

ProSpeed 4-LITE Manual Version 3.2

HW Version: 1.0 > 1.5
Software Version: 3.5

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IMPORTANT!

**User must read and understand all instructions prior to installation.
Important operational and safety information is contained within this manual.**

SAFETY AND WARNINGS:

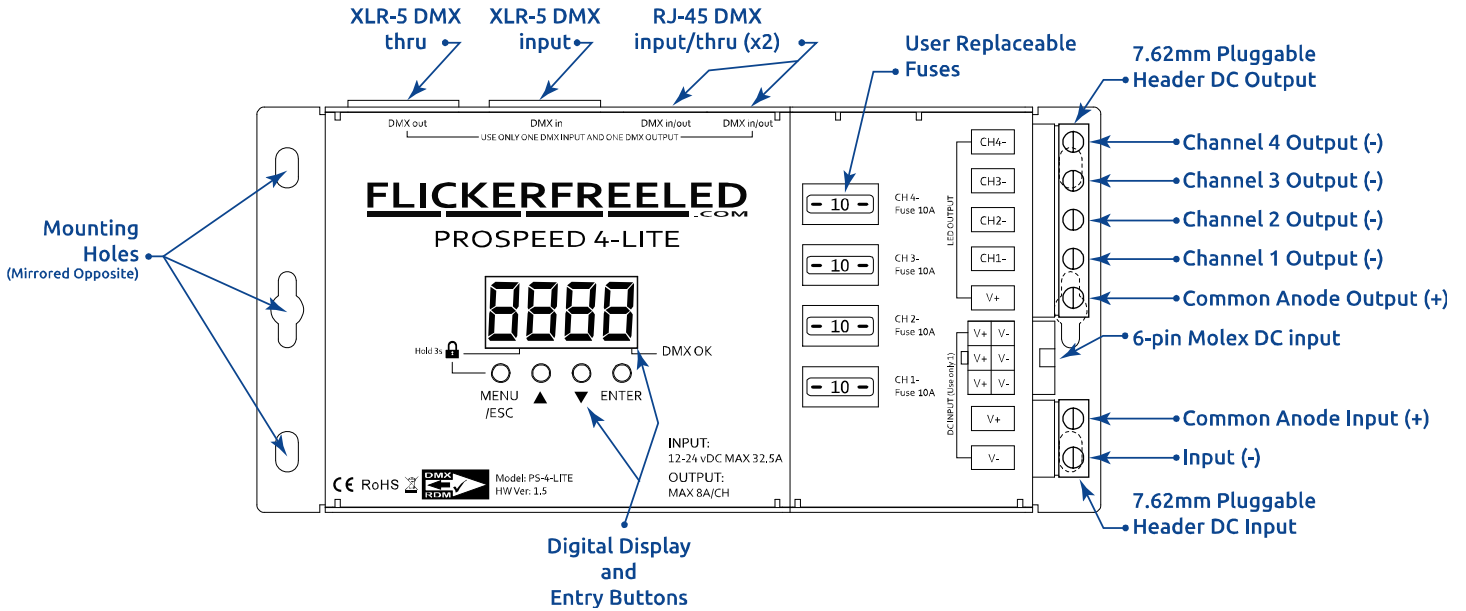
- For professional use only.
- Use 12 – 24 vDC power input **ONLY**.
- Each dimmer may only be connected directly to only one power input source.
- Power input source must be properly protected by fuse or electronic means.
 - Maximum input rating for 6-pin white connector is 9a per pin (27A maximum with 3 pairs.)
 - Maximum input rating for green 2-pin connector is 32A.
- Please ensure you are using the correct wire gauge for the connected loads.
- Do **NOT** install the device when power is applied.
- Do **NOT** expose the device to moisture.
- Only connect the device to one source of input DATA and one source of output DATA.
- Use a maximum of 10A fuses on each output – type Mini (APM / ATM)
- This device shall be contained with a fire enclosure.
- **Always** check your connections before connecting power.

CAUTION – RISK OF FIRE

As with all high current electrical devices there is a potential risk of fire if this device is misused or driven over its rated capacity.

We recommend monitoring temperature at the DC input and output connectors as well as at the fuse area. If the temperature exceeds 75°C in these areas, ensure that these areas are enclosed within a fire enclosure or reduce loads to bring temperatures below 75°C.

DESCRIPTION



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

DC Input

The dimmer will safely operate from 12vDC to 24vDC. Please ensure there is adequate input current protection for either input.

