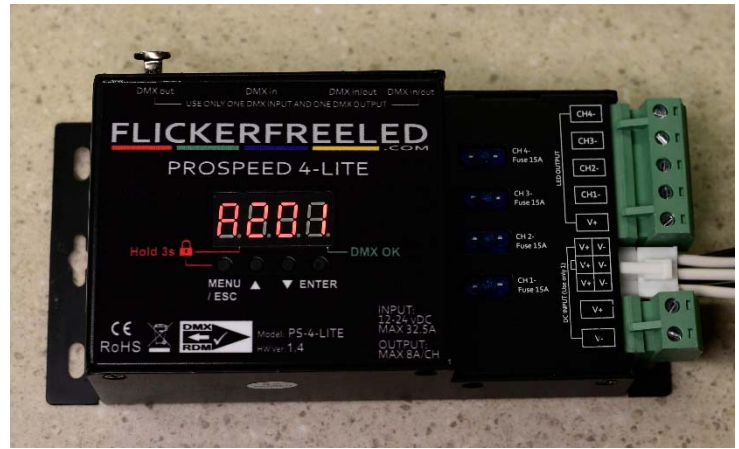# ProSpeed 4-LITE Manual
Version 2.2

HW Version: 1.4
Software Version: 3.2

Support email:
support@flickerfreeled.com

Support website:
www.flickerfreeled.com/support

The ProSpeed 4-LITE is a camera friendly high speed LED Dimmer. The software was designed to make installation and troubleshooting easy and painless, and it offers many useful functions.

The dimmer is controllable via DMX-512A protocol or manually. It has a speed selectable chaser mode as well as DMX readout mode for testing and troubleshooting purposes.

The ProSpeed 4-LITE also offers Remote Device Management (RDM) when connected to a RDM capable controller using RDM capable infrastructure.

Connections

DMX Input and Output

The ProSpeed 4-LITE is controlled by the DMX512-A protocol. DMX can be input via industry standard XLR-5 input connector or a RJ-45 connector. DMX can be looped through to other DMX devices following the DMX512-A standards via _one_ of the RJ-45 connectors _or_ the DMX-out XLR-5 connector.

Note: The inputs and outputs are not isolated from each other and only _one input_ and _one output_ should be connected to each dimmer. Although the DMX specification states a 32 device maximum per run, we suggest using a DMX and RDM capable opto-isolator to isolate a maximum of 15 ProSpeed 4-LITE devices per data chain.

OK

OK

OK

NO!

NO!

DC Input

The dimmer will safely operate from 12vDC to 24vDC with a maximum input amperage of 32.5a.

There are two DC inputs on the dimmer, *__please choose and use only one input power source at a time.__*

The white 6-pin Molex connector is for convenient connection to factory connectors installed on many high amperage desktop power supplies.

The green 2-pin 7.62mm pluggable terminal strip can be used for connection to alternate power sources, such as batteries or bare-wire power supplies. The green 2-pin 7.62mm pluggable terminal strip connector can also be used to link more than one ProSpeed 4-LITE together if the amperage requirements are low enough, simply jump the two units together with wire via the 2-pin pluggable terminal strips.
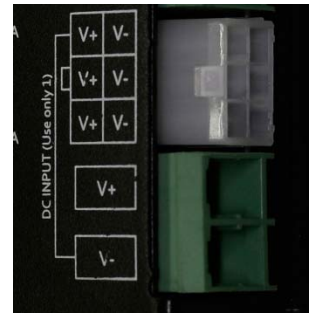

DC Input Connectors

DC Outputs

The dimmer will output a maximum of 8 amps per channel of the same DC voltage input into the dimmer. i.e. 12vDC in equals 12vDC out, 24vDC in equals 24vDC out.
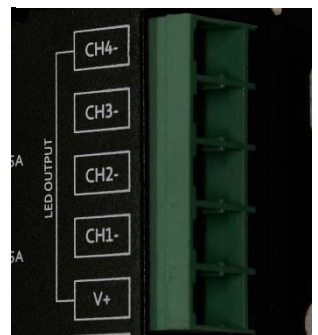
+vDC is common and each channel is dimmed independently via their -vDC terminals.

__Always test your connected components for shorts before applying power for the first time!__

The outputs are all protected by 15A mini-ATO fuses. Never use a higher amperage fuse as it may cause a risk of fire. Fuses are easily accessed for replacement and can be tested easily with a multimeter in continuity mode between the two silver tabs.

