#newRDMexperience

Lighting control at a next level

LumiSplit

DMX/RDM SPLITTERS

LUMI-WHAT?
Splitters explained

LumiSplit stands for a range of DMX/RDM splitters designed by Luminex Network Intelligence. But what actually is a splitter?

A splitter is a device that takes in a DMX line and repeats it on multiple DMX outputs.. This comes in very useful when you have more than 32 lighting fixtures, which is the maximum amount for a single DMX line to control.

A DMX splitter is able to provide 32 devices on each of the split lines with the correct data. So for example LumiSplit 2.10 with 10 outputs offers you a solution to control up to 320 lighting devices with only 1 splitter.

You also need a splitter when you have fixtures in different locations and they cannot be incorporated in a 'daisy chain' (f.e. illustration).

Lighting rig 2

Lighting rig 1

LumiSplit

Lighting desk / RDM controller
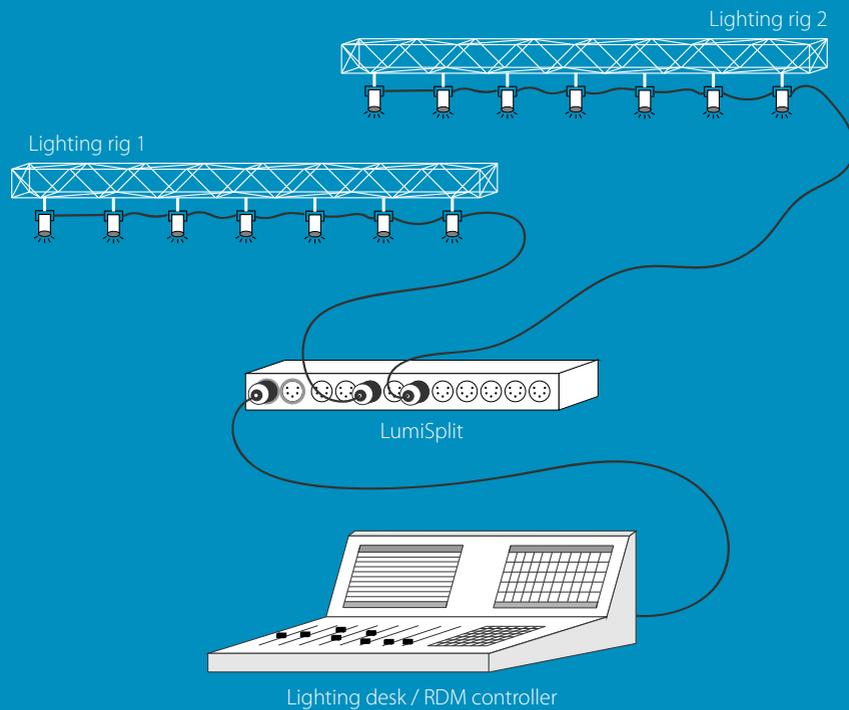
RDM/DMX
Introduction

LumiSplit devices not only transfer DMX signals, but also RDM packets. Remote Device Management or RDM is a protocol that allows bi-directional communication between a system controller and attached devices over a standard DMX line. This protocol allows configuration, status monitoring, and management of your lighting devices from any RDM controller. You never have to climb the truss anymore to change a small setting or patch lighting fixtures.

At Luminex we strongly believe that the RDM standard will grow even more in importance in the worldwide entertainment industry. By implementing it in our devices, we want to make sure all Luminex users are reinforced and prepared for the future.

RDM packets reply

DMX + RDM packets

Lighting desk / RDM controller

Lighting fixture
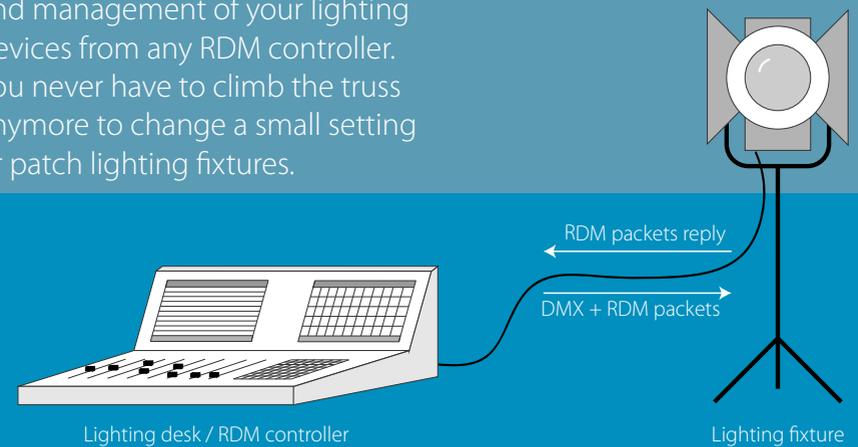
LUMISPLIT 2.10 FEATURES

HIGH PORT FLEXIBILITY

LumiSplit 2.10 offers you the highest possible flexibility for a 1U device at configuring multiple DMX lines, with 2 inputs and 10 outputs (Neutrik 5 pin XLR) with A/B zone selection.

