

Rail-Tran User Guide

(Version 2-5)

Rail-Tran provides six Darlington transistor outputs capable of operation to 50V DC at 450mA, product total 750mA. Rail-Tran is housed in a high impact DIN Rail mounting case with DMX512 and RDM Draft V1.0 support.

Rail-Tran can be used for a wide range of interface tasks including remote control of contactors, solenoid and motor drive and general animatronics.

The control interface is DMX512 (all standards) and RDM (Remote Device Management) Draft V1.0. All parameters including start address are set using RDM. This can be done using any of the following products: Jump-Start & Net-Lynx O/P or Ether-Lynx via an Art-Net network. For more information see App Note 36 & 39 at www.ArtisticLicence.com

Specification:

Input Voltage:	9-48V DC
Maximum Current:	1.5A
Internal Fuse:	500mA Electronic Fuse
Feedback Voltage:	5V to 50V
Feedback Fuse:	1A Slow Blow 20mm
Duty Cycle:	100%
Dimensions:	W:88 H:90 D:58mm
Mounting:	DIN Rail or surface mount
IP:	Indoor use only
Listings:	CE, FCC
Max Wire Size:	2.5mm ²

Power Supply Options: (order separately)

PSU-9-1.5-FER

Output:	9V 1.5A
Input:	Auto-sensing
Max Rail-Trans:	1
Listing:	CE / FCC / UL / PSE

PSU-24-2-FER

Output:	24V 2A
Input:	Auto-sensing
Max Rail-Trans:	2
Listing:	CE / FCC / UL / PSE



Copyright © Artistic Licence Engineering Ltd. All rights reserved.

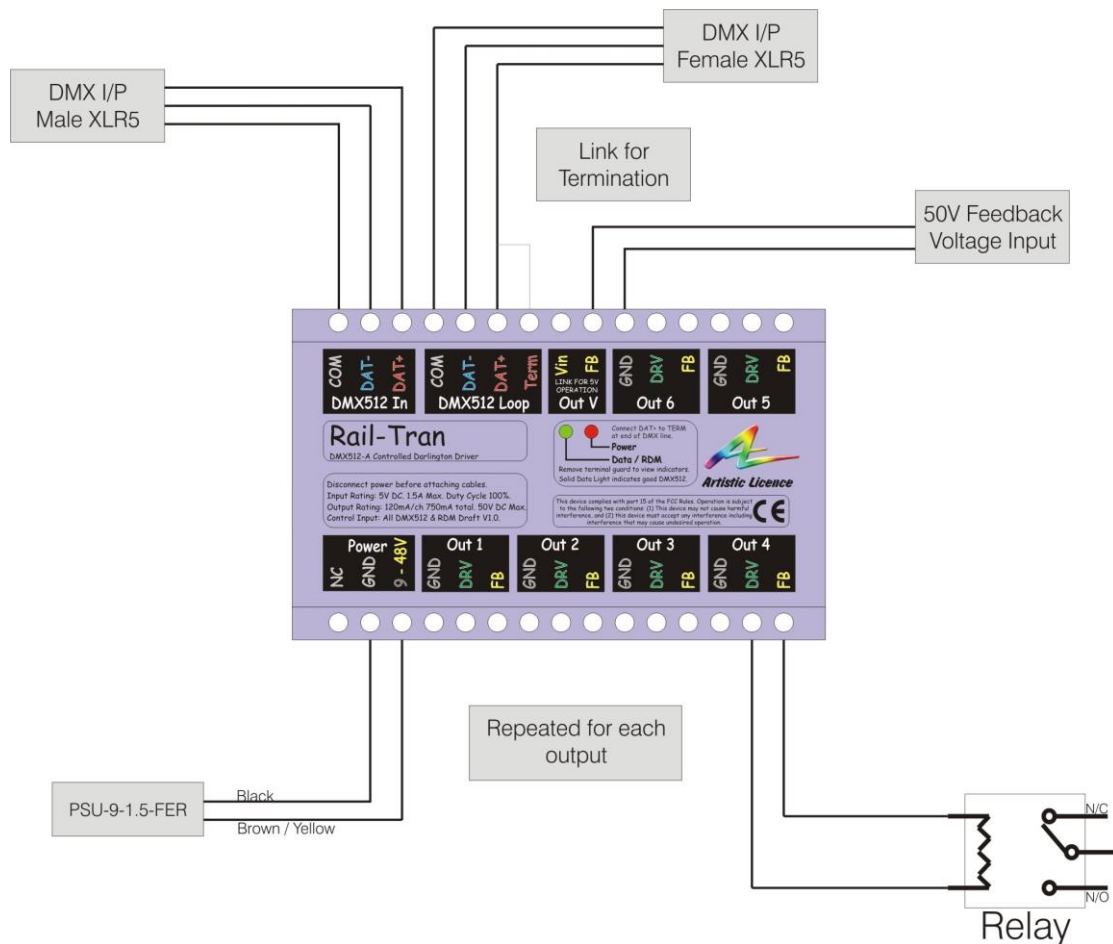
Operation:

