Luminex
NETWORK INTELLIGENCE

LumiSplit 2.10
USER MANUAL

LUMISPLIT PRODUCT FAMILY
LumiSplit 2.10

THANKS FOR CHOOSING LUMINEX

MADE IN BELGIUM

⚡ The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

L'éclair avec une flèche à l'intérieur d'un triangle équilatéral est destiné à attirer l'attention de l'utilisateur sur la présence d'une « tension dangereuse » non isolée à l'intérieur de l'appareil, pouvant être suffisamment élevée pour constituer un risqué d'électrocution.

⚠ The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

Le point d'exclamation à l'intérieur d'un triangle équilatéral est destiné à attire l'attention de l'utilisateur sur la présence d'instructions importantes sur l'emploi ou la maintenance (réparation) de l'appareil dans la documentation fournie.

CAUTION
TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE.

AVERTISSEMENT
POUR RÉDUIRE LES RISQUES D'INCENDIE OU DE DÉCHARGE ÉLECTRIQUE, N' EPOSEZ PAS CET APPAREIL À LA PLUIE OU À L' HUMIDITÉ.

CAUTION
NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONEL.

AVERTISSEMENT
AUCUNE PIÈCE CONTENUE À L' INTÉRIEUR NE PEUT ETRE RÉPARÉE PAR L' UTILISATEUR, VEUILLEZ CONFIER TOUTE RÉPARATION À UN PERSONNEL QUALIFIÉ.

FCC Compliance Statement:
This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received; including interference that may cause undesired operation.

⚠ IMPORTANT NOTICE:
DO NOT MODIFY THIS UNIT!

This product, when installed as indicated in the instructions contained in this manual, meets FCC requirements. Modifications not expressly approved by Luminex Lighting Control Equipment nv may void your authority, granted by the FCC, to use the product.

This Equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Industry Canada compliance statement
This Class A digital apparatus complies with Canadian ICES-003. Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

European Community Compliance Statement
This is a class A product. In a domestic environment, this product may cause radio interference in which case the user may be required to take adequate measures.

🗑 **Disposal of Waste Equipment by users in the European Union**

Information for Users on Collection and Disposal of Old Equipment.

This symbol on the products, packaging, and/or accompanying documents means that used electrical and electronic products should not be mixed with general household waste.

For proper treatment, recovery, and recycling of old products, please take them to applicable collection points, in accordance with your national legislation and the Directives 2002/96/EC. By disposing of these products correctly,

you will help to save valuable resources and prevent any potential negative effects on human health and the environment which could otherwise arise from inappropriate waste handling. For more information about collection and recycling of old products, please contact your local municipality, your waste disposal service, or the point of sale where you purchased the items.

[**For business users in the European Union**]
If you wish to discard electrical and electronic equipment, please contact your dealer or supplier for further information.

[**Information on Disposal in other Countries outside the European Union**]
This symbol is only valid in the European Union. If you wish to discard these items, please contact your local authorities or dealer and ask for the correct method of disposal.

Warranty information

Limited warranty
Unless otherwise stated, your product is covered by a two (2) years parts and labour limited warranty. It is the owner's responsibility to furnish receipts or invoices for verification of purchase, date, and dealer or distributor. If purchase date cannot be provided, date of manufacture will be used to determine warranty period.

Returning under warranty
Any product unit or parts returned to Luminex LCE must be packaged in a suitable manner to ensure the protection of such product unit or parts, and such package shall be clearly and prominently marked to indicate that the package contains returned product units or parts. Accompany all returned product units or parts with a written explanation of the alleged problem or malfunction.

Freight
All shipping will be paid by the purchaser. Items under warranty shall have return shipping paid by the manufacturer only in the European Union. Under no circumstances will freight collect shipments be accepted. Prepaid shipping does not include rush expediting such as air freight. Air freight can be sent customer collect in the European Union. Warranty is void if the product is misused, damaged, modified in any way, or for unauthorized repairs or parts.

CONTENTS

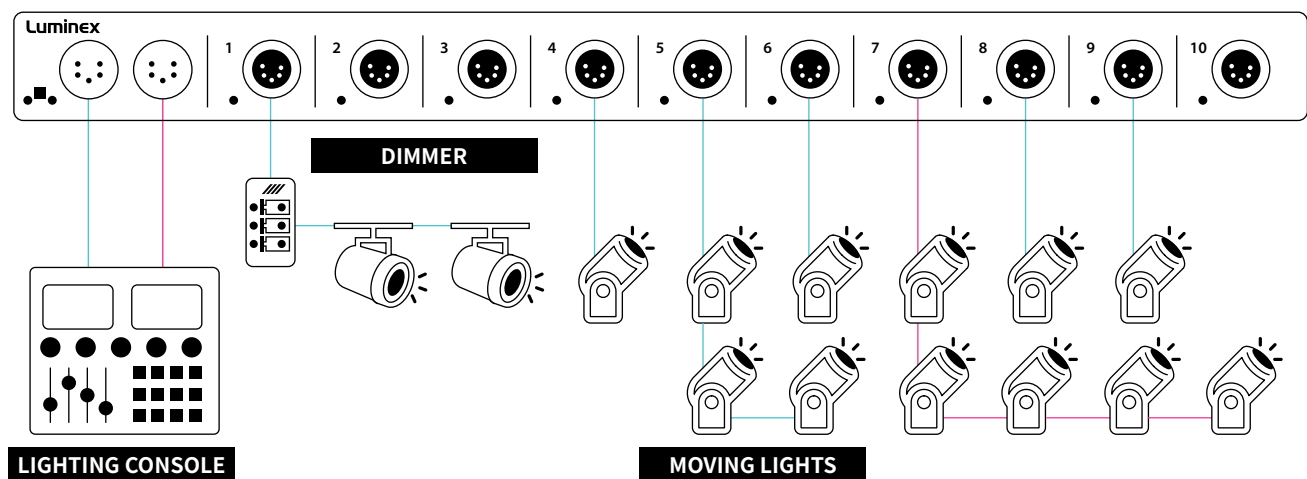# VERSATILE. EFFORTLESS. RELIABLE.

