# DX10

10-PORT ETHERNET TO DMX/RDM CONVERTER
DATA SHEET

PRODUCT OVERVIEW

The DX10 by LED CTRL is a compact Ethernet-DMX to DMX/RDM gateway, supporting up to 10 universes of Art-Net, sACN, and ESP eDMX protocols in a 1U half-width rack.

With 10 DMX/RDM output ports, two mirrored service ports, and RJ45 outputs, it ensures DMX compliance using cost-effective Cat5e/Cat6 cables. Dual power options (PoE or 12-24V DC) and front LED indicators make installation and monitoring simple, while a local host web interface streamlines configuration and updates. HTP/LTP merging of two Ethernet-DMX sources adds versatility.
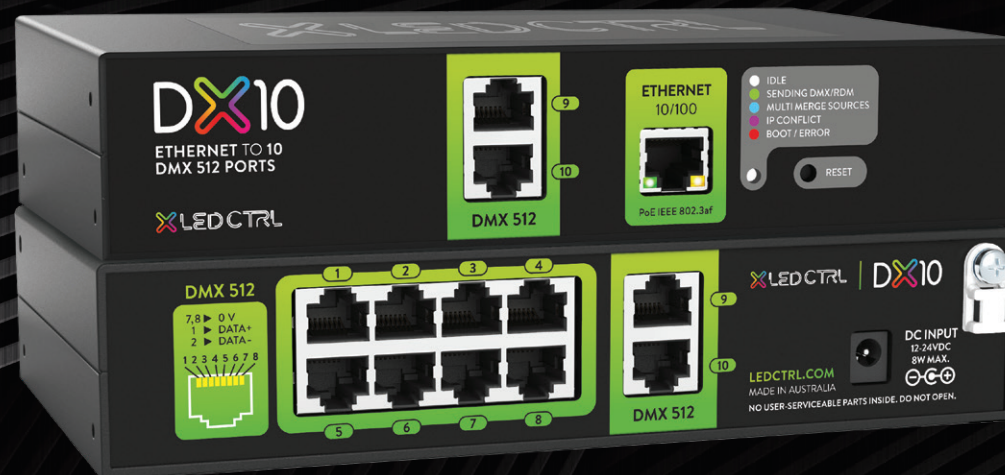
KEY FEATURES

- SUPPORTS 10 UNIVERSES OF ETHERNET-DMX TO DMX/RDM.

- COMPATIBLE WITH ART-NET, SACN, AND ESP PROTOCOLS.

- 1X RJ45 ETHERNET INPUT (10/100 MBPS) WITH LED STATUS INDICATOR.

- 12 DMX/RDM OUTPUT PORTS: 10 REAR AND 2 MIRRORED FRONT-FACING SERVICE PORTS.

- DHCP OR STATIC IP SUPPORT.

- DUAL POWER OPTIONS: POE OR DC JACK, WITH SURGE AND REVERSE POLARITY PROTECTION.

- INDEPENDENTLY CONFIGURABLE DMX SETTINGS: INPUT PROTOCOL, OUTPUT TYPE, REFRESH RATE, HTP/LTP MERGE.

- SIMPLE CONFIGURATION AND FIRMWARE UPDATES VIA A WEB INTERFACE.

- INCLUDES MOUNTING ACCESSORIES FOR SURFACE, DIN, OR RACK (HALF/FULL-WIDTH) INSTALLATIONS.

WWW.LEDCTRL.COM

A CLOSER LOOK AT THE DX10

FORWARD-FACING SERVICE PORTS

The DX10 includes two forward-facing service ports that electronically duplicate the rear Ports 9 and 10. These provide convenient access for troubleshooting without needing to reach the back of the rack.

LED INDICATORS

Status LED indicates current operation:

- White: Idle
- Green: DMX/RDM data transmission
- Cyan: Multiple merge sources
- Red: Error or device in boot state

WEB INTERFACE

Accessible via any modern web browser, the localhost web interface allows:

- Device configuration
- IP address management (Static/DHCP)
- Firmware updates
- Real-time status monitoring

NETWORKING AND MERGING

- Supports DHCP or Static IP address configuration.
- Allows merging of up to two Ethernet-DMX sources using HTP (Highest Takes Precedence) or LTP (Latest Takes Precedence) methods.