Rail-Tran uses six DMX channels, one channel for each output. The output is energised when the level of the selected DMX512 channel exceeds 50%.

Feedback Voltage:

For convenience Rail-Tran provides a feedback voltage with each output to simplify wiring. The user can provide the feedback voltage or it can be linked to the fused input voltage.

Rail-Tran Wiring Diagram:



Note: It is recommended that wires from the PSU to the Rail-Tran have a ferrite core, or similar suppression device, fitted. This should be located close to the Rail-Tran. It is also recommended that the output wires are fitted with separate ferrite cores when driving a high current load.

Drive Output:

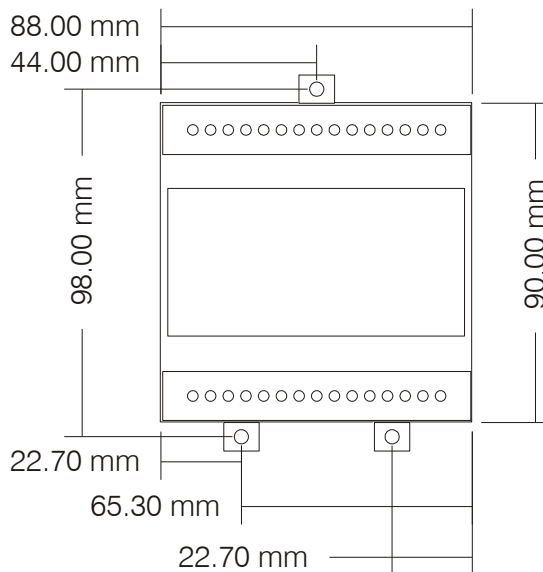
- Darlington drive
- 50V DC Current Sink
- 450mA per output maximum
- 750mA product total current drive

DMX512 Wiring:

XLR Pin (Convention)	Rail-Tran Terminals	Function	Colour
1	GND	Ground	Black
2	DAT-	Data -	Blue
3	DAT+	Data +	Red
4		No Connection	
5		No Connection	

DIN Rail Surface Mounting:

To use the surface mount option push the three bottom tabs out until they click into place. We recommend using an M4 Pan head screw.



CE Compliance

Rail-Tran is CE compliant when installed in a shielded and earthed metal case



Artistic Licence

Studio 1 Spectrum House
32-34 Gordon House Road
London
NW5 1LP
Tel: +44 (0)20 88 63 45 15
Fax: +44 (0)20 84 26 05 51
Email: Sales@ArtisticLicence.com



The information contained in this document is subject to change without notice. Artistic Licence Engineering Ltd. makes no warranty of any kind with regard to this material, including, but not limited to, the implied warranties of fitness for a particular purpose. Artistic Licence Engineering Ltd. shall not be liable for errors contained herein or for incidental or consequential damages in connection with the furnishing, performance or use of this material. All trademarks are acknowledged.