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NEW RDM FEATURES

From now on, you can discover, manage and set-up all LumiSplit devices directly from your RDM controller. Even future upgrades can be executed over RDM.

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FULL ISOLATION

All LumiSplit DMX connectors are individually equipped with optic and galvanic isolation. This safeguards the devices against any spikes and power surges coming from the network.

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RDM PORT FILTERING

Tired of issues with non-RDM compatible devices? LumiSplit has RDM filtering on every output, which makes sure non-RDM fixtures never behave strange when sending RDM data.

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MERGE AND BACK-UP

LumiSplit 2.10 can be configured in different operating modes such as HTP/LTP merging mode, back-up mode and regeneration mode.

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2 USER PROFILES

Save your custom pre-sets in 2 user profile slots. In this way LumiSplit becomes a real plug-and-play device and time-saver in the heat of the moment.

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NEW FRONT PANEL

The renewed front panel with RGB led indicators gives users a better and easier status indication. The front panel can also be locked to prevent accidents.

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TRUSS VERSION

LumiSplit also comes in a 1.6 version that can be mounted in a truss as well as in a rack (with the long mounting ears that are included in the box).

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ULTIMATE PORT FLEXIBILITY

with zone selection on every outlet

LumiSplit 2.10, the flagship of our splitter range, offers a zone selection per port. This enables users to allocate as much ports as needed for the required amount of DMX lines. So instead of combining two splitters, you now have the flexibility to make any combination of 10 outputs, e.g. 3 outputs connected to input A and 7 to input B.

This example is not even possible with two 1.5 splitters and users would need to link the two devices with a thru connection as well. LumiSplit 2.10 also offers users to assign all 10 ports to a single input. This provides users with ultimate port flexibility during configuration.

