

## DMX USB PRO

(PN 70304)



### Box Contents

- DMX USB PRO (Part No. 70304)
- USB Cable (Part No. 79110)
- This user manual

### Features

- Full 512 DMX channel (1 universe) of input or output
- Fully compliant with USITT DMX512-A
- Adjustable Frame Rates and empty frames to accommodate non-standard equipment
- USB 2.0 Support on Windows PC and Mac OSX
- 1500 V full isolation (data & power lines to protect your computer from surges)
- RDM enabled (ANSI E1.20 compliant)
- Drivers for Windows, OSX and Linux (drivers released and maintained by FTDI)
- Output refresh rate configurable from 1 to 40 Fps (Frames per second)
- Compatible with various open-source and professional lighting control programs.

### Safety

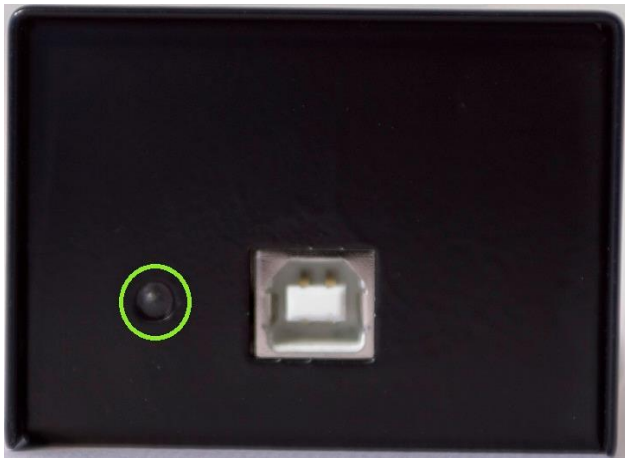
- Do not expose the DMX USB PRO to rain or moisture, doing so will void the warranty.
- Do not remove the cover, there are no user serviceable parts inside.
- This unit is intended for indoor use only.
- Wherever possible, use with a DMX Splitter for safety and higher system reliability.

### Basic Setup

- Install and configure the Driver software on your Windows™, Linux™ or Mac™ computer. Methods can vary between Operating systems, but the end result is the same: once installed correctly, the drivers will allow software to communicate with the DMX USB PRO.
- Connect the DMX USB PRO to your computer (usb) and the DMX512 control network (DMX cable).
- Load the control software of your choice onto the computer. You can choose between open-source (free) and professional (paid) programs. More information is available at [enttec.com/dmxusbpro](http://enttec.com/dmxusbpro)
- Run the software and create your show.
- For troubleshooting and testing DMX USB PRO, install and run PRO-Manager.

## LED Status

The DMX USB PRO comes with a green LED indicator located on the left of the USB port. It behaves as following:



1. **Blinks once** on USB connection: signifies that the DMX USB PRO is powered on and ready. After blinking once, it will remain off, until DMX is sent or received.
2. **Blinks continuously:** signifies DMX is being sent or received by the DMX USB PRO.
3. **Stays on always (no blinking):** signifies error mode, DMX USB PRO needs to be restored.
4. **Stays off always:** normal mode, waiting for software to instruct it to perform DMX operation.

## DMX Connector pin out

### 5pin DMX OUT/ DMX IN:

- Pin 1: Ground
- Pin 2: Data -
- Pin 3: Data +
- Pin 4: NC
- Pin 5: NC

Any suitable 3 to 5pin DMX adaptor can be used to connect to 3pin DMX cables or fixtures. Please note the pinout, before connecting to any non-standard DMX connector.

## Install Drivers

DMX USB PRO is supported by FTDI drivers for the following Operating Systems:

- Windows 8, Windows7, Windows XP, Windows Server 2003, Windows Vista, Windows Server 2008, Windows Server 2008 R2. (32 bit and 64 bit versions)
- Mac OS X (Mac OS X 10.4 or later).
- Linux - Raspberry Pi also supported

To proceed, you need the driver setup file, which is available from :

- download PRO-Manager (includes the driver setup) from the ENTTEC website: [enttec.com/dmxusbpro](http://enttec.com/dmxusbpro)
- for latest drivers and OS support, please visit FTDI website: [ftdichip.com/Drivers/D2XX.htm](http://ftdichip.com/Drivers/D2XX.htm)

## Setting up on Windows



Execute the setup file and let the drivers install on your Windows machine. If using PRO-Manager setup, click Yes when prompted to install FTDI Drivers

Click on Extract, and follow the setup procedure by clicking Next. It will go through the drivers install process and copy the needed files.

Once done it will show the completion screen, highlighting that the drivers have been installed



correctly

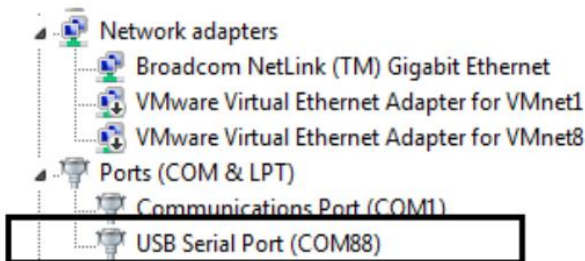
In most cases the USB port you plug the DMX USB PRO in to will automatically fall into an acceptable range with respect to the other elements of your computer's communications ports, but if you are having problems or conflicts between the ports, here is what you can do to change the COM port.

