

USER MANUAL

Splitter 8

DMX / RDM SPLIT & DATA FIX



Thank you

Thank you for choosing Splitter 8 by Zero 88 to fulfil your data distribution needs. We sincerely hope that your new product will bring you years of trouble-free service. We make great efforts to build in reliability and serviceability at every stage of our development and production processes and include a three-year limited warranty - giving you peace of mind for your investment.

Our extensive dealer network can also provide you with technical service and sales support in your local language no matter where you are in the world. If you have any questions, comments or problems our contact details can be found at zero88.com/support

Once again, thank you for choosing Zero 88.

Introduction

Splitter 8 provides flexible DMX / RDM data distribution, in a slim (1RU) 19" format, offering both splitter and "data fix" functionality in a single device.

Splitter 8 is fully compatible with the latest RDM protocol, ensuring your DMX distribution network is ready to meet your future demands. Splitter 8 is appropriate for permanent installations or as a flexible, adaptable rental & touring tool.

"Fix Switch" is designed for systems where compatibility issues (or poorly designed fixtures) are causing flickering. When enabled, "Fix Switch" discards non-DMX data (including RDM) and adjusts the DMX timing to values more likely to work with fixtures that do not fully comply with the DMX standard.

The input is optically isolated, with a "Thru" connection for further expansion. The eight buffered outputs are protected against electrical faults. All connectors are Neutrik parts.

Splitter 8 is ideal for use alongside Gateway 4 and Gateway 8 to build a larger data distribution system.

Power

The internal power supply requires an input in the range 94-230 VAC with an earth connection. The mains fuse is not user changeable.



This product must be earthed
Apparatets stikprop skal tilsluttes en stikkontakt med jord, som giver forbindelse til stikproppens jord.



Laite on liitettävä suojakoskettimilla varustettuun pistorasiaan



Apparatet må tilkoples jordet stikkontakt
Apparaten skall anslutas till jordat uttag

DMX Input

The input is optically isolated from the outputs and mains earth. This isolation offers protection from potentially dangerous high voltage accidents. Also, it can eliminate potential earth/ground differential issues as the input is not electrically connected to any of the outputs.

DMX Loop / Termination

A passive loop-through connection allows onward connection to other DMX512 devices. If this feature is not required then the signal must be terminated.

DMX Outputs

Splitter 8 has electrical (transient) protection on the outputs, to guard against both static electricity and LED power supply faults or mis-wires. Each output is independently buffered and can drive up to 32 DMX devices. It is not necessary to terminate any unused outputs.

DMX Connector	Pin	Desc.
	1	COM
	2	DMX -
	3	DMX +
	4	Not Connected
	5	Not Connected

LED indicators

The product features two LED indicators on the front panel.

- Power
 - Green: power on
 - Red (split mode): data error or collisions detected
 - Red (fix mode): data fixing is occurring
- Data
 - Off: no data received
 - Green: DMX and RDM received
 - Yellow: DMX only received

Fix switch

Normal splitter operation is achieved by setting the switch on the front of the product to 'Split'. In splitter mode, the outputs operate as bi-directional RDM ports and all DMX data received is passed onto the outputs.

Alternatively, set the switch to 'Fix' if you are experiencing product compatibility problems. Unfortunately, there are numerous products on the market that will not accept the wide range of legal DMX timings and data. Fix mode attempts to clean-out any unusual or non-standard timing and data before sending to the output. This includes stripping out all non-zero start codes (including RDM), forcing a 512-channel footprint and calming any timing jitter.

The detailed fix specification is as follows:

- Accepts and corrects break in range 56 µs – 1000 µs and outputs 250 µs
- Accepts and corrects MaB in range 5 µs – 1000 µs and outputs 30 µs
- Accepts and corrects MbB in range 0 µs – 1000 µs and outputs 30 µs
- Accepts channel count 1 – 512 and outputs 512
- Accepts refresh period from 23 ms – 1000 ms and outputs 30ms
- Filters out multiple consecutive breaks
- Re-times bytes of 1 stop bit to 2 stop bits
- Filters out all non-zero start code packets
- Re-times digital signal

This equipment is designed for professional lighting control and is unsuitable for any other purpose. It should be used by, or under the supervision of, an appropriately qualified or trained person.

E&OE. Cooper Lighting Solutions reserves the right to make changes to the equipment and specification described in this manual without prior notice.