Zone A   Zone B

LumiSplit

Lighting console
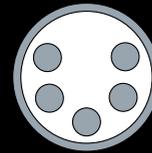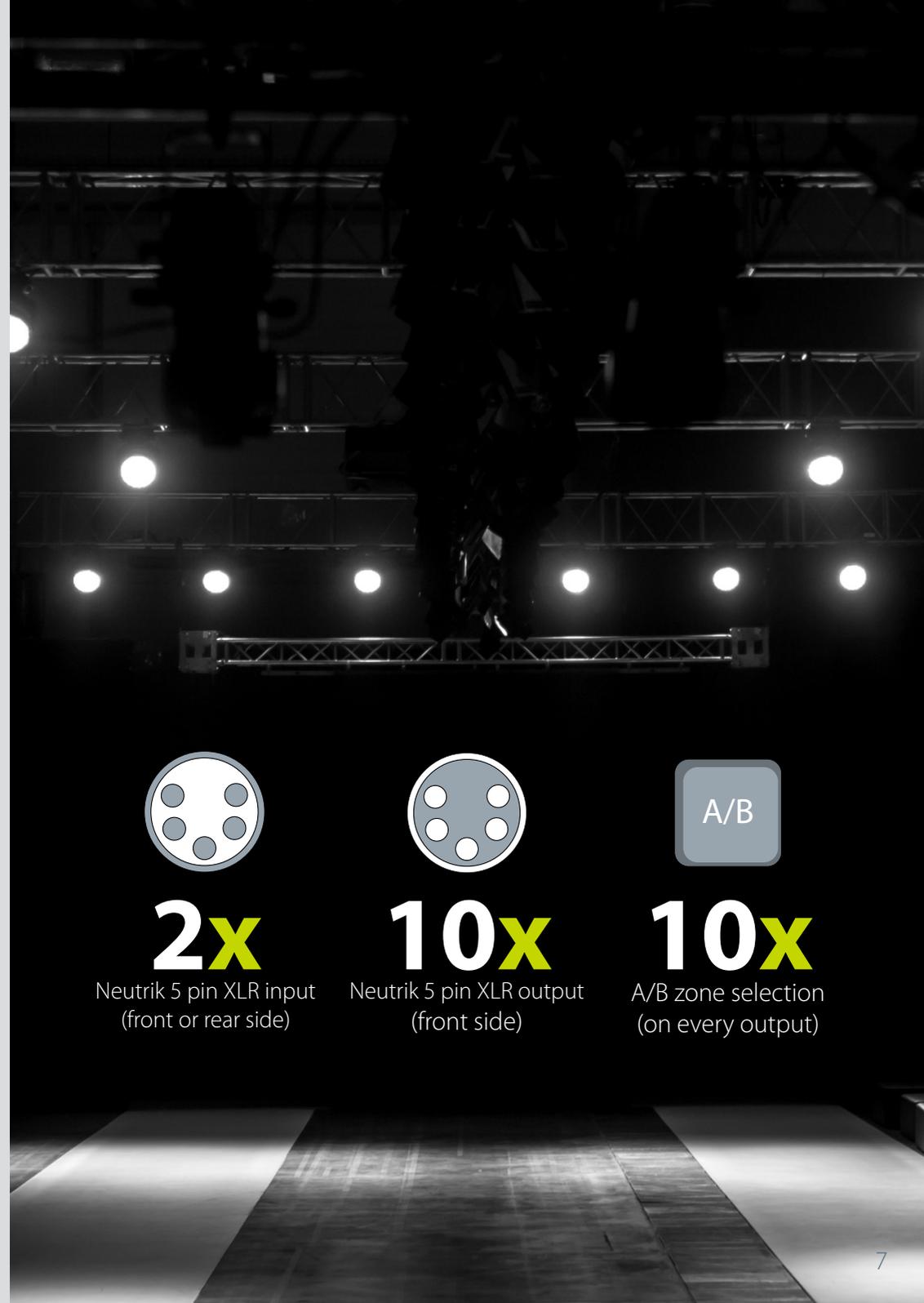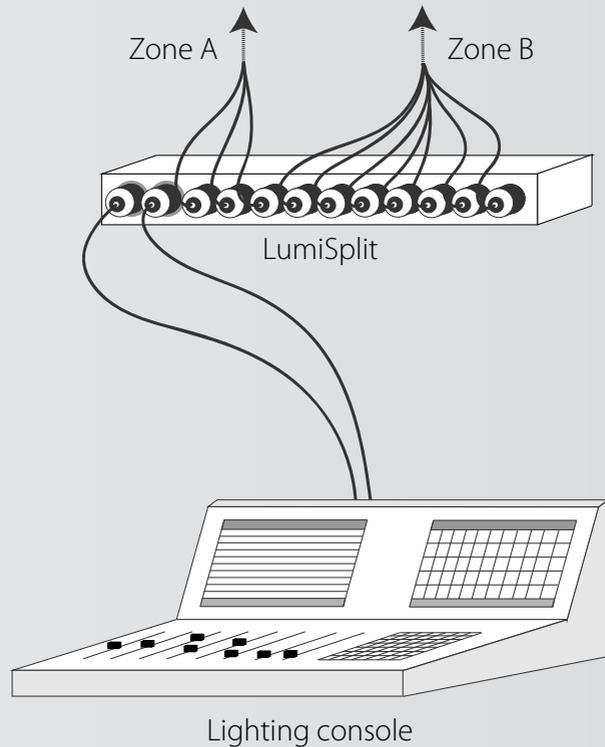
2x
Neutrik 5 pin XLR input
(front or rear side)
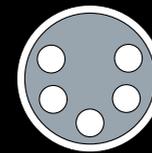
10x
Neutrik 5 pin XLR output
(front side)

A/B

10x
A/B zone selection
(on every output)

ADVANCED RDM FEATURES
for an even easier and faster configuration

Visibility through RDM

Every LumiSplit is now a responder in the RDM network as well. This means the devices are also visible and manageable through the RDM controller, allowing users to constantly monitor the network and check the status and availability of the splitters.

ID	▲	RDM UID	Source	Short name	Universe	Port	Model	Manufacturer
		4c:4c:2c:00:00:04	2.5.5.1	Node 1	1	1	LumiSplit 2.10	Luminex LCE
		4c:4c:2c:00:00:05	2.5.5.2	Node 2	7	8	LumiSplit 2.10	Luminex LCE

Custom configuration through RDM

Configure all connected LumiSplits from one central place: our free software pack 'Luminet Monitor'. In large scale installations such as theaters, festivals or large events, this avoid users to move from one place to another to configure and monitor every LumiSplit, and provides a true flexible and centralized patch facility.

Discover all connected devices

It is now possible to get a clear view of which devices are connected to each port of the splitter. In that way, LumiNet Monitor can show you a clear overview of all connected devices.

Upgradeable through RDM

Luminex proudly presents the world's first DMX splitter which enables the firmware to be upgraded through RDM, in conjunction with Luminet Monitor software and a Luminex Ethernet-DMX converter.

