

# DMX-Fix User Guide

(Version 1.4)

DMX-Fix is a combined DMX512 error fixer and splitter. It is used to solve compatibility problems between DMX512 devices.

## Key Features include:

- ❑ Input Optical Isolation
- ❑ Five independent outputs, All connections via Neutrik XLR
- ❑ DMX512-A compatible
- ❑ Truss Mounting adaptor available
- ❑ Fixed DMX512 output timing:
  - Break: 250uS
  - MaB: 30uS
  - MbB: 30uS
  - Channels: 512
  - Refresh: 30mS
- ❑ Removes all advanced data with non zero start codes such as RDM and SIPs
- ❑ Retimes DMX512 input and corrects both byte and break timing
- ❑ Last Frame Transmit on DMX input failure

## Specification:

Input Voltage: 9V DC  
Maximum Current: 0.5 A  
Dimensions: W:195mm H:115mm D:55mm  
Mounting: Free standing or Truss Mounted (optional adaptor)  
IP: Indoor use only  
Listings: CE, FCC

## Power Supply Options: (order separately)

PSU-9-1.5-XLR4  
Output: 9V 1.5A  
Max DMX-Splits: 1  
Connection: 4pin Female XLR  
Listing: CE / FCC / UL / PSE



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## DMX512 Wiring:

XLR Pin	Function	Colour
1	Ground	Black
2	Data -	Blue
3	Data +	Red
4	No Connection	
5	No Connection	

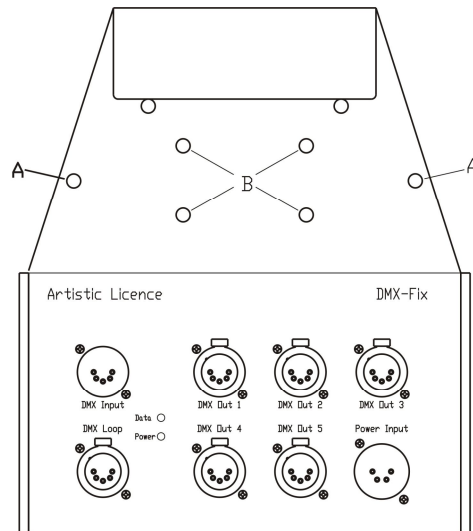
## Power Input Wiring:

XLR Pin	Function	Colour
1	Ground	Black
2	Not connected	
3	Not connected	
4	9 to 24V @ 200mA	White

## Truss-Ear Adaptor: *(Supplied separately)*

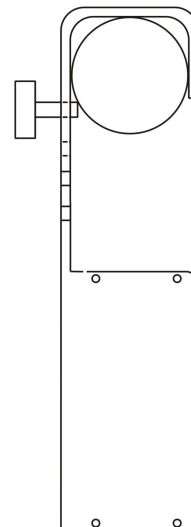
The Truss-Ear adaptor can be used to attach a DMX-Fix to a truss bar. To fit the Truss-Ear follow instructions below:

- 1) Remove two black end bezels
- 2) Unscrew two end plates
- 3) Push the DMX-Fix into the Truss-Ear
- 4) Using the eight screws provided, screw the side panels of the Truss-Ear into the DMX-Fix.



## Truss Mounting:

- 1) Attach a safety wire using the eye link provided (A)
- 2) Place over truss bar and screw the two thumb screws
- 3) There are additional holes for cable management (B)



## Input:

The DMX512 input is attached via a male 5 pin XLR.

## Loop Through:

A passive Loop Through connection allows onward connection to other DMX512 devices. If this feature is not required a termination link must be connected.

## Output:

Five DMX512 outputs are provided. Each output is capable of driving 32 additional DMX512 devices. It is not necessary to terminate any outputs that are not connected. However, a terminator must be connected to the final DMX512 device. If the DMX input fails DMX-Fix will automatically retransmit the last good DMX frame.

## Indicators:

Two dual colour indicators are provided:

1. Data:
  - ❑ Green: Indicates that DMX512 is being transmitted by the outputs.
  - ❑ Red: Indicates that DMX-Fix has fixed a bad packet.
  
2. Power:
  - ❑ Red: Indicates good power and normal operation.

## System Connection:

The following table summarises the internal earth interconnection and isolation:

Please note that we use the term Earth-Ground to avoid international confusion. In Europe Earth-Ground is called Earth, in the USA Earth-Ground is called Ground.

<b>Circuit</b>	<b>Description</b>	
Chassis	Normally floating. Can be connected to Earth-Ground via screen of power cable.	
DMX512 Input (including Loop Through)	Type:	Isolated.
	Pin 1:	Connects to internal isolated circuit. No connection to chassis.
	Shell:	The connector shell is connected to chassis.
DMX512 Outputs	Type:	Grounded.
	Pin 1:	Connected to chassis.
	Shell:	The connector shell is connected to chassis.
Internal Logic Ground	Connects to chassis.	

## Accessories:

- ❑ DMX-Term5 - Termination Plug
- ❑ PSU-9-1.5-XLR4 - Moulded PSU with universal mains input via an IEC 3 pin
- ❑ Truss-Ear - A Truss Mounting Kit

## The Splitter Range:

- ❑ Rail-Split RDM - A fully bi-directional six channel DMX512 splitter and distribution amplifier designed for permanent installations
  - Input: 1 & Loop (inc termination option)*
  - Isolated Outputs: 6*
  - Connections: Screw Terminals*
  - Housing: DIN Rail Enclosure*
  - Power: 5V via screw terminal*
  - RDM: Draft & Standard V1.0*
- ❑ DMX-Split RDM - A portable and robust five channel DMX512 distribution splitter with support for the RDM V1.0
  - Input: 1 & Loop*
  - Outputs: 5*
  - Connections: Neutrik XLR*
  - Housing: Small Metal Enclosure*
  - Power: 9-24V via 4pin XLR*
  - RDM: Draft & Standard V1.0*
- ❑ Rack-Split RDM - An economical DMX512 distribution system with support for the RDM V1.0, including eight RDM outputs and one Non-RDM output.
  - Input: 1 & Loop*
  - Outputs: 8 + 1 (safe output with no RDM)*
  - Connections: Neutrik XLR*
  - Housing: 1U Rack Unit*
  - Power: IEC Mains*
  - RDM: Draft & Standard V1.0*
- ❑ Iso-Split RDM - A fully isolated DMX512 distribution system with support for the RDM V1.0 (Remote Device Management)
  - Input: 1 & Loop*
  - Isolated Outputs: 10*
  - Connections: RJ45*
  - Housing: 1U Rack Unit*
  - Power: IEC Mains*
  - RDM: Draft V1.0 only*

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