WELCOME TO YOUR LUMISPLIT 2.10

The LumiSplit range can be easily integrated in any lighting system when one requires to split and boost DMX and RDM signals.

1. Applications

A few examples of applications where the LumiSplit can be used:

- Live events
- Concert lighting
- Theatre
- TV
- Installations
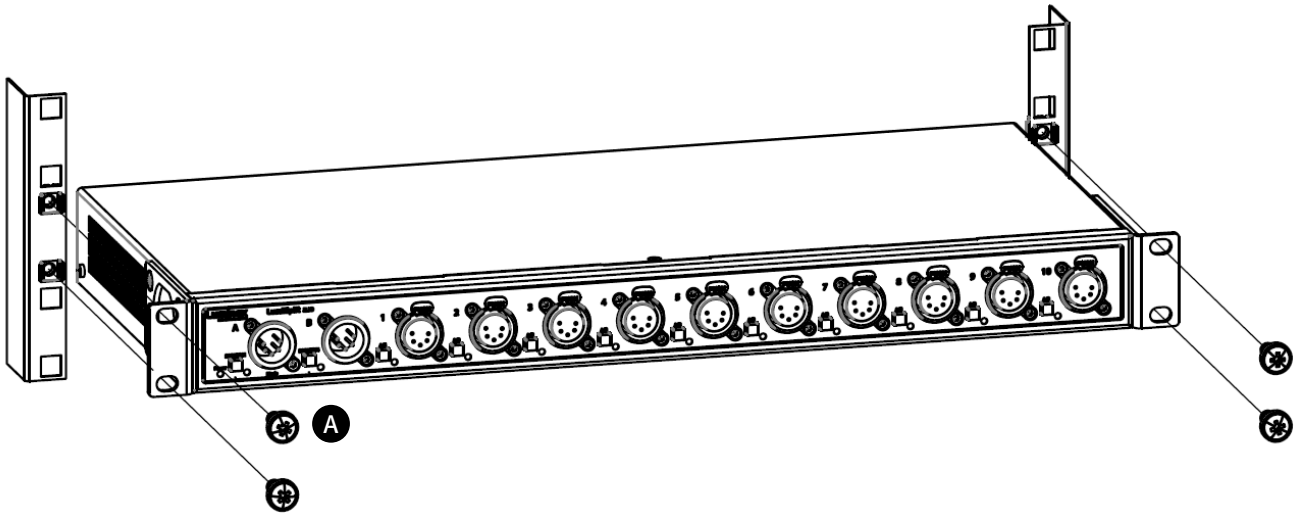- Architectural lighting
- Multimedia shows

Typical Application:

2. Installation

2.1 Mounting the device

■ RACK MOUNT

In case you want to mount your LumiSplit 2.10 in a standard 19-inch rack, you need 4 rack screws (A) to mount the device.

2.2 Power up the device

Power-up the device with a power cable with Neutrik® powerCON® TRUE1 connection (J) (please contact your local dealer if you don't have a suitable power cable on hand). The device will automatically switch on. To shut it down after use, just un-plug the power cable again. After connecting the power cable correctly, by default the power LED indicator on the front panel will light up in green.
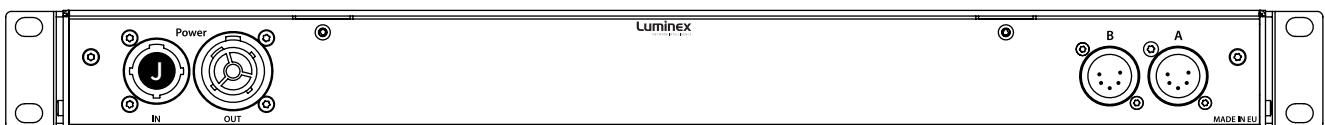The LumiSplit requires standard AC power distribution from 100-240VAC, 50/60Hz.

The mating Neutrik® powerCON® TRUE1 connector is supplied; however, you will need to purchase or construct a cable appropriate for your application.
When installing a new connector please refer to the following wire colour code reference:

WIRE*	CONNECTION
Green/Yellow	AC Ground
Blue	AC Neutral
Brown	AC Line

* International (Harmonised) Standard

2.3 Description

2.3.1 Front Panel

■ **(A) POWER LED:**
Indicates the general status of the splitter.

■ **(B) INPUT BUTTON:**
Enable / disable RDM filtering per input, mode selector.
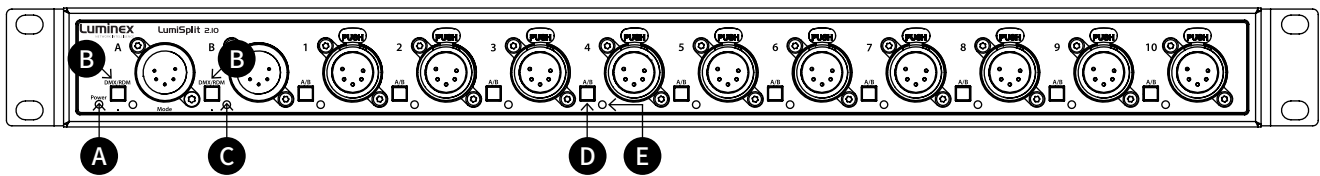
■ **(C) INPUT LED:**
Indicates the input status and the selected mode.

