═══DOUG FLEENOR DESIGN═══

Model: 124-3 and 124-5
DMX512/RDM Splitter
Installation and Operations Manual

Doug Fleenor Design, Inc.
396 Corbett Canyon Road
Arroyo Grande, CA 93420
(805) 481-9599 Voice and FAX

Manual revision
September 21, 2016

Product description

The 124-3 and 124-5 are economical bi-directional DMX512/RDM splitters. They are available with either 3 (model 124-3) pin or 5 pin (model 124-5) XLR connectors for all DMX512/RDM connections. These splitters have fully isolated inputs. The four outputs are separately driven, but are not isolated from one another.

The rugged chassis made from 0.1" thick aluminum is designed for portable use. A ½" hole is provided for truss or pipe mounting using a C-clamp or half coupler. Additional slots are provided for safety cables.

The power supply is permanently attached so it can not be lost or separated from the splitter. It also has auto-switching universal voltage input selection allowing the splitter can be used around the world without changing any switches or jumpers.

Indicators are provided for power (red), and signal present (green).

Specifications

Input circuit:	Protected EIA-485 receiver (LT1785).
Input protection:	Undamaged by up to 60 Volts continuous, 15KV transients.
Input signal:	DMX512, DMX512/1990, DMX512-A, or RDM.
Signal connectors:	Gold plated Neutrik male (input) and four female (output) XLR connectors.
Termination:	Input and all outputs are terminated per RDM specifications.
Power input:	100-240 VAC, 50-60 Hz., 0.5 Amps, auto-switching.
Indicators:	Red POWER indicator. Green SIGNAL lights when DMX512 or RDM is present.
Cooling:	Convection cooling, no fan required.
Isolation:	DMX512/RDM input is optically isolated to 1,500 Volts.
Color:	Black. Laser engraved legends on top surface.
Size and weight:	1.6"h X 4.8"d X 5.5"w, 2 pounds
Environmental:	0-40 degrees C, 10-90% humidity, non-condensing
Mounting:	A ½" hole is provided for C-clamp or half coupler mounting. Two slots are provided for safety cables or other mounting techniques.

Wiring

Cabling used for DMX512 signals to and from the 124-3 or 124-5 must be specified for DMX512 usage. Examples include Belden 9829 and Belden 9729 or their equal.

Pin outs for 5 pin "XLR" connectors:
pin 1:   DMX512 common
pin 2:   data -
pin 3:   data +
pin 4 & 5: not used

Pin outs for 3 pin "XLR" connectors:
pin 1: DMX512 common
pin 2: data -
pin 3: data +

Mounting

These units can be used as portable devices or they can be mounted to a pipe or truss using a C-clamp or half coupler. There is no rack mounting adaptor. For applications requiring rack or junction box mounting, please refer to our standard or enhanced splitter product lines.

LED indicators

There are two LEDs on the 124-3 and 124-5. Their function is described in the table below:

LED	Function
POWER (red)	On when input power is present
SIGNAL (green)	On or flickers when DMX input is present

Splitter operation

The 124-3 and 124-5 have one input which is optically isolated from the outputs. The four outputs are independently driven, but are not electrically isolated from one another.

There are no settings, jumpers, or adjustments in the 124-3 and 124-5. They only need to be connected to a DMX512 or RDM signal source and to dimmers, fixtures, or other "end devices".

The 124-3 and 124-5 splitters work with standard DMX512 signals. In addition, they can be used with RDM compliant equipment. The splitters can operate in bi-directional communication modes as required by the RDM protocol. No settings or adjustments are needed to enable this capability. These splitters are not discoverable devices within the RDM protocol.

Warranty

Products manufactured by Doug Fleenor Design carry a five year parts and labor warranty against manufacturing defects. It is the customer's responsibility to return the product to Doug Fleenor Design (at the customer's expense) for service. Doug Fleenor Design will repair the unit and return it to the customer (at Doug Fleenor Design's expense). If a trip is necessary to the customer's site to solve a problem, the expenses of the trip must be paid by the customer.

1. Note that this warranty covers Manufacturing Defects. It does not include damage due to misuse or abuse. Most non-warranty repairs are made for a fixed $30.00 fee.