the "Level" knob to 0%.
3) Press and hold the LOCAL TRIGGER until the LED indicator begins flashing. (Alternatively, you may use the REMOTE TRIGGER instead of the LOCAL TRIGGER.)
4) Using the "Level" 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 (see "Paparazzi Effect" section).

"Aaaaand Action!" Cueing

After setting the fade time, this dimmer function allows for your LiteMat+ Plus or LiteTile+ Plus to be brought up on cue.

To invoke this effect, complete the following steps:

1) Set the Kelvin temperature and brightness 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 LiteMat+ Plus or LiteTile+ Plus will fade on or off (with the set fade time) to or from the desired brightness.

This feature is only available in Hybrid, Low, and Fire 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) Locate the PROG button in the lower section of the front panel, and using the included LiteGear Actuator Tool (or another small tool such as a paperclip), depress the PROG button for approximately 2 seconds. The indicator light will begin flashing.
3) Turn the "Level" knob until the flashing indicator shows the color that corresponds to the desired mode. See the "MODES" table above to check for color correspondence.
4) Confirm selection by depressing the PROG button again for approximately 2 seconds.

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.

Variable Low Mode

To set the maximum intensity of variable Low mode, complete the following steps:

1) Set your DC100 or DC200 ALT mode to Low. See "**Changing ALT Modes**" section.
2) Rotate the "Level" knob to 0%
3) Press and hold the LOCAL TRIGGER until the LED indicator flashes. (Alternatively, you may use the REMOTE TRIGGER instead of the LOCAL TRIGGER.)
4) Using the "Level" knob, adjust to your desired maximum brightness.
5) Confirm your selection with a 1-second press of the LOCAL TRIGGER.

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 LiteMat+ Plus or LiteTile+ Plus will turn on according to the position of the "Level" knob. 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:

- 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.
- The second parameter is the speed of the fire flicker. You may choose between "barely noticeable" to "very rapid."

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

1) Activate Fire mode (see "Changing ALT Modes" above).
2) With the switch in the down (ALT.) position, rotate the "Level" knob to 0%.
3) Press and hold the LOCAL TRIGGER until your LiteMat+ Plus or LiteTile+ Plus flashes once and then remains on. (Alternatively, you may use the REMOTE TRIGGER instead of the LOCAL TRIGGER.)
4) Using the "Level" knob, set the low threshold.
5) Press and hold the LOCAL TRIGGER until your LiteMat+ Plus or LiteTile+ Plus flashes twice and then remains on and flickering.
6) Using the "Level" knob, set the speed (0% = slowest; 100% = fastest).
7) Press and hold the LOCAL TRIGGER until your LiteMat+ Plus or LiteTile+ Plus flashes thrice to confirm your settings.

You are now in playback mode and are free to adjust Kelvin temperature with the "Kelvin" knob and brightness with the "Level" knob. These new parameters are locked and will remain until updates are made.

TROUBLESHOOTING

If the DC100 or DC200 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) Provide DC power to either battery plate(s) or the alternate PL4 DC voltage input. See "POWERING THE DC100 & DC200" above, observing voltage requirements.
2) Place the switch in the center (OFF) position.
3) Press and hold the PROG button for approximately 8 seconds until the indicator light flashes red very rapidly.
4) Release the PROG button. At this point, the software version will flash on repeat.
5) Disconnect the DC power source.
6) Reconnect the DC power source.

Your preferences and settings may now have to be reset.

If the DC100 or DC200 is still experiencing irregular operation after a factory reset, contact LiteGear Technical Support for assistance.

SPECIFICATIONS

DC100
RATING: 100W max.
INPUT (through Battery Plate[s]*): 14.4VDC (nominal) (10~16VDC)
INPUT (through alternate PL4): 9~40VDC
OUTPUT: Constant Voltage, PWM
TRIGGER JACK: 2.5 mm TRS
SIZE: 238.8 mm (9.40 in.) L, 112.0 mm (4.41 in.) W, 70.1 mm (2.76 in.) H
WEIGHT: 2.4 lb, 38.4 oz, 1.09 kg

DC200
RATING: 200W max.
INPUT (through Battery Plate[s]*†): 14.4VDC (nominal) (10~16VDC)
INPUT (through alternate PL4): 10~18VDC
OUTPUT: Constant Voltage, PWM
TRIGGER JACK: 2.5 mm TRS
SIZE: 286.3 mm (11.27 in.) L, 112.0 mm (4.41 in.) W, 79.2 mm (3.12 in.) H
WEIGHT: 3.6 lb, 57.6 oz, 1.63 kg

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

Refer to our list of approved batteries, found at http://www.litegear.com/support/document/
†Batteries on the DC200 are in parallel, not in series.

WARNINGS
Stage and Studio Use Only • Dry Location Only • Hazardous Voltage
Risk of Electrical Shock • Disconnect Power Before Servicing
Not For Residential Use