■ **(D) OUTPUT BUTTON:**
Output selector, enable / disable RDM filtering per output.

■ **(E) OUTPUT LED:**
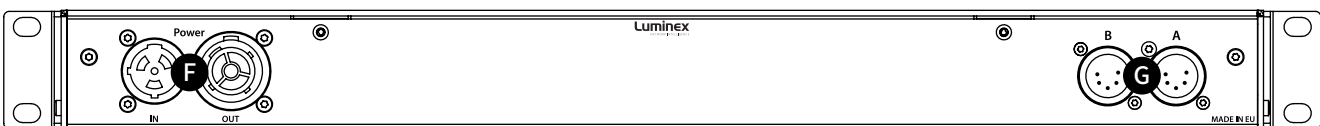Indicates the output status and the selected mode.

2.3.2 Rear Panel

■ **(F) POWER:**
■ **1x Neutrik® powerCON® TRUE1** inlet.
■ **1x Neutrik® powerCON® TRUE1** outlet.

■ **(G) DMX INPUT:**
■ **2x Neutrik® XLR** input A and B ports. When the front panel inputs are used these can be used as DMX thru.

2.4 LED indicators:

The LED indicators of the LumiSplit show the following statuses:

POWER LED	COLOUR	DESCRIPTION
Power (General status LED)	Dimmed	Dark Mode
	Green	Normal, unlocked (default) or upgrading
	White	Identify
	Orange	Locked Front Panel
	Red	Port error
	Red blink	Factory Reset
	Blue	DMX fail mode or Startup mode configured

PORT LED	STATUS	DESCRIPTION
Input A (front panel)	Blue	DMX + RDM
	Cyan	DMX Only
	White blink	RDM activity
	White flashing	Identify
Input B (front panel)	Red	DMX + RDM
	Orange	DMX Only
	White blink	RDM activity
	White flashing	Identify
Output ports	Blue	Connected to Input A, DMX + RDM
	Cyan	Connected to Input A, DMX Only
	Red	Connected to Input B, DMX + RDM
	Orange	Connected to Input B, DMX Only
	White blink	RDM activity
	White flashing	Identify

After the device has been powered-up correctly, you can start changing the different operating modes and port features through the front panel or via RDM. To change the settings by using the front panel, follow these instructions.

Through the front panel, you can connect 2 inputs (A and B) and 10 outputs (1 to 10). Each output has a LED indicator and a push button. These are used to change and display the port status. The input buttons are used to change the operating mode of the splitter.
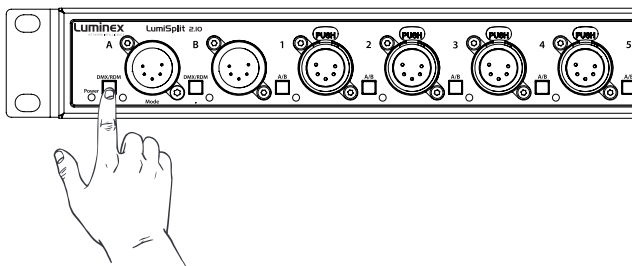
3.1 Zone selection per port

By default, every output is linked to input / zone A. To toggle between zone A and B, **shortly press the A / B button** next to the specific output. The output LED indicator colour will change accordingly. Press the button again to toggle between A and B once more.

3.2 RDM Filtering

The LumiSplit supports RDM filtering to prevent lighting fixtures from being flooded by undesired RDM packets. You can enable or disable RDM filtering per input (zone A / B) or per output.
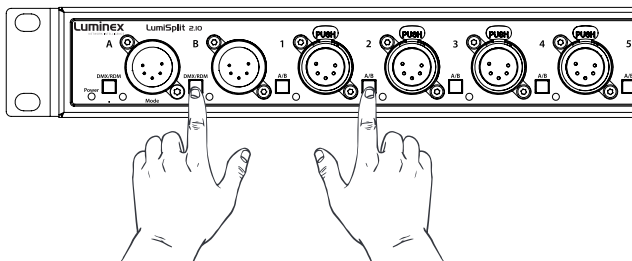
■ **RDM FILTERING PER INPUT:**
Press the input button shortly to enable or disable RDM filtering per zone (A / B). The input LED indicator colour will change, together with all associated output LED indicators.
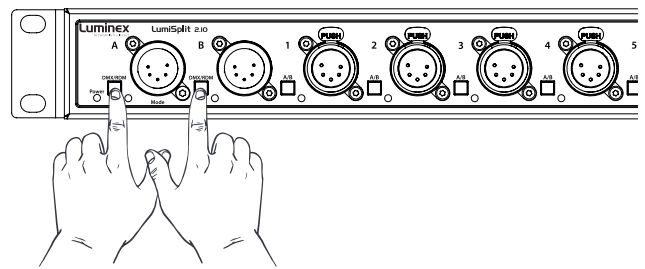