DC Output Connectors

7.62mm Pluggable terminal strips

Display and buttons

The 4-digit readout is used to display the menu items and functionality. The 4 buttons below the screen are used to navigate the menus, select and change items.

DISPLAY DECIMAL POINTS

Two of the display decimal points are used to indicate functionality:

- The first decimal point (furthest left) will light when the ProSpeed 4-LITE menu is locked. Press MENU/ESC for 3 seconds to lock/unlock the ProSpeed 4-LITE Menu.
- The last decimal point (furthest right) will light when a valid DMX512-A signal is received. If it is not lit, there is no valid DMX signal present at the dimmer.

Unit Menu Locked Indicator

DMX Signal Present

MENU/ESC button

The MENU/ESC button has multiple functions. Its main functions are to initiate the settings menu and to escape out of menu areas, unless noted below.
Holding the MENU/ESC button for 3 seconds will lock/unlock the dimmers menu buttons.

Buttons

Up / Down Buttons

Used to cycle through the menu options, set levels, change addresses, etc.

Enter Button

Generally used to store changes and select menu items. Additional functionality as described in each section below.

Holding Enter for 10s will reset the device to factory defaults and "d2" will flash on the screen.

Menu Functionality

Press MENU/ESC to enter the menu. The following menu options below will flash, press ENTER to select one.

"Addr" – Set Address

Allows changing of the DMX address. A base address of "A001" through "A509" are possible in Mode 1; and "A001" through "A508" are possible in Mode 2.

Select your desired base address with the UP/DOWN arrows and press ENTER to store your address. Pressing MENU/ESC will back out to the menu and discard your current selection.

"dISP" – Display DMX Data

This troubleshooting tool shows you the incoming DMX level for each channel in either Percent (0-100) or Decimal (0-255) value if valid DMX is present in the format n:xxx; where n = output channel and xxx = level.

Select the "dISP" menu item by pressing ENTER. If valid DMX is being received the display will show the DMX value the current channel is receiving (e.g. " 1.133.") Press UP/DOWN arrows to cycle through the channels. If "#.---" is being displayed then no valid DMX data is being received for that channel.

To change from Percentage to/from Decimal value display simply press ENTER; "Pc" will flash to indicate Percent, or "dc" will flash for Decimal value display view. The last view type chosen is stored and recalled for use the next time.

To exit "**dISP**" press MENU/ESC.

"CHSE" – Chaser Mode

6 pre-set chasers are programmed into the dimmer. They can be used for testing purposes or for manual chaser effects.

Press ENTER to select the "**CHSE**" menu item. Once you are in the Chaser Mode your dimmer will cycle through the 4 channels at the last used speed setting. To cycle through the 6 chaser speeds, simply press the UP arrow to speed up the chase up, or the DOWN arrow to slow the chase down.

Pressing ENTER while in Chaser Mode will pause the current channel at 50%, a great feature for troubleshooting. Simply cycle through the 4 channels at 50% by using the UP and DOWN arrows. Press ENTER or MENU/ESC to resume the chase at the previous speed.

Pressing MENU/ESC while the chaser is running will return you to the menu.

"dirA" – Direct Access (Manual) Mode

To enter Direct Access mode select "**dirA**" from the menu and press ENTER.

The display will show the currently stored value for each channel in 0-255 decimal values (eg "3.227". Cycle through the channels using the UP/DOWN keys.

To change the level of a channel use the UP/DOWN buttons to display the channel, then press ENTER and the display will flash the channel number to show that the channel is ready for editing. Press the UP/DOWN keys to set a new level for that channel. To record the level press ENTER, to revert to the previously stored level press ESC.

To exit Direct Access mode **hold ESC** and **press ENTER**. All values are stored in memory and the next time you enter dirA mode they will be restored.

"PEr" – Personality

Personality 1 (Auto dSS)

This 4-channel mode will automatically blend the 255 DMX steps throughout the dimming curve allowing for smooth fades, while still allowing the dimmer to react quickly enough to create great strobing or snap effects.

Personality 2 (Controllable dSS)

This 5-channel mode adds a 5th DMX channel, which allows the amount of Digital Smoothing to be controlled remotely. The amount of dSS applied to the ProSpeed 4-LITE's channels becomes variable from 0 through 20 giving you complete control of the dSS applied.

A dSS level of decimal 0 will enable extremely fast and snappy steps, while a dSS level of decimal 20 will ensure the smoothest of cross-fades. The ProSpeed 4-LITE's Mode 1 default dSS setting is equal to 3 which is great for general use.