POWER OPTIONS AND FAULT PROTECTION

Dual Power Input:

- Power over Ethernet (PoE) IEEE 802.3af
- 12-24V DC input with reverse polarity protection

Integrated Surge Protection:

- Ensures reliability and protects against voltage spikes.

OPERATIONAL SAFETY AND MAINTENANCE

- Ensure proper ventilation around the device for convection cooling.
- Avoid exposure to moisture (IP20 rating).
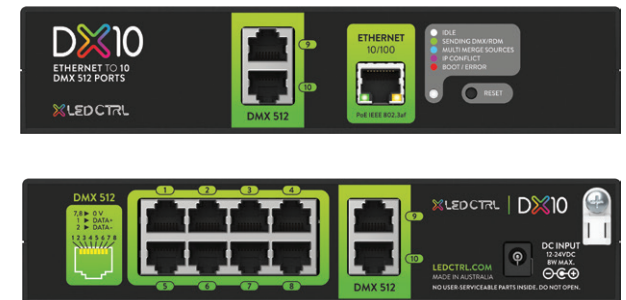- Regularly inspect and clean connections to prevent dust buildup.

WARRANTY AND CERTIFICATIONS

Warranty:

3-year return-to-base manufacturer warranty.

Certifications:

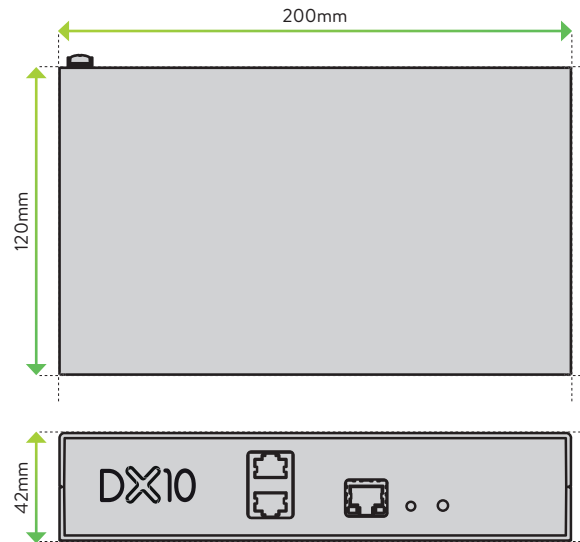CE, FCC, RCM, and other relevant standards.

BOX CONTENTS

- DX10 unit
- Ethernet cable
- Power supply with AU/EU/UK/US adapters
- Rack, surface/DIN mount ears, DIN clips, screws

SPECIFICATIONS

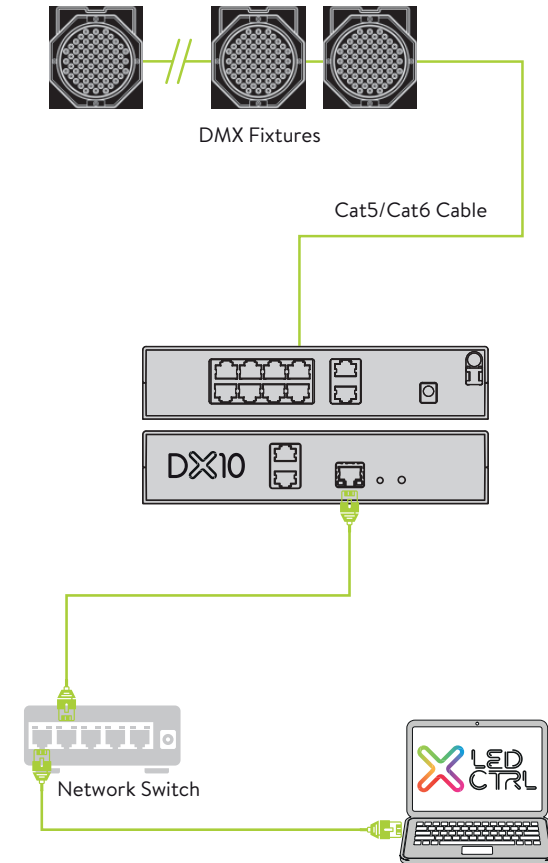|	
Connectors	1x Ethernet Input (RJ45) 1x Power Input (DC) 10+2 (Duplicated Port 9 and 10) x DMX/RDM Output (RJ45)
IP Rating	IP20
LED Status Indicator	Forward facing LED indicator Network link/Activity (integrated into RJ45 port)
Input Protocols	Art-Net, ESP, sACN
Output Protocol	USITT DMX512/1990
Max Output Channels	5120 (10 Universes)
Network Speed	10/100Base-T
Network Configuration	DHCP/Static (Default 192.168.0.10)
RDM	Yes
Max Merging Sources	2 Sources
Firmware Updates	Web browser
Input Voltage	12-24V DC/PoE IEEE802.3AF
Cooling Method	Convection
Environmental Operating Temperature	-20°C to 50°C / 32°F to 122°F
Environmental Operating Humidity	5-95% (non-condensing)
Body Material	ABS and Anodized aluminium
Rack Ear Material	Powder coated aluminium
Dimensions	200 x 120 x 42mm (L x W x H)
Weight	0.46kg/1.01lbs