■ **RDM FILTERING PER OUTPUT:**
Press the input button together with the desired output button (shortly) to enable or disable RDM filtering on that output. The output LED indicator colour will change accordingly.
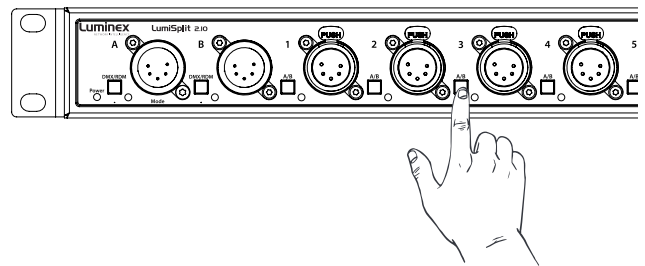

3.3 Mode Selection

The LumiSplit 2.10 has different operating modes. To change the mode, **hold both input buttons (A and B)** together for 2 seconds. The LEDs from both ports will start blinking blue. Then **release the two buttons and press the desired output button** to select the mode. Each output button represents another mode.

Step 1: hold the A + B button until the port LEDs change colour.

Step 2: Press the output button corresponding to the desired mode. A list of the different modes can be found on the label on the rear of the device.

BUTTON	COLOUR	MODE SELECTION
Output 1	Blue	Splitter
Output 2	Blue	Backup
Output 3	Blue	HTP Merging
Output 4	Blue	LTP Merging
Output 5	Blue	Regeneration Zone A
Output 6	Blue	Regeneration Zone B
Output 7	Blue	Regeneration Zone A + B
Output 8	Green	Dark Mode
Output 9	Orange	User Preset 1
Output 10	Orange	User Preset 2

3.4 Modes in detail

3.4.1 Splitter mode (1) A: ● B: ●
The LumiSplit now runs in A / B splitter mode. This is the default mode.

3.4.2 Backup mode (1) A: ● B: ●
Zone A becomes the main input, Zone B the backup input. In the unlikely event of DMX loss on Zone A, the splitter will switch automatically to zone B.

This mode can be used to create a backup situation for two network converters. In case of failure of the first device, the LumiSplit will automatically switch to the other device.

When the DMX signal is lost on input A, the A LED turns red, and all output LEDs turn red. This provides the user with a clear indication that the LumiSplit has switched to the secondary input.

When the DMX signal is back available on input A, the A LED will turn blue again but unless auto recovery has been enabled, the LumiSplit will NOT switch back to input A.

When the LumiSplit has recovered to Input A, all output LEDs will turn Blue/Cyan again.

When the DMX signal on input B is NOT present both LEDs turn red. To give back control to input A, you need to press the A input button or use the control panel through LumiNet Monitor. Alternatively, from firmware version 6 onwards, it is possible to enable Auto recovery via RDM. (see paragraph 4.8)

3.4.2 HTP merging mode (3) A: ● B: ●
The LumiSplit will merge the two DMX inputs according to the Highest Takes Precedence policy. RDM communication with connected endpoints is no longer active.

3.4.4 LTP merging mode (4) A: ● B: ●
The LumiSplit will merge the two DMX inputs according to the Latest Takes Precedence policy. RDM communication with connected endpoints is no longer active.

3.4.5 Regeneration Zone A (5) A: ● B:
The LumiSplit will re-generate the incoming DMX signal on input A with some new parameters. These parameters can be selected through LumiNet monitor. (for more information, see 4.7.4) RDM communication with connected endpoints is no longer active.

3.4.6 Regeneration Zone B (6) A: B: ●
The LumiSplit will re-generate the incoming DMX signal on input B with some new parameters. These parameters can be selected through LumiNet monitor. (for more information, see 4.7.4)
RDM communication with connected endpoints is no longer active.

3.4.7 Regeneration Zone A + B (7) A: ● B: ●
This mode allows you to quickly select regeneration mode for both inputs. The timing for each input will be set as described above.
RDM communication with connected end points is no longer active on both zones.

3.4.8 Dark Mode (8)
Dark mode set the brightness of all LEDs to a low value. This avoids the LumiSplit generating too much light from its LEDs, where darkness is a must have. Once you press one of the buttons on the front panel, the brightness will go back to full for a few seconds. Select the dark mode again from the selection menu to disable it. Dark mode can be set from LumiNet Monitor as well.

3.4.9 User Preset 1 (9) and 2 (10)
Two user Presets can be stored on outlet 9 & 10. This allows you to easily recall your favourite configuration or alternate between two configurations for different applications. To record a preset, and once in the selection mode, simply hold one of the two buttons to store your configuration. Once the output LED start blinking on its own, you can release the button. To recall the profile, once in selection mode, press once on the output button to reload the preset. These actions can be performed through LumiNet Monitor as well.

3.5 Front Panel Lock

For reliability reasons you can lock the front panel. In this way, nobody can accidentally change the settings of the splitter during a live event for example. To lock and un-lock the front panel, press and hold the input A button for 4 seconds. Once the power LED indicator blinks orange, release the button and the power LED indicator will turn orange. The front panel is now successfully locked. Execute the same procedure to unlock the front panel again.

The front panel can be locked/unlocked from LumiNet Monitor as well.

3.6 Factory Reset

Sometimes it can come in handy to reset the entire device. To do that, press and hold the input A button for 10 seconds. Once the power LED indicator blinks red, release the button. This will reset all settings to default. Please keep in mind that also all user presets will be deleted after this procedure.

The LumiSplit can be remotely reset from LumiNet Monitor as well.

Not only can the LumiSplit provide you with some great features directly from its front panel, the unit can also be remotely configured and monitored, all through RDM connectivity.