Internal sensors

LumiSplit comes with some internal sensors such as a temperature sensor to monitor the heat within the devices through RDM. This comes in very useful in harsh situations such as crowded racks, TV studios and festivals. LumiNet monitor also notifies you in case of an output isolation failure.
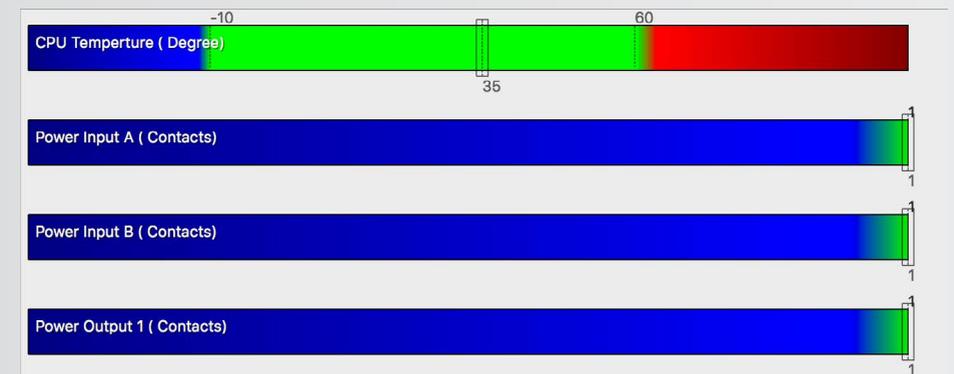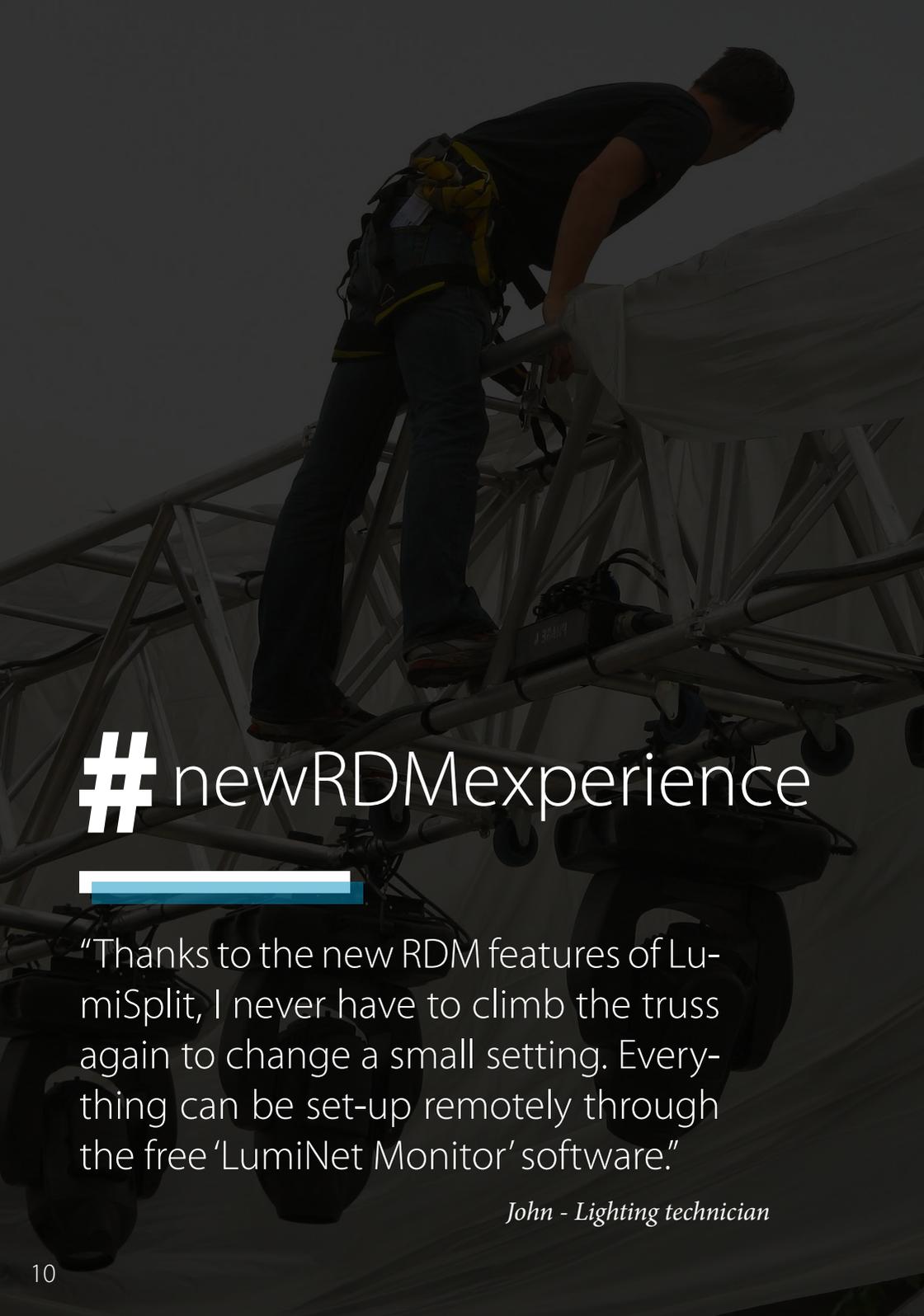
#newRDMexperience

"Thanks to the new RDM features of Lu-miSplit, I never have to climb the truss again to change a small setting. Every-thing can be set-up remotely through the free 'LumiNet Monitor' software."

