

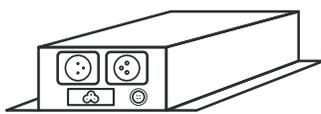


# Nanoleaf DMX Adapter for Nanoleaf Light Panels

Your DMX universe is about to get crazy. With the Nanoleaf DMX Adapter, you can individually address red, green, blue, and white on each panel to take your light and sound design to the next level. You might hang out behind the curtains, but we know that you're the real maestro.

- Enables a DMX512 console to control the Nanoleaf Light Panels ("panels").
- Each Nanoleaf DMX Adapter ("adapter") supports up to 30 panels.
- Daisychain multiple adapters to control up to 128 panels on one DMX universe.
- Each panel consumes 4 channels (red / green / blue / white).
- Program a base channel for all panels (channel offset).
- Program panel channels individually (with respect to the base channel).
- Auto-discovery of panels and panel layout on adapter boot-up.
- AC power input with universal voltage (automatic switching).
- Fully configurable channel IDs.
- Durable, brushed aluminum construction.

## What's in the Box?



Nanoleaf DMX Adapter

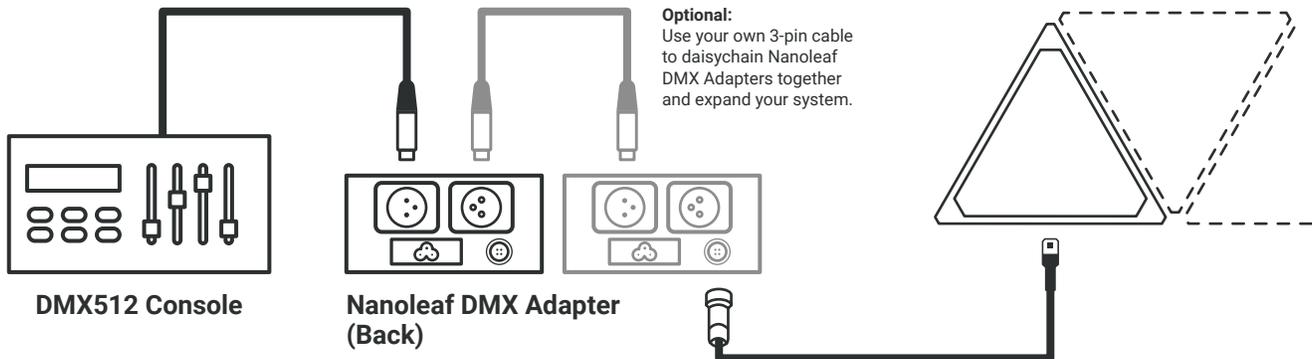


Light Panels Connector



AC Cable

## Connection Diagram

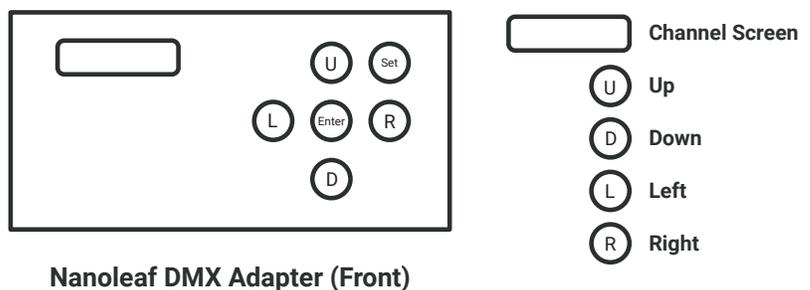


## Basic Usage

### Assigning Channel IDs

The buttons on the front face of the Nanoleaf DMX Adapter are used for assigning DMX channels for each Nanoleaf Light Panel.

Each panel has four possible channel assignments: red, green, blue and white. By default, the first panel is set to DMX Channels 1 through 4.



### For example

ID: 1

CHNL: 5

Indicates that the panel with ID: 1 has red on channel 5, green on channel 6, blue on channel 7, and white on channel 8. When programming the DMX adapter, you can only set the starting channel in the sequence, and all others are consumed / assigned automatically.

If you want to have all of the panels work together at the same time, they can be assigned to the same set of channels. You can also assign channels to overlap.

## Using The On-screen Menu

Press the SET button to enter or exit the menu screen.

