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DMX PIPE

Interface USB – DMX512

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User's manual

DMX PIPE enables connection of the DMX512 data bus using USB. It is possible both to send data and to receive data from an external device. The number of bytes in a packet sent via data bus is not limited. It is therefore possible to use all 512 channels or a different number of them depending on the program used.

DMX PIPE   **Drivers installation**

Installation of drivers for Windows XP and Windows 2000

The drivers can be found in Drivers\WinXP or Drivers\Win2000 directory. For installation execute file „setup.exe". Installation will completed in the background. After installation the connected DMX PIPE interface will be automatically detected.

Successfully installed hardware can be found in the "Device Manager" as "USB Serial Converter".
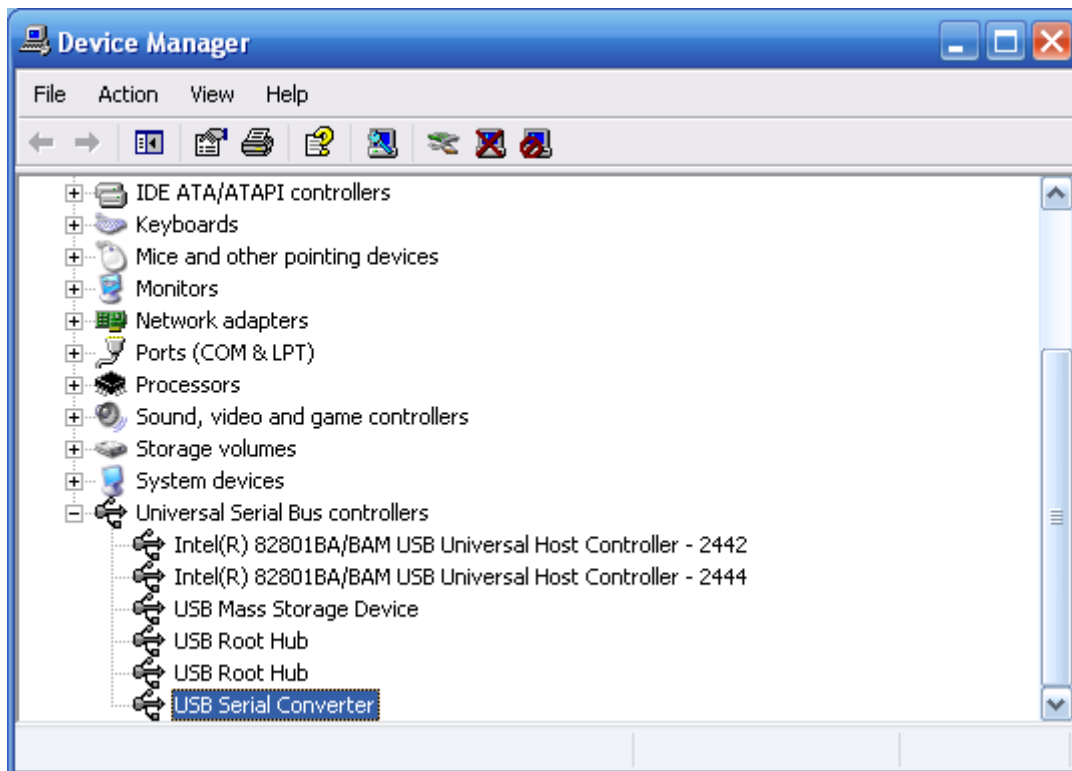
Installation can also be done through "Control Panel" using "Add hardware" item. In this case first extract "CDM 2.04.06 WHQL Certified.zip" file to your chosen directory and then select this directory when asked for the location of the driver files. This way not only the control device named as "USB Serial Converter", but also the "WDM driver" (for direct access to module USB - DMX512) can be installed. The device should function correctly with both types of drivers.

DMX PIPE   Features of DMX PIPE

- Full 512 channels support

- Transmitting/Receiving via DMX512 data bus

- Full speed DMX512

- USB 2.0 compatible

- Low consumption from USB

- -40°C to 80°C extended operating temperature range

DMX PIPE   Package contents

Interface DMX PIPE with cable for USB connection

CD with control devices and control programs

Manual for the DMX PIPE usage

Manual for Music Visualization

Description of the programs included

DMX PIPE   Connection of the DMX512 cable

The following picture shows how to connect the cable. The grounding outlet of the XLR connector is not used for grounding. Therefore do not connect shield to the metal connector cover, it can cause short circuit or unexpected behavior. Shield should be connected to pin number 1.
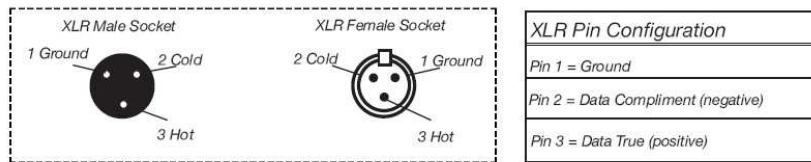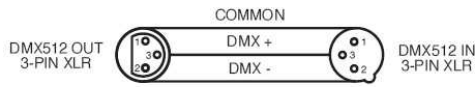
Figure 2

Figure 3

Connection of the DMX512 cable

When connecting longer cables, it is necessary to use a terminator (for impedance adaptation of the wiring) at the end of the wiring. Terminator is 120 Ohms resistor, ¼ W connecting pins 2 and 3 on the XLR connector socket (DATA+ to DATA-). Resistor can be soldered in to the XLR socket and connected to the last DMX unit. This lowers the probability of unexpected behavior of units.