Once LumiNet Monitor is connected to a Luminex LumiNode or Ethernet-DMX converter with RDM enabled, the software will provide you with a comprehensive set of tools to monitor and configure your LumiSplit 2.10.

LumiNet Monitor 2.1.6 or higher and LumiSplit firmware v5 or higher are necessary to take full benefit of all the features listed below.

4.1 Discovery

The LumiSplit 2.10 comes with two RDM responders (A & B). In the RDM panel, two responders will appear per splitter, if both are connected to the RDM controller.

ID	RDM UID	Source	Port	Short name	Model	Manufacturer	Label	Universe	DMX	PWR State	Lamp state	Lamp hours	Category	Location
2	4c:4c:2c:00:01:c2	2.2.8.12	11	LumiNode12	LumiSplit 2.10	Luminex LCE	LumiSplit Zone A	11	NA	Normal operati...			Data: Splitters/ nodes	Undefined
2	4c:4c:2c:00:01:c3	2.2.8.12	12	LumiNode12	LumiSplit 2.10	Luminex LCE	LumiSplit Zone B	12	NA	Normal operati...			Data: Splitters/ nodes	Undefined

If you hover your mouse over the responder, additional information will be available.

Manufacturer	Label	Universe	DMX
Luminex LCE	LumiSplit Zone A	0	NA

UID: 4c:4c:02:c0:ff:ee (Online)

Manufacturer: Luminex LCE
Model: LumiSplit 2.10
Version: 6 (Release 6 Jun 3 2020 13:17:15)
Sensors: 8
Subdevices: 0
DMX: NA
Pers: 5/8 Regeneration (0)
DMX fail mode: S: Off, D: 0s, H: Inf, L: 255
DMX start mode: S: Off, D: 0s, H: Inf, L: 255
Identify state: Off
Power state: Normal operating mode
Display level: 255
Factory default: Off
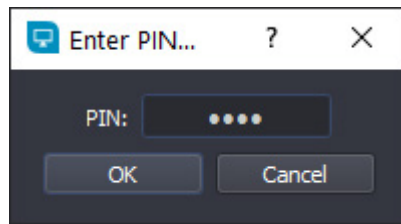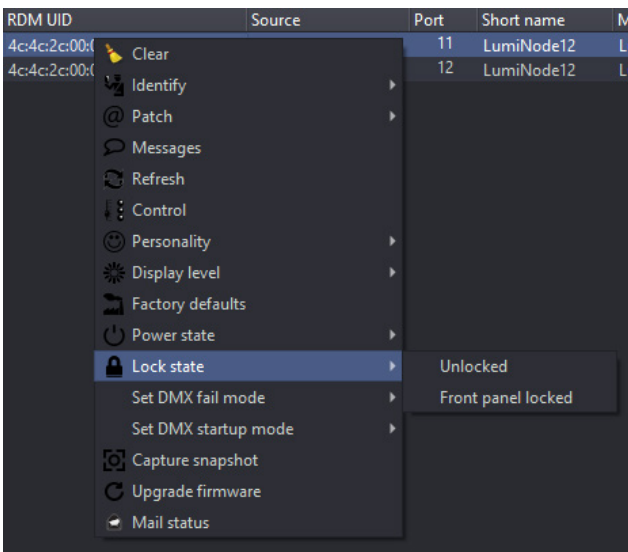Lock state: Unlocked
Endpoints: 7

4.2 Identify a LumiSplit

If you have many LumiSplit devices, it can come in handy to identify a unit. Right click on one of the responders and select Identify -> On. All LEDs will turn white and start flashing, to identify the unit. To stop the identification, repeat the same procedure and select "Off", or click on the "Identify OFF" button on the top right-hand side of the RDM panel.

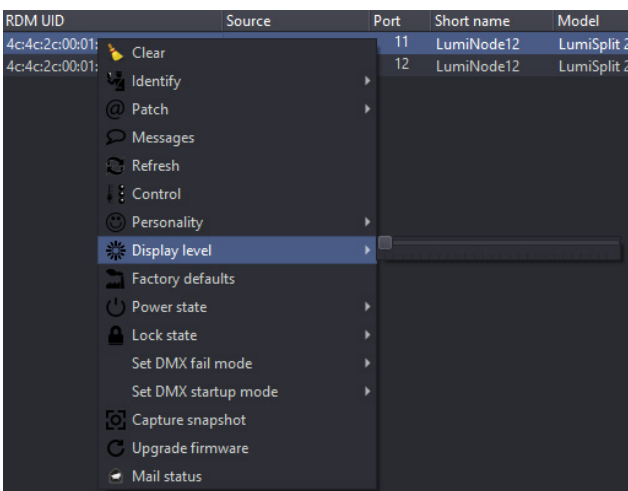| 4c:4c:2c:00:01:c2 | | 2.2.8.12 | 11 | LumiNode12 |
4c:4c:2c:00:0	🧹 Clear		12	LumiNode12
	🔧 Identify ▶		On	
	@ Patch ▶		Off	
	💬 Messages			
	🔄 Refresh			

4.3 Lock / Unlock the Front Panel

To lock the device, right click on one of the responders and select **Lock state > Front Panel Locked**. To unlock the device, repeat the same operation, and select **Lock state > unlocked**. LumiSplit doesn't actually use a pin code for locking the front panel, therefor it is not required to enter a 4-digit code. Just click OK to confirm the lock state.

4.4 Dark Mode

The LumiSplit offers you to lower down the brightness of the LEDs. Right click on one of the responders and select display level. Here you can set the brightness either to low or full. There is no intermediate value available for the brightness of the LEDs.