### Channel Setup

This screen is used for setting the channel for each panel. Use the left and right keys to cycle through the connected panels. Use the up and down keys to set the red channel for the selected panel.

### Set First Address

This screen is used to set the starting channel number for your Light Panel configuration. For instance, if you wanted to reserve DMX Channels 1 through 99 for use by other devices, you could set the First Address to 100. ID1 will then be passed to your DMX console as channel 100.

### Discover Panels

When new Light Panels are added to your installation, this function needs to be run in order to identify the new panels within the DMX universe. Verify that your newly-added panels have been detected by making sure the number on the initial screen matches the number of installed panels.

### Firmware Version

This displays the current firmware version of the DMX Adapter.

### Update Firmware

Used to initiate an update to the DMX Adapter's firmware.

1. On your Mac OSX device, download and unzip the firmware payload to an easy to remember location. Ensure that Bluetooth is enabled on your Mac, and that the DMX Adapters to update are nearby (ten metres or less).
2. On your DMX Adapter, enter the Update Firmware screen and press the 'Enter' key to activate the update function. After pressing the 'Enter' key, you can only cancel by disconnecting the unit from power. When prompted, press the "D" key to prepare the unit to receive the update payload. The screen on the DMX Adapter should display "Send Firmware" (this indicates that the unit is ready to receive the update payload).
3. On your Mac OSX device, search for and open "Terminal" in the search bar (Spotlight). Navigate to the folder that contains the firmware update payload, then type:

```
"cd DMX_Converter_vXXX_Firmware_Update"
```

When you've entered this folder, run the update by typing:

```
"/update.sh" and press enter.
```

(don't type the quotation marks, if you encounter an error type "chmod +x update.sh" and then run the update script again)

4. During the update process, the DMX Adapter will display two progress indicators: one tracks the completion percentage of the update process, and the other indicates the packet error rate. If the packet error rate is high (interference or poor quality connection), the update process will take longer than normal. When the DMX Adapter is receiving data, the blue status LED indicator will blink.
5. Upon completion, the DMX Adapter will return to normal operation and the LED will stop blinking. At this point, power cycle the unit by disconnecting it from power and reconnecting.

**Note:** that there is a minimum Mac hardware requirement to execute the update process. If your Mac is too old, the following message will be displayed:

```
ManagerDidUpdateState @2 CBCentralManagerStateUnsupported
```

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## Specifications

<b>Panel Support:</b>	Maximum of 30 panels per Nanoleaf DMX Adapter. Daisy chained adapters can support up to 128 panels in one DMX universe (512 channels).
<b>Daisy chaining:</b>	Up to 50 Nanoleaf DMX Adapters or other DMX devices per DMX universe.
<b>Supported protocol:</b>	DMX512
<b>DMX channels:</b>	Each panel consumes 4 channels (red, green, blue, white). Channel IDs are fully configurable.
<b>Connectors:</b>	Nanoleaf DMX Adapter lines use a 3-pin XLR3 connector, one male and one female that are internally connected in parallel. Connectors are suitable for daisy-chaining multiple adapters.
<b>Isolation:</b>	DMX control lines have electrical isolation to 2000V
<b>Output signal:</b>	Nanoleaf proprietary control signal to the Light Panels
<b>Display:</b>	OLED dot matrix display; cyan colour; visible in the dark
<b>User input:</b>	Capacitive touch navigation buttons used for configuration of the adapter.
<b>Firmware upgradable:</b>	Via short range Bluetooth wireless communication (requires a Mac OSX device).
<b>Voltage:</b>	100VAC – 240VAC
<b>Current:</b>	50mA (Nanoleaf DMX Adapter), 750mA (Nanoleaf DMX Adapter + 30 Light Panels)
<b>Power:</b>	5W (Nanoleaf DMX Adapter), 65W (Nanoleaf DMX Adapter + 30 Light Panels)
<b>AC frequency:</b>	50/60Hz



## Customize The Experience

You can extend the Nanoleaf Light Panels with DMX experience even further by using our local network API and SDK.

Learn more: [nanoleaf.me/developers](https://nanoleaf.me/developers)

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## Need More Panels?

Commercial customers can qualify for special pricing, get early access to new features, and get customized project support when you purchase direct from Nanoleaf.

Learn more: [nanoleaf.me/commercial](https://nanoleaf.me/commercial)

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