Some manufactures use 5-pin XLR DMX connector for data transfer instead of a 3-pin one. Standard 5-pin XLR connector can be implemented into a 3-pin one using cable adapter. Connection of pins for a 5 and 3-pin XLR connector is shown in the following table.

Conductor	3-Pin XLR Female	5-Pin XLR Male (In)
Shield / Ground	Pin 1	Pin 1
Data Compliment (- signal)	Pin 2	Pin 2
Data True (+ signal)	Pin 3	Pin 3
Not Used		Do Not Use
Not Used		Do Not Use

Connection of the XLR connector

Any hardware working with the DMX512 protocol can be connected to the module USB - DMX512. Interconnection of the individual modules is done as a data bus, where a terminator has to be connected to the last unit. Do not connect devices in a star topology or other unsuitable one. The control of units is independent and their address is set up according to a table provided by the manufacturer.
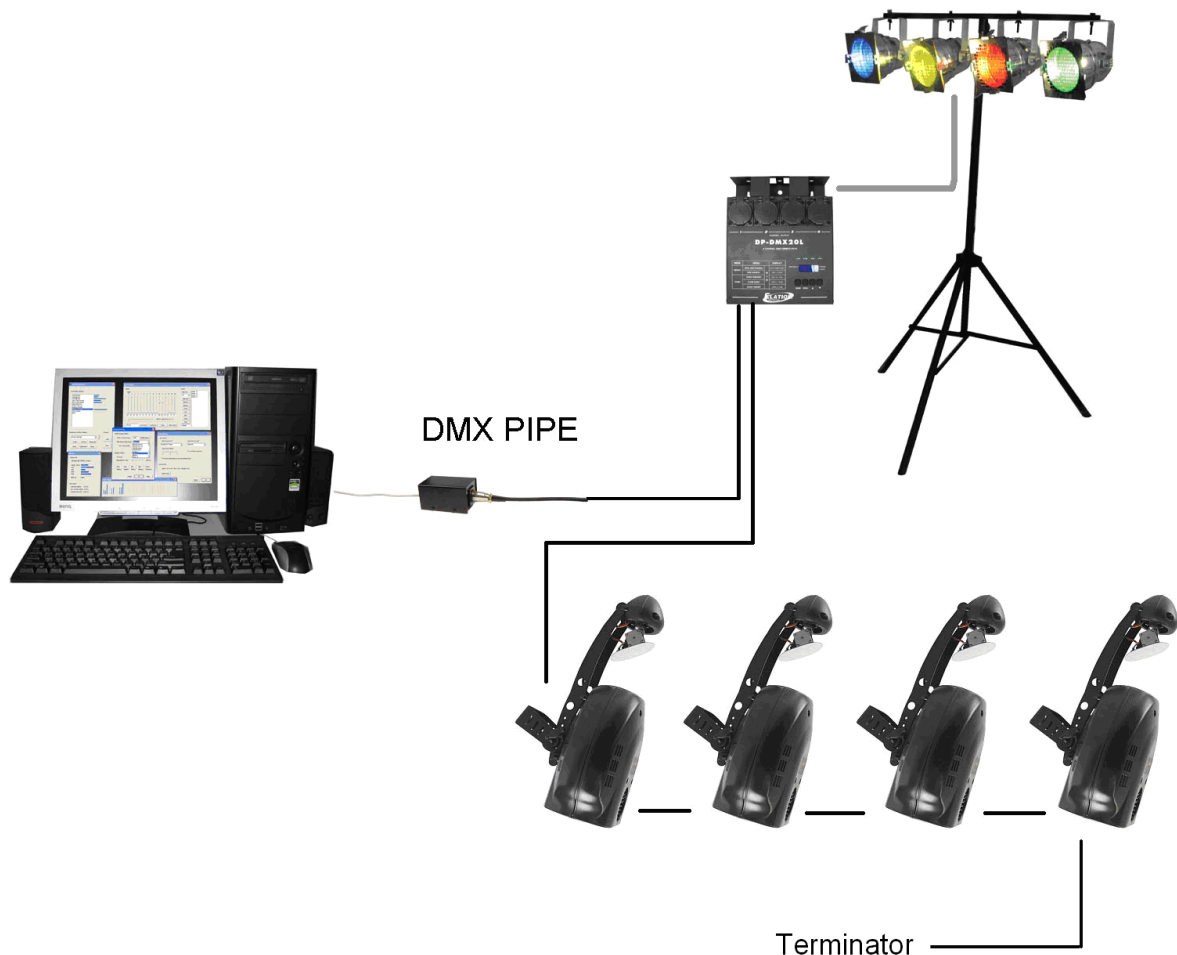
Diagram of a connection using DMX512

Supply of the module	from USB
Current consumption	70 mA
Cable length	1.6 m
Weight	0.1 kg
Working position	any safe position
Output	DMX512 (EIA-485)
Guarantee	30 months
Driver download	drivers.svetla.org