4.5 Mode Selection

You can remotely select one of the modes the splitter offers. Right click on one of the responders and select the desired mode. Regeneration mode is available for both responders. You need to select the right responder (A or B) to assign the regeneration mode to it.
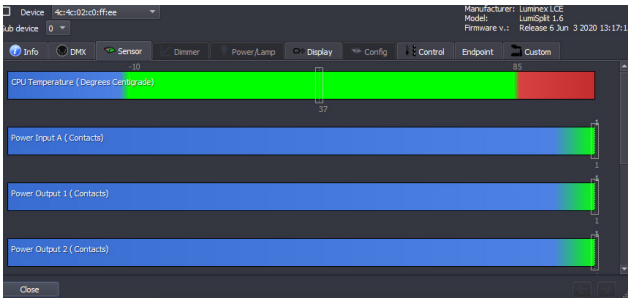From here, you can reload presets stored on outlet 9 and 10 as well.
More details about each available mode can be found in paragraph 3.4 of this manual.

4.6 Monitoring

The RDM control panel enables you to monitor the status of all sensors embedded in the LumiSplit. The splitter comes with one temperature sensor, and one sensor per DC/DC converter (input and output).

To monitor the status of these sensors, right click on one of the responders, select Control, and then, click on the Sensor tab.

The temperature sensor will indicate the actual inner temperature of the LumiSplit. The contact sensors will display the status of all DC/DC converters. A DC/DC converter's sensor with a value of 1 means the DC/DC converter is working correctly.

4.7 Endpoint View

The LumiSplit 2.10 is the world's first splitter to offer the endpoint view. Endpoints are any RDM compliant devices such as lighting fixtures, smoke machines, lasers, or any remotely managed devices.
If RDM devices are connected to the ports of the LumiSplit, you'll be able to know which port they are connected to.
By default, any RDM device will be listed in the RDM panel as follows:

In this example, the RDM test device is connected to port 1 of the converter using 2.0.0.12 as an IP address.
To see which port of the LumiSplit the device is connected to, right click on one of the responders of the LumiSplit 2.10 and select Control.

If RDM devices are connected to the splitter, they will appear on each port marked with a white triangle on the left-hand side. Expand these lists, and discover the devices connected to the selected port. This feature makes your life easier when troubleshooting an installation, to follow the complete signal path. Hover your mouse over the discovered RDM device to get some more info about it.

4.7.1 Zone assignation

In the endpoint view, you can also modify the zone assignment per port (1 or 2). Input A is universe 1, input B is universe 2. To assign an output to one of these zones, click on the universe number of the selected output, and change the number, according to your need.

ID	Label	Mode	Universe	Timing	Identify	Filter
1	Zone A	Input	1	Medium (184uS/36FPS)	☐	☐
2	Zone B	Input	2	Medium (184uS/36FPS)	☐	☐
3	Port 1	Output	1	Unknown timing	☐	☐
4	Port 2	Output	1	Unknown timing	☐	☐
5	Port 3	Output	1	Unknown timing	☐	☐
6	Port 4	Output	2	Unknown timing	☐	☐
7	Port 5	Output	2	Unknown timing	☐	☐
8	Port 6	Output	2	Unknown timing	☐	☐
9	Port 7	Output	2	Unknown timing	☐	☐
10	Port 8	Output	1	Unknown timing	☐	☐
11	Port 9	Output	1	Unknown timing	☐	☐
12	Port 10	Output	1	Unknown timing	☐	☐

4.7.2 RDM filtering

From this menu, you can enable/disable RDM filtering per port and per zone as well. Tick the corresponding filter checkbox to enable RDM filtering. A filtered output will display a light colour on its LED (cyan or orange).

ID	Label	Mode	Universe	Timing	Identify	Filter
1	Zone A	Input	1	Medium (184uS/36FPS)	☐	☐
2	Zone B	Input	2	Medium (184uS/36FPS)	☐	☐
3	Port 1	Output	1	Unknown timing	☐	☐
4	Port 2	Output	1	Unknown timing	☐	☐
5	Port 3	Output	1	Unknown timing	☐	☐
6	Port 4	Output	2	Unknown timing	☐	☑
7	Port 5	Output	2	Unknown timing	☐	☑
8	Port 6	Output	2	Unknown timing	☐	☐
9	Port 7	Output	2	Unknown timing	☐	☐
10	Port 8	Output	1	Unknown timing	☐	☑
11	Port 9	Output	1	Unknown timing	☐	☑
12	Port 10	Output	1	Unknown timing	☐	☐

4.7.3 Identify a port

If needed you can identify a port. To do so, tick the corresponding Identify check box, and the LED of the selected port will blink white. This can come in handy when you need to indicate the port to use.

ID	Label	Mode	Universe	Timing	Identify	Filter
1	Zone A	Input	1	Medium (184uS/36FPS)	☐	☐
2	Zone B	Input	2	Medium (184uS/36FPS)	☐	☐
3	Port 1	Output	1	Unknown timing	☐	☐
4	Port 2	Output	1	Unknown timing	☐	☐
5	Port 3	Output	1	Unknown timing	☐	☐
6	Port 4	Output	2	Unknown timing	☐	☐
7	Port 5	Output	2	Unknown timing	☑	☐
8	Port 6	Output	2	Unknown timing	☑	☐
9	Port 7	Output	2	Unknown timing	☐	☐
10	Port 8	Output	1	Unknown timing	☐	☐
11	Port 9	Output	1	Unknown timing	☐	☐
12	Port 10	Output	1	Unknown timing	☐	☐

4.7.4 Regeneration

When in regeneration mode, click on the timing field of the selected input(s) to assign the desired regenerating timing.

