

Single Channel StudioPro LED Dimmer
Part No. PRO-DIM-5000-20A



The Single Channel StudioPro LED Dimmer is a simple yet powerful high-capacity LED dimmer. With a single knob on the top of the unit, you can dim up to 20 amps of LEDs from 100% brightness to full off to achieve the perfect lighting for any installation. The design utilizes a 5kHz PWM frequency to ensure no visible flicker on camera. The Single Channel StudioPro LED Dimmer features precise dimming to achieve the exact look that is needed on set, stage or anywhere where precise lighting control matters.

Dimmable LED lighting allows you to create the perfect ambiance for any occasion. The high pulse width modulation (PWM) frequency of this controller eliminates flicker and creates a smooth output of LED light. Simply connect monochrome LED strip light and power to the Single Channel StudioPro LED Dimmer and you are ready to go!

This dimmer is rated for a maximum load of 20 amps, which equates to a maximum of 240 watts at 12VDC or 480 watts at 24VDC. We recommend using both output terminal blocks if using over 20A to reduce the voltage drop associated with passing high current through a wire.

Features

- 20 Amp Capacity
- 5Khz PWM frequency
- Fully dimmable from 100% to 0% brightness
- Dimmer knob “clicks” when fully off
- Control up to 240W @ 12 VDC or 480W @ 480 VDC
- Terminal block input and output connections
- Two 3mm mounting holes on opposite corners of the dimmer

Applications

The Single Channel StudioPro LED Dimmer is perfect for single-color fixtures that need dimming and will be on camera. The small and compact design allows for dimming on set without having to go to a control board.

With a 20 Amp capacity, the entire load of a large installation can be placed on one dimmer, to ensure even and balanced lighting.

Specifications

Dimensions:	5.91” x 1.81” x 1.97” 150 mm x 46 mm x 50 mm
Output Frequency:	5000 Hertz
Input Voltage:	12-24 VDC
Maximum Load:	20A
Maximum Power:	240W/480W (12VDC/24VDC)

Wiring

This unit is extremely easy to wire. Use a Phillips head screw driver to remove the covers over both ends of the dimmer. Apply 12 or 24 VDC (based on the requirements of the LEDs you are powering) to the terminal blocks labeled DC+ and DC-. Next apply the leads of the monochrome strip to the terminal blocks labeled LED+ and LED-. Two LED+ and LED- ports are provided to allow for easier installation. A maximum load of up to 20A of monochrome LED strip, light bars or modules can be connected to the OUTPUT ports. Once your power and lights are connected remount the covers ensuring that the wires are fed through the open slots.



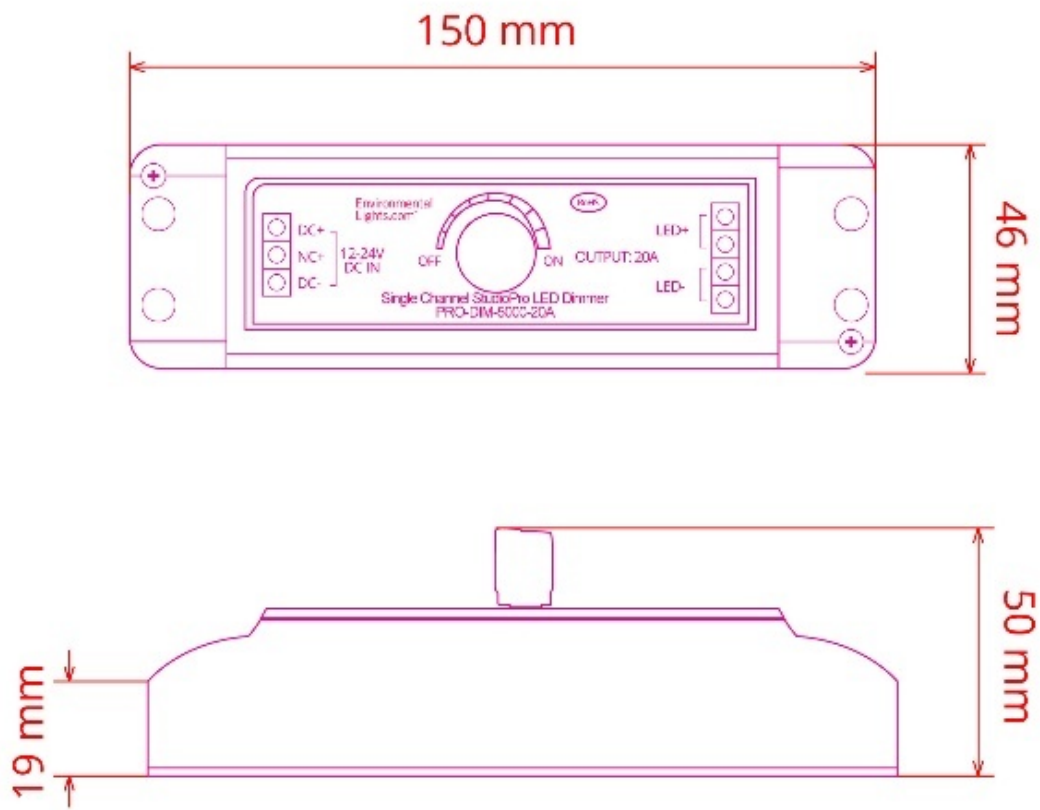
Operation

1. Turn the knob clockwise to illuminate your lights.
2. To power off your lights, turn the knob counter-clockwise until you hear a click.
3. If using multiple dimmers, use the lines to ensure accuracy.

Mounting

Remove the covers over both end of the dimmer using a Phillips head screw driver. Mount the dimmer to a surface using the two mounting holes circled in blue below. The mounting holes have a diameter of 3mm.





Instructions

Please take the following precautions:

1. This equipment, like all electrical equipment, should be installed by a qualified person.
2. Do not expose these LEDs, dimmers or power supplies to intense electro-magnetic fields, including lightning.
3. The controllers and power supplies are not waterproof. Keep them dry.
4. Always observe proper polarity.

When installing LED lighting, it is a good idea to follow this “dry-run” procedure:

1. Be sure you have everything you need before you start.
2. Lay out your lights and power supply on the floor or table.
3. There is some resistance in the LED lighting. If you see any color fading or dimming at the end of a long run, you may have too many LEDs for your power supply and you might need a bigger supply or shorter runs. Use a bus structure as described in [rgb_manual.pdf](#). Call if you need assistance with larger projects.
4. Connect everything and test it to be sure it works and you have it connected properly. It is unlikely, but possible, that some part of your system is defective or was damaged during shipment. If that is the case, it will be very helpful to you to know that before you do all the work involved in installing custom LED lighting systems. You will also know if you damage anything during installation, which is really helpful in trouble-shooting because manufacturing defects and installation damage typically have very different solutions.

Once you have tested the system successfully, you are ready to install it. We recommend you install LEDs, electronic controls and dimmers in such a way that you have access to them in case they fail. All electrical components can fail.