John - Lighting technician

FORGET ISSUES WITH RDM INCOMPATIBLE FIXTURES

with RDM filtering per port and per zone

LumiSplit finally offers the perfect solution for a well-known issue with fixtures that don't support RDM. Such RDM incompatible lighting devices interpret RDM packets as normal DMX packets. This causes the fixtures that are being flood-ed by undesired RDM packets, to flicker consistently every time they receive such RDM packets. Because RDM incompliant devices do not discard RDM packets themselves, LumiSplit offers an RDM filter per zone and per output to prevent that kind of problem. At the press of a button, you can filter at input or output level in a very fast way. The filtering control is also avail-able through the RDM controller. So finally you can connect RDM enabled devices and non RDM de-vices to the same splitter without them showing any undesired be-haviour.

non-RDM lighting fixture

LumiSplit

RDM filter

Lighting desk / RDM controller
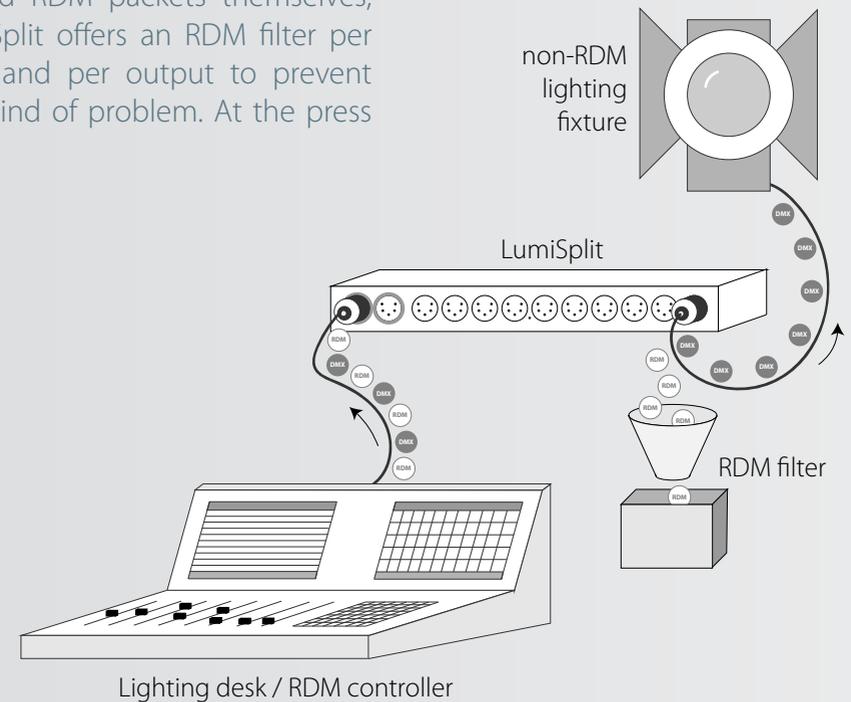
HTP & LTP MERGING MODE

**to easily combine different DMX sources**

You can now easily merge DMX sources from different controllers directly through the splitter. Simply connect each console to an input and select the HTP or LTP merging option from the front panel (or through the 'Luminet Monitor' software). This is for instance an easy way to merge signals from a road console and an in-house lighting controller.