Three different timings are available (Break Time, Framerate):

- Slow (200µs/25FPS)
- Medium (184µs/36FPS)
- Fast (176µs/40FPS)

The timing set here will be available for all outputs linked to the selected input

4.8 Custom

4.8.1 Backup

Once the splitter is in backup mode, and in the unlikely event you lose DMX on input A, the splitter will automatically switch to input B. If input A is back online, the splitter will, depending on the configuration, not automatically give back control to input A.
To give back control to input A, press the input A input button. Alternatively, you could right click on one of the online responders in Luminet Monitor and select Control. Click on the Custom tab.

To give back control to input A, go to the Backup: Recover main option, and click on the Set button. All output LEDs will turn blue again.

4.8.2 Backup Auto Recovery

The LumiSplit (firmware version 6 onwards) offers the option to automatically recover when input A becomes active again.

To enable auto recovery please follow the following steps:

- Select the desired responder in the RDM devices list.
- Right click and select Control.
- Browse to the Custom tab.
- In the "Backup: AutoRecover" field enter the value "1".
- Click the set button. Auto recovery is now enabled.

4.8.3 Backup TimeOut

With the backup timeout function, you can set a time, in milliseconds, that no frames are being received on input A before the LumiSplit switches to input B.

4.8.4 Store preset

The LumiSplit 2.10 offers you to remotely store a configuration on outlet 9 and 10. In the "Store User Preset" field, enter "1" (one) if you wish to record your first preset on outlet 9, enter "2: (two) if you wish to record your second preset on outlet 10. Press the Set button to record your preset.

4.9 Snapshot

From firmware version 6 onwards the LumiSplit offers the option to record a DMX snapshot per input. This snapshot can later be used for the DMX fail mode or Startup mode.
To use this new feature, the user will need LumiNet Monitor v2.4.2 or higher.

4.9.1 Capture Snapshot

To capture the snapshot, an active lighting state needs to be present.
To capture the snapshot please perform the following steps:

- Open LumiNet Monitor and locate the responder of the desired   device(s) in the RDM devices list.
- Select the desired responder(s) and right click.
- From the pop-up window, choose Capture Snapshot (option 3 from the bottom)

The snapshot has now successfully been made.

4.10 DMX Fail Mode

In DMX Fail mode, the LumiSplit offers 3 options as output in the unlikely event that something happens to the DMX input signal.
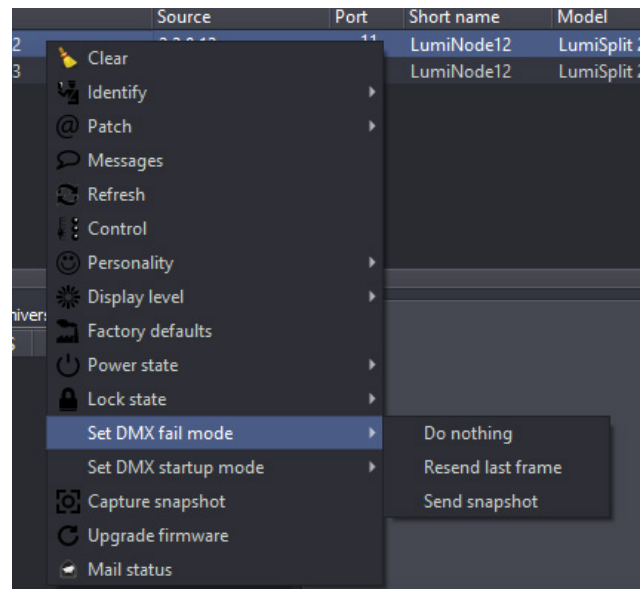The three options available are:

- Do Nothing (default), There will be NO DMX signal forwarded to the outputs of the respected input, until valid DMX signal arrives at the input.
- Resend last frame, will keep repeating the last received DMX frame on all outputs of the respective input (zone). As soon as the DMX input receives valid DMX again, the output will follow that new input again. The frame rate used for resending the last frame is the same as set for the regeneration mode (default: 36 FPS with a break time of 184 µs).
- Send snapshot, makes it possible to send out the captured snap shot as lighting state with defined timings. In this way the snapshot will be send to all concerned outputs until valid DMX input signal is received or until the hold time expires. When a valid DMX input signal is received again, the outputs will follow the input data.

When the DMX Fail mode is active all the output port LEDs will blink slowly in sync.

4.10.1 Configure DMX Fail mode

To set the DMX Fail mode, use the following steps:

- Select the desired responder in the RDM devices list.
- Right click and select DMX Fail mode.
- Choose the option you want to use.
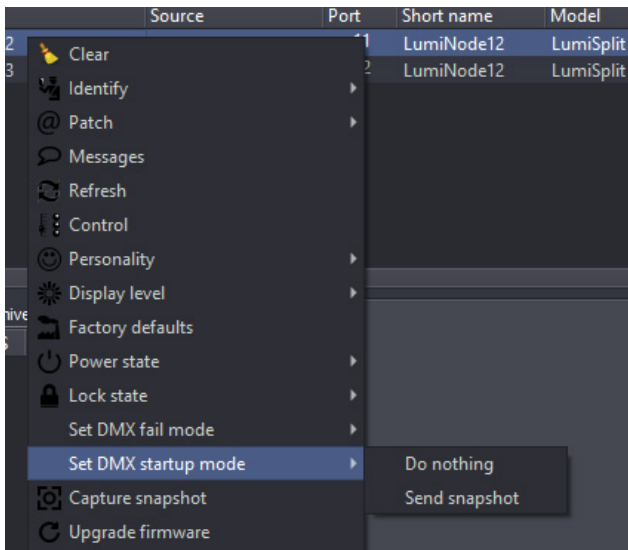

