

D1 Advanced DMX controller / Driver

Introduction

D1 family of DMX controllers are universal, 4 channel advanced DMX controllers/drivers for lightning applications. They are based on PX1048 OpenDMX controller and features 4 high power constant current output channels with selectable current. Every channel is controlled by the separated dimming control, in order to obtain over 4 billion (32 bit) of colors.

Features

- Stand alone solution for LED control
- 4 separated, 8 bit, constant current high power outputs
- Current regulation from 4x80mA up to 4x1 Amp
- Isolated DMX connection
- No lost DMX frame feature
- Flicker free Algorithm
- Master DMX capability
- Full support DMX512A and OpenDMX protocols
- Programmable for stand-alone operation
- DMX line protected against external burst and surge
- Wide range of AC/DC power supply (9-36VDC, 8-28VAC)
- Very small footprint (WxHxL - 36x90x58 mm)
- Standard DIN 2 modules housing for easy installation



Technical characteristics

Power supply input *	+9...36VDC or 8..28VAC
Number of output channels	4 separated 8 bit or 2 separated 16 bit
Max. output current (per channel)	1 Amp
Max. output tension (per channel)	33V
Output current selection	0.08/0.1/0.12/0.15/0.17/0.25/0.30/0.35/ 0.4/0.45/0.5/0.6/0.7/0.8/0.9/1.0 Amp
Protocol support	DMX512A, OpenDMX
DMX Line isolation	Optoisolators 2.5KV
Address selection	DMX 512 or OpenDMX 65K
Operating mode selection	16 different modes
Status indicators	2 LED indicators (Power ON and DMX Active)

Ordering information

D1-1048	D1 DMX/OpenDMX controller and driver

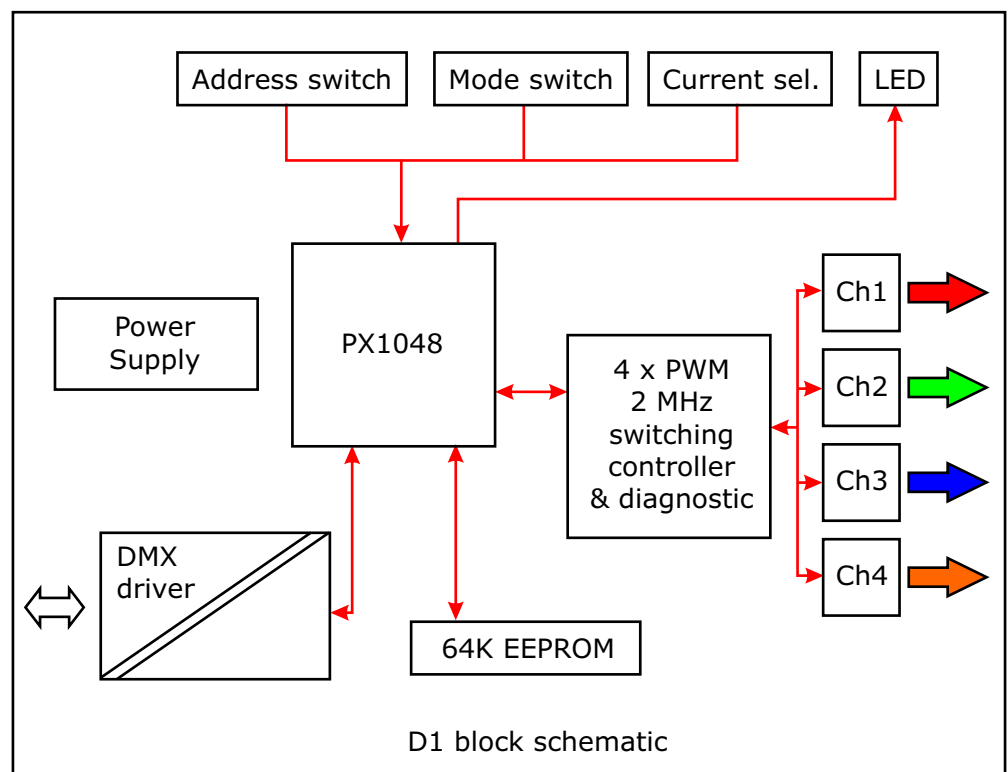
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Technical details

The D1 is four channel front end, DMX/OpenDMX controller and driver. The core of the controller is PX1048, DMX/OpenDMX protocol manager with the capability to serve both DMX512A and OpenDMX protocols simultaneously.

The controller unit supports all operating modes according to OpenDMX specification, in both slave and master modes. The D1 has 64 kb of user flash memory space for the program storage. The configuration and user programs can be stored using OpenDMX protocol. The 9 bit address switch can select 512 different DMX addresses, while 64K address feature can be obtained using ODMX_ADDRESS command. The OpenDMX operating modes are available via 4 bit switches.

When running in master mode, D1 can drive whole DMX/OpenDMX network according to the user program settings. Note that D1 support also remote dimmer existence, such as LUX P1 devices.



The output current can be selected via 4 bit switches on fixed base: 0.08/0.1/0.12/0.15/0.17/0.25/0.30/0.35/0.4/ 0.45/0.5/0.6/0.7/0.8/0.9/1.0 Amp. The maximum output voltage is $V_{in} - 3V$. Since D1 can be supplied either with AC or DC, when operating on DC, no exact power supply polarity is required on input connectors.

The outputs are supervised, offering remote diagnostic feature.

The DMX stage is isolated from the rest of the controller electronic. The correct DMX line termination is required.

The D1 has two LED indicators, one for the Power Supply, and other one for valid DMX/OpenDMX transmission.