Fixed lighting rig

HTP/LTP

LumiSplit

Touring console

In-house console
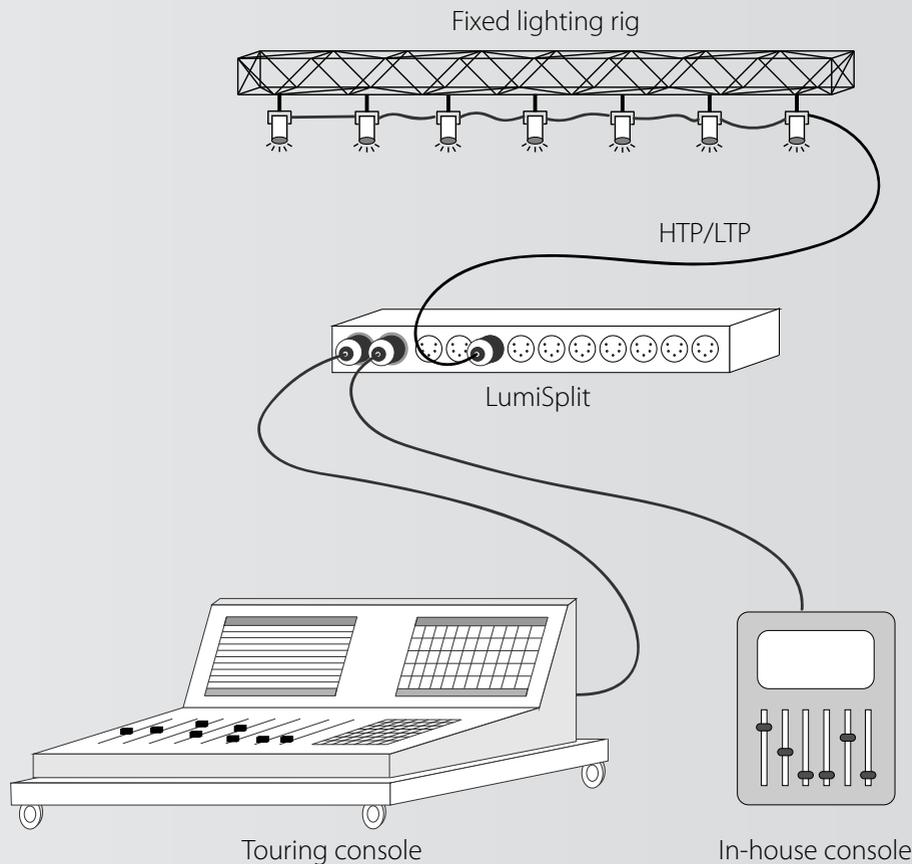
DMX BACKUP MODE

for ultimate redundancy and a relaxed state of mind

LumiSplit 2.10 can be used as an automated backup switcher between two DMX sources. This enables users to provide a backup to equipment such as Ethernet-DMX converters, network processors or DMX controllers.

LumiSplit

Link failure

Back-up link

Main console

Back-up console

RELAX!
LUMISPLIT
COVERED
OUR ASS
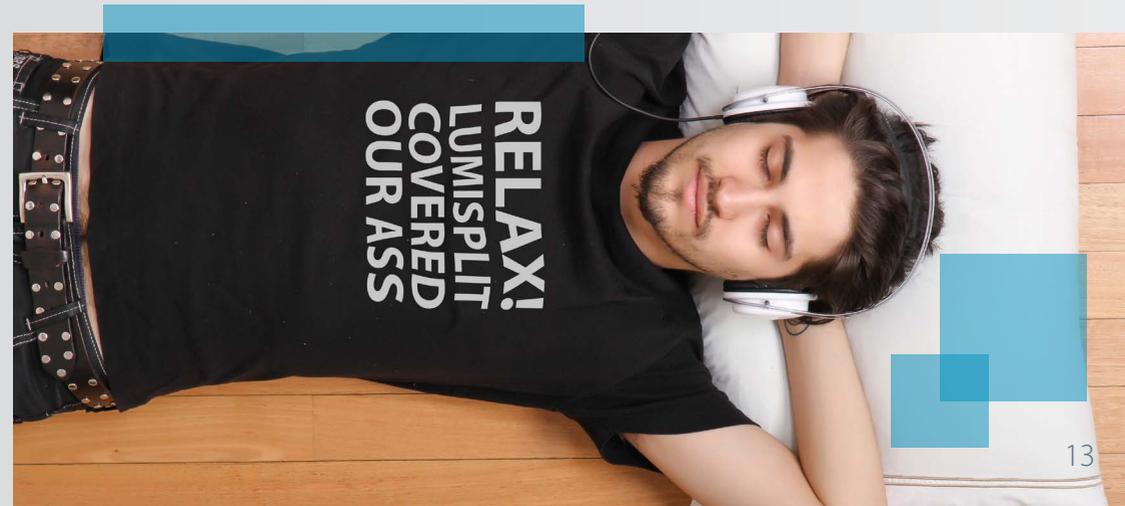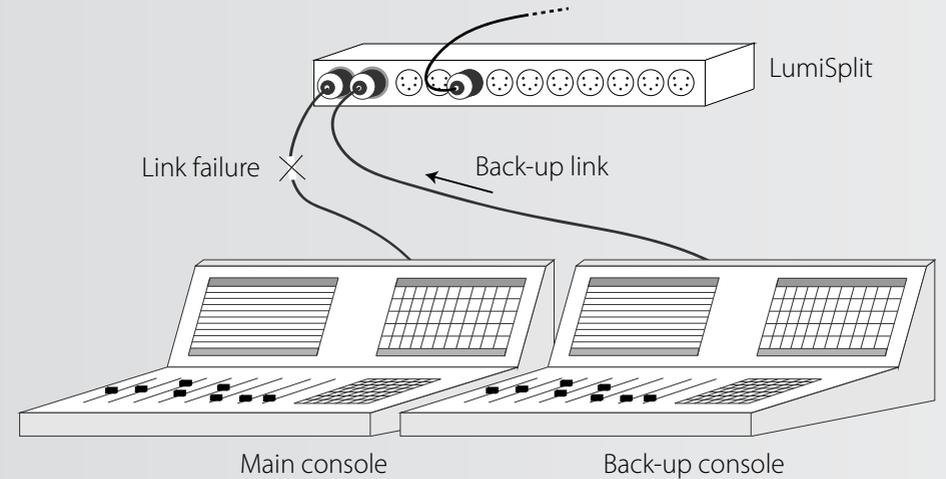
REGENERATION MODE
to solve issues with high frame rates