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

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

The white 6-pin input connector's maximum amperage rating is 9A per pin pairing (total of 27A using all 3 pin pairs.)

***Always check your power supply specification sheet to ensure the pinouts match the dimmer's inputs.

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 7.62mm input connectors has a maximum amperage rating of 32A.

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.

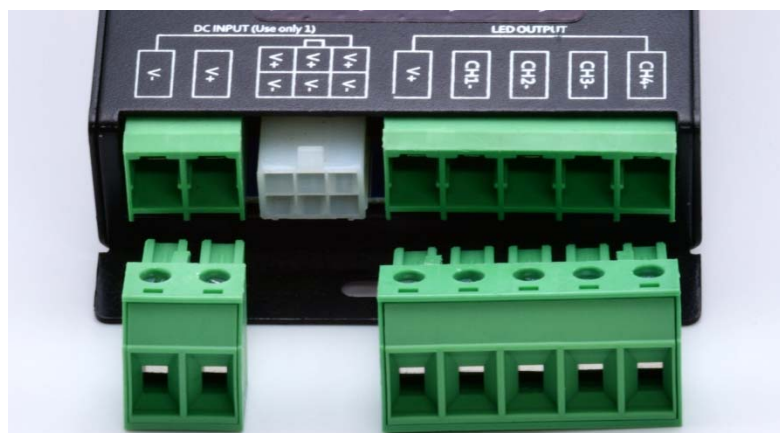
+vDC is common and each channel is dimmed independently via their -vDC terminals.

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

The outputs are all protected by 10A Mini (APM / ATM) 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

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 optoisolator to isolate a maximum of 15 ProSpeed 4-LITE devices per data chain.



OK



OK



OK



NO!

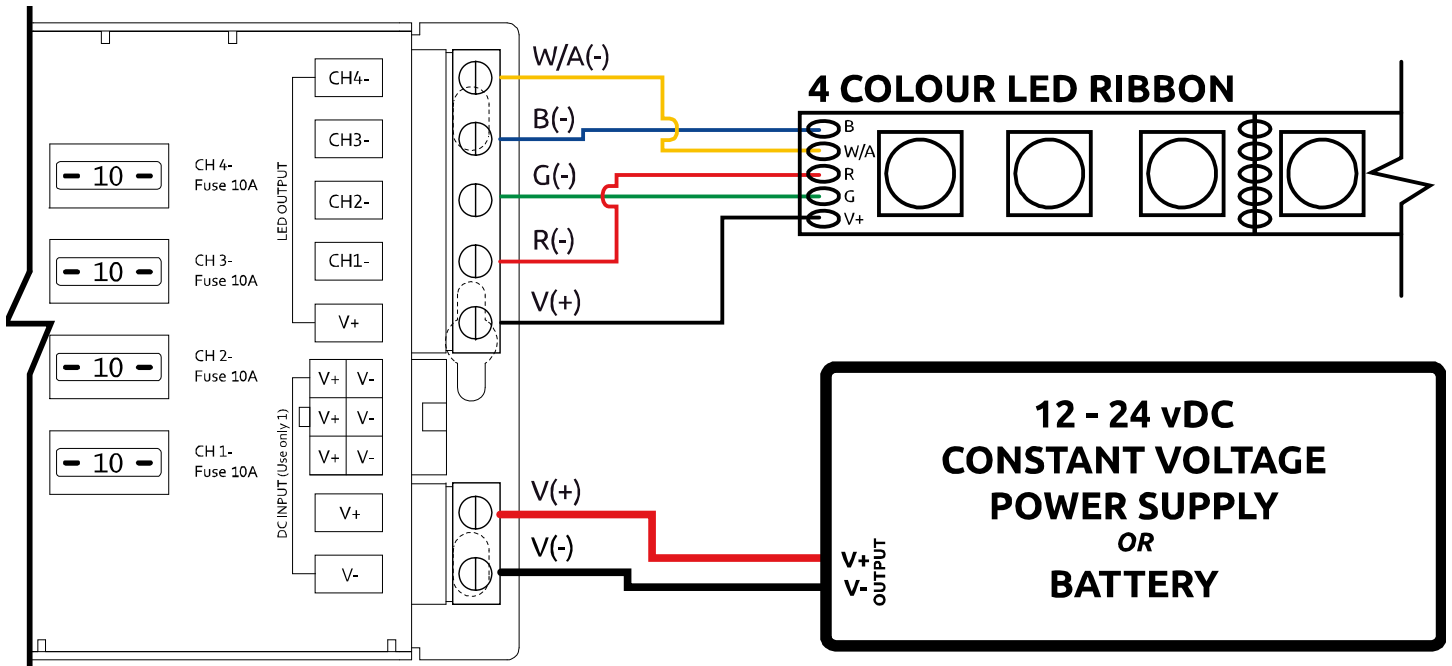


NO!