OVERALL DIMENSIONS

200mm

120mm

42mm

DX10

MOUNTING DIMENSIONS

101mm

26mm

M3-4mm
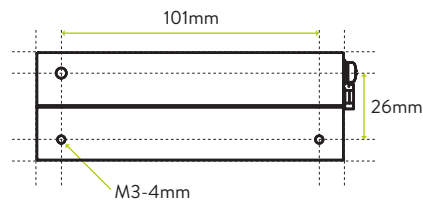
TYPICAL SYSTEM WIRING DIAGRAM

DMX Fixtures

Cat5/Cat6 Cable

DX10

Network Switch

CAT5/6 PINOUT FOR DMX OUTPUT (RJ45 CONNECTORS)

- **Pin 1:** Data +
- **Pin 2:** Data –
- **Pin 7/8:** Ground
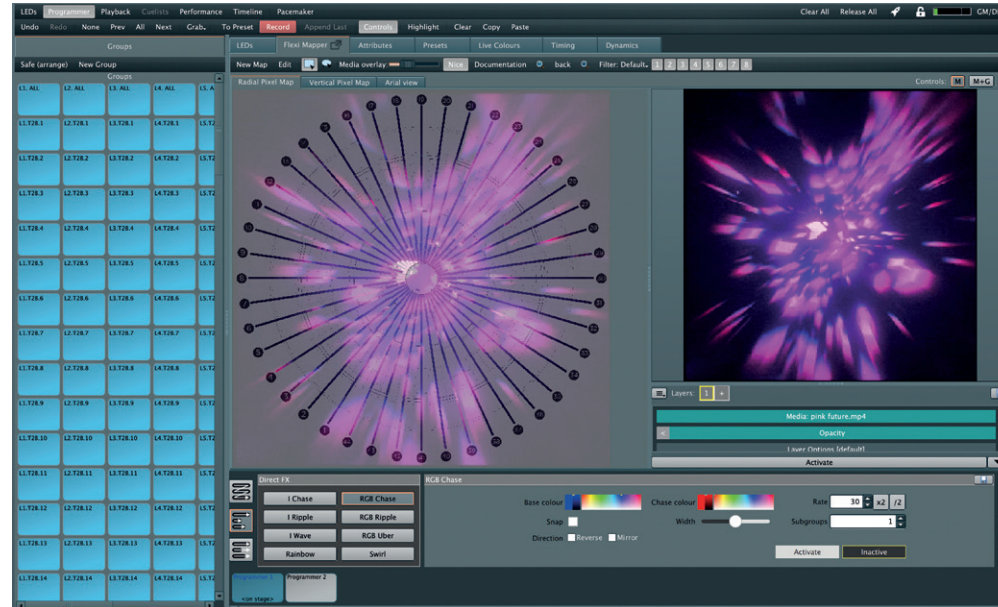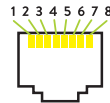
LED CTRL SOFTWARE

Using the DX10 with LED CTRL software provides the easiest configuration method and maximum functional benefits.

LED CTRL software is a powerful LED lighting solution that revolutionises your lighting control experience by simplifying the design and commissioning processes.

It empowers you to communicate, plan, commission and program small to large scale projects visually and using drag and drop tools, supporting efficient and effective project delivery.