Sometimes users encounter problems with DMX devices that do not support high frame rates or exotic DMX timing. To solve that kind of issues, LumiSplit now has a regeneration mode. It regenerates DMX signals with custom DMX timing and can be activated on every input (separately or together). The regeneration parameters can be controlled in LumiNet Monitor, through RDM.

OPTICAL & GALVANIC ISOLATION ON EVERY PORT
**to prevent total damage after spikes or power surges**

Both models of the LumiSplit range offer full optical ànd galvanic isolation on every port. This protects the device in the unlikely event of spikes and power surges on the different DMX lines. When that occurs, only the specific port will be damaged and the device can easily be repaired. LumiSplit secures all upstream DMX lines and connected devices from being damaged as well.

All outputs are also terminated, as it is important to match the impedance of the driver circuit to the DMX line. An impedance mismatch between the DMX driver and the DMX line (or any impedance mismatch) will result in signal distortion.

Lighting rig 1

POWER SURGE

Secured line

Secured line

Secured line

Secured line

Isolated zone
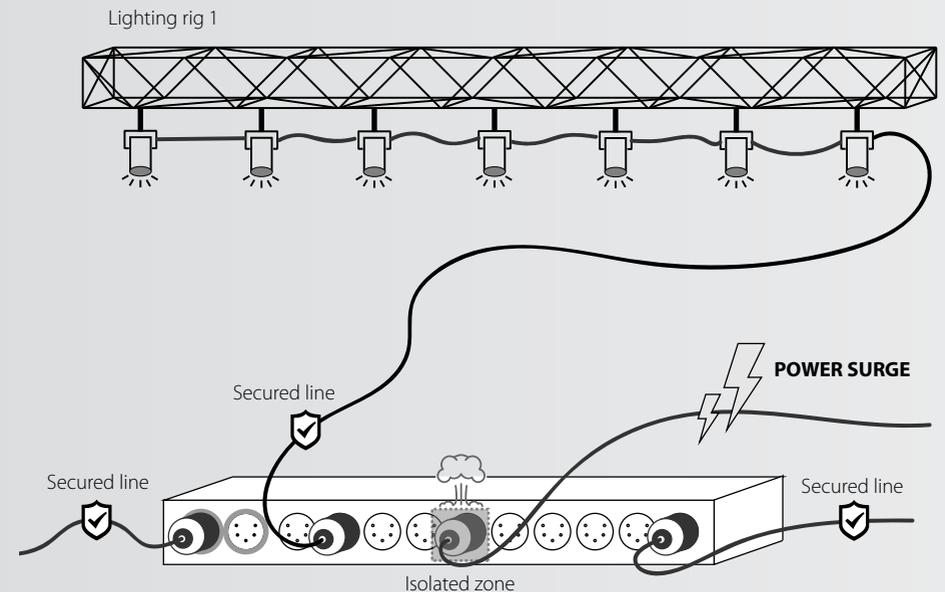
FRONT PANEL WITH RGB LEDS AND DARK MODE

for a better and easier status indication

Front panel with RGB LEDs

Every LumiSplit comes with an RGB LED per input and output. This offers users to read the status of the device in the blink of an eye. Selected modes such as HTP/LTP merging, backup, regeneration and dark mode are identifiable through a specific pattern of LED colours. Port filtering per input or per output is also identifiable through specific LED colours. Furthermore, the power LED offers additional information such as locked front panel, or custom settings remotely applied through RDM.
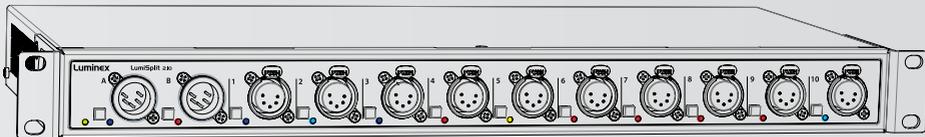
Dark mode and front panel lock

In some cases it might come in handy to dim all the lights on the front panel of the device, especially when placed on or near the stage. By activating the dark mode, users can easily dim all LEDs.