Before making any changes. it is advisable to keep a record of which serial port has been used in each attempt to configure the hardware and drivers. That way you will be able to retrace your steps should you decide to go back and try something again but with different settings elsewhere.

## Device Manager

Open Device Manager on your Windows machine. (Control Panel → Device Manager)

Expand the “Ports” section, and identify the DMX USB PRO, which usually is “USB Serial Port”



Right click on it and select *Properties*. Under “Port Settings”, click on “Advanced”, and you can then change the COM Port No. under this screen:



## Setting up on Mac



Download and install PRO-MANAGER on your Mac . For OSX 10.7 – OSX 10.10, FTDI “D2XX” drivers are copied by PRO-MANAGER and made ready for use.

From OSX 10.11 onwards, 3<sup>rd</sup> party drivers are not needed. Just install PRO-MANAGER to test your USB PRO. Apple's USB drivers are supported by ENTTEC USB PRO from OSX 10.11 onwards.

Follow detailed instructions on how to do this, using FAQ/Support links on the ENTTEC DMX USB PRO web-page: [www.enttec.com/dmxubspro](http://www.enttec.com/dmxubspro)

For driver problems with 3<sup>rd</sup> party Apps, please contact their respective support for more details.

## PRO-MANAGER

ENTTEC provides a free cross-platform app to configure, test and update DMX USB PRO. The App is available for Windows on the CD or you can download the latest version for Windows or Mac from the ENTTEC website [www.enttec.com/pro-manager](http://www.enttec.com/pro-manager)

- Use this App to test your DMX USB PRO, change default parameters (Refresh rates, Break Time), test DMX Send and Receive.
- This App is merely a troubleshooting tool and not Lighting Control software
- PRO-Manager runs inside a browser window, and it opens up the page by default, however you can also use this address in your browser <http://localhost:55555/>



From the PRO-Manager Home page, you can click the ‘Find Devices’ button to search for ENTTEC products connected to your computer. Once Pro manager discovers it, select it from the dropdown box to begin communication.

## Firmware Update

1. The following steps will guide you on how to update the firmware, use this procedure to reset the DMX USB PRO if it ever gets stuck or stops responding.
  - Firmware 1.44 is for DMX only (recommended)
  - Firmware 2.4 is for RDM and DMX



From the home page of PRO-Manager, select the firmware from the drop-down “Select firmware File” and Click on “Update firmware”



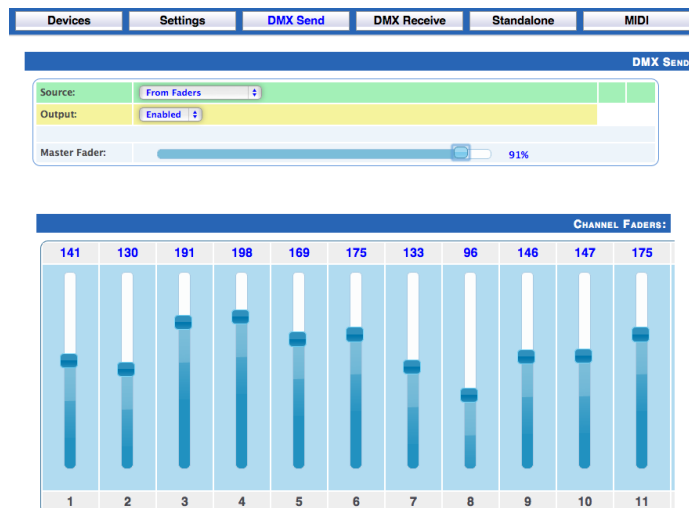
Once Finished, the page will automatically refresh, and device information will be updated to reflect the updated firmware.

Firmware 2.4 is needed, if DMX USB PRO is to be used with RDM Controller Application

## DMX Send Test

PRO-Manager can also be used to send preset DMX patterns or test selected DMX channels by sending DMX through the DMX USB PRO.

Select the "DMX Send" page from the top-menu and from DMX Send page, select "Faders" and drag the needed Channel faders to test the DMX output.



With your fixtures connected to the DMX output of the DMX USB PRO, you will see the desired effect for the value of the channel you change. For example, a fixture setup with intensity on Ch10, and R,G,B on Ch 4,5,6 - when you change the values on these channels you will see the effect on your fixtures. This can be used to test that your DMX USB PRO is working as expected.

After testing, you must close PRO-Manager, and then open any lighting control software to use DMX USB PRO.

## Specifications

Due to continuous improvements and innovations of all ENTTEC products, specifications and features are subject to change without notice.

Item	Value
Power Requirements	300mA supplied by USB
Length	77mm / 3.03"
Width	57.5mm / 2.27"
Height	40mm / 1.58"
Weight	0.3Kg / 0.66 lbs
Shipped Weight	0.4Kg / 0.88 lbs
Op Environment	0° -> 50°
Connectors	1 * 5-Pin Male for DMX Input 1 * 5-Pin Female for DMX Output 1 * USB B Male connector

## Ordering Information

DMX USB PRO and related products can be ordered from our website or through your ENTTEC dealer using the following part numbers.

Item	Name
70304	DMX USB Pro
79122	5-pin DMX Terminator
79133	2m 5-pin DMX Cable
70029	3-pin female to 5-pin male adapter
70030	5-pin female to 3-pin male adapter

## Registration

Please register your ENTTEC product to get latest software updates and to validate your warranty. To register, please visit [enttec.com/register](http://enttec.com/register)

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