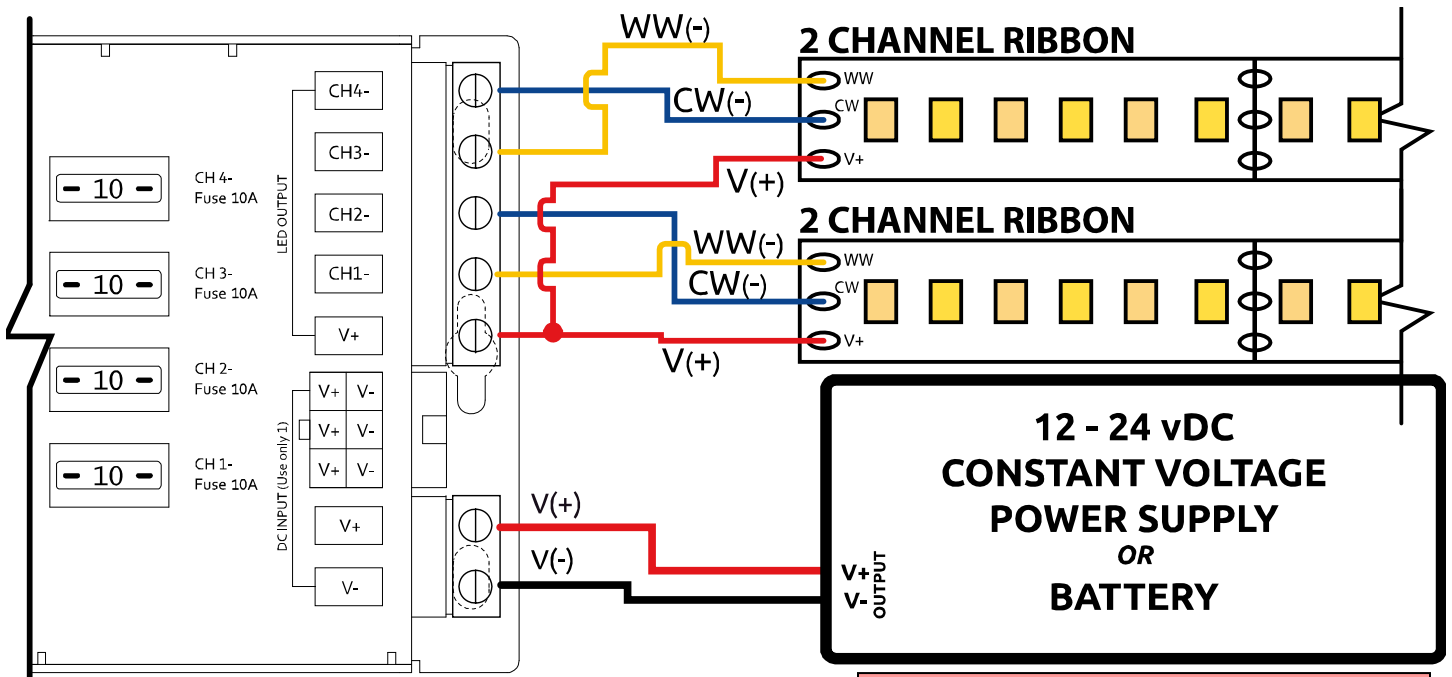
NO!

WIRING DIAGRAMS



Wiring single 4-channel LED ribbon

NOTE: Appropriate input current protection must be in place. See page 3.



Wiring two 2-channel LED ribbons

NOTE: Appropriate input current protection must be in place. See page 3.

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.

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 “dE” 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 “A00 I” through “A509” are possible in Mode 1; and “A00 I” 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.



Buttons

“d ISP” – 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.

“d rA” – 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 (e.g. “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 quickly jump all 4 channels to 0%, 25%, 50%, 75%, or FULL hold down the **ENTER** button until “ALL” appears, select your desired level with **UP/DOWN** and push **ENTER** to change the level or **ESC** to leave the level the same as before. **ESC** will take you back to “dirA” mode.

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.