The front panel can also be locked. This avoids unattended manipulation or installers to accidentally press one of the buttons, resulting in an unwanted change of settings of the splitter.

User profiles for a quick setup

LumiSplit offers you 2 slots to save and recall different user profiles. This offers users to recall their favourite configuration at the push of a button or through RDM.

10 years experience

"Based on 10 years of in-house expertise at developing bi-directional networking equipment between lighting controllers and fixtures, Luminex now brings you the most reliable, versatile and easy-to-use splitter ever built."

LUMISPLIT 1.6
for truss and rack mounting

LumiSplit also comes in a 1.6 truss version. This device has the same functionalities as LumiSplit 2.10 (except for A/B zone selection, merging mode and backup mode, because the device has only one input). Thanks to the included long mounting ears, the 1U unit can also be mounted in a rack and will perfectly line up with a LumiSplit 2.10.

LumiSplit 1.6 truss mount

LumiSplit 1.6 rack mount

LumiSplit 2.10 vs. 1.6

	LumiSplit 2.10	LumiSplit 1.6
CONNECTIVITY		
DMX INPUT	4 x Neutrik 5 pin XLR (male) (2 at the front, 2 at the rear)	1 x Neutrik 5 pin XLR (male)
DMX OUTPUT	10 x Neutrik 5 pin XLR (female)	6 x Neutrik 5 pin XLR (female)
POWER	1 x Neutrik PowerCON TRUE1 In/Out	1 x Neutrik PowerCON TRUE1 In/Out
DMX/RDM FEATURES		
SUPPORTED PROTOCOLS	DMX512 (1986 & 1990), DMX512-A, RDM ANSI E1.20	DMX512 (1986 & 1990), DMX512-A, RDM ANSI E1.20
RDM DISCOVERABLE	Yes	Yes
RDM FILTER PER INPUT	Yes, through input button	Yes, through input button
RDM FILTER PER OUTPUT	Yes, available through the front panel and RDM	Yes, available through RDM
DMX BACKUP MODE	Yes	No
HTP/LTP MERGER	Yes	No
REGENERATION MODE	Yes, available through the front panel and RDM	Yes, available through RDM
DARK MODE	Yes, available through the front panel and RDM	Yes, available through RDM
DMX ZONE SELECTION	Selection of the DMX zone per output	No
USER PRESETS	2, can be saved and recalled from the front panel	2, available through RDM
DMX PORT ISOLATION	Optic and galvanic isolation per port (except THRU)	Optic and galvanic isolation per port (except THRU)
SHORT CIRCUIT PROTECTION	Yes	Yes
TERMINATED OUTPUTS	Yes	Yes
STATUS REPORT		
POWER	1 x RGB LED on the front panel	1 x RGB LED on the front panel
DMX INPUT	2 x RGB LED on the front panel	1 x RGB LED on the front panel
DMX OUTPUT	10 x RGB LED on the front panel	6 x RGB LED on the front panel
LOCKABLE FRONT PANEL	Yes	Yes
POWER		
POWER INPUT	100 – 240V AC; 16A; 50-60Hz	100 – 240V AC; 16A; 50-60Hz
POWER OUTPUT	MAX 15A	MAX 15A
POWER CONSUMPTION	100-240V AC, 0,2-0,1A; 50-60Hz	100-240V AC, 0,2-0,1A; 50-60Hz
FUSE	No user-serviceable fuse	No user-serviceable fuse
PHYSICAL		
DIMENSION (WXDXH)	482 x 204.85 x 44 mm	303 x 210 x 44 mm (with ears: 482 x 210 x 44 mm)
WEIGHT	2,54 kg	2,38 kg (with ears: 2,62 kg)
PACKAGING	530 x 330 x 80 mm	530 x 330 x 80 mm
ENVIRONMENTAL		
OPERATING TEMPERATURE	0 to 50°C	0 to 50°C
STORAGE TEMPERATURE	-10 to 70°C	-10° to 70°C
HUMIDITY	5 to 95%	5 to 95%
APPROVALS		
CERTIFICATIONS	CE, RoHS Compliance, FCC Part 15, CFR 47, Class A	CE, RoHS Compliance, FCC Part 15, CFR 47, Class A
STANDARDS	UL 60950-1, CAN/CSA-C22.2 No.60950-1, CAN/ICES-003(A), IEC 60950-1, EN 60950-1, EN55022 (CISPR22), EN55024 (CISPR24)	UL 60950-1, CAN/CSA-C22.2 No.60950-1, CAN/ICES-003(A), IEC 60950-1, EN 60950-1, EN55022 (CISPR22), EN55024 (CISPR24)

LumiSplit 1.6

- 6 full isolated outlets
- enhanced RDM features
- truss & rack mount