4.11 DMX Startup Mode

With the DMX Startup mode , you can define the behaviour of the LumiSplit at Startup for each input. If no DMX signal is present, you may choose the following 2 options:

- Do Nothing (default), There will be NO DMX signal forwarded to the outputs of the respected input, until valid DMX signal arrives at the input.
- Send snapshot, makes it possible to send out the captured snapshot as lighting state with defined timings. In this way the snapshot will be send to all concerned outputs until valid DMX input signal is received or until the hold time expires. When valid DMX input signal is received, the outputs will follow the input data.

4.11.1 Configure DMX Startup mode

In order to set the DMX Startup mode, use the following steps:

- Select the desired responder in the RDM devices list.
- Right click and select DMX Startup mode.
- Choose the option you want to use.

4.11.2 DMX Fail and Startup detailed timing

The Startup and DMX Fail features in LumiSplit are based on standard RDM PIDs. These PIDs can be generically controlled in detail via the RDM control panel.
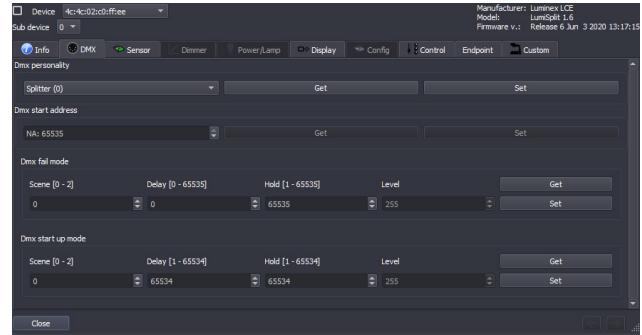DMX Fail mode and DMX Startup mode both make use of preset info in case available via RDM. The preset info will set the configurable boundaries for setting the details of these modes.

The following attributes can be adjusted:

■ **DELAY:** Number of 0.1 seconds delay before the preset gets active. 65535 (0xffff) represents infinite time. Mind that Lumi-Split already takes 800ms (or 0.8 seconds) before detecting DMX signal fail. So, by setting the Delay at 1, you set a time out of: 0.8 + 0.1 = 0.9 seconds.

■ **HOLD:** The hold time defines how long the mode stays active. After the amount of x times 0.1 seconds, the mode will go back to default behavior. In case of LumiSplit the minimum hold time is 0.1 second and the maximum is infinite (65535 or 0xffff). When the hold time has elapsed, the input (zone) of the LumiSplit will go back to "Do nothing". Or as soon the DMX signal has recovered the outputs will follow the incoming DMX again.

■ **LEVEL:** The level is a value that acts as a master level on the captured preset. LumiSplit only supports 255 (full) as level.

4.12 Messages

The LumiSplit can send messages over RDM. You can then be notified about any change on the LumiSplit. To display the message window, right click on one of the responders, and select Messages.
You can save the messages to review later or print them for record keeping.

4.13 Factory reset

The unit can be reset via RDM. To proceed, right click on one of the responders, and select Factory Default.

4.14 Firmware upgrade

The LumiSplit 2.10 is the first splitter to be upgradable through RDM. To upgrade the unit, you will need a Luminex LumiNode (firmware 1.1.0 or higher) or Ethernet-DMX converter (firmware 4.2.0 or higher), and LumiNet Monitor 2.1.6 or higher.
Please bear in mind only one instance of LumiNet Monitor should be running on the network during the firmware upgrade.

- Download the latest LumiSplit firmware on our website and extract the archive. Connect your computer to the node and enable RDM on one port.
- Connect this port to one of the two inputs of the splitter.
- In LumiNet Monitor RDM panel, right click on one of the responders, and select Upgrade Firmware.
- Click on Select file and select the extracted file (.bin).
- Click on the Upgrade button, and the upgrade procedure will start.
- The procedure ends once the progression bar reaches 100%.

5. Technical support

Sometimes it is required to get more help with your device or application. There is a knowledge base available online that gets updated on a regular basis at: https://support.luminex.be

If you need to ask our team for more help or you need to return a device to Luminex for diagnostics or repair, you can also find the option on this page to request an RMA or start a support ticket.

6. Appendix

6.1 TECHNICAL DATA	
Mains Voltage:	100 – 240VAC
Main Frequency:	50/60Hz
Power output:	Max 15A
Power consumption:	Max 15W
Dimensions (W x D x H):	482 x 204.85 x 44 mm (19" x 8" x 1.73")
Weight:	2.5 kg
Operating temperature:	0 to +50°C
Storage temperature:	-10 to +70°C
Humidity (non-condensing):	5 to 95%
Certificates / Approvals:	cSGSus Mark, CE, CB certificate
Standards:	IEC 60950-1, EN 60950-1, IEC 62368-1, EN 62368-1, UL 62368-1, CAN/CSA-C22.2 No. 62368-1, FCC Part 15 CFR 47, CAN/ICES-003, EN 55022, EN 55024, RoHS, Reach
Protocol standard:	ANSI E1.11 – 2008 (R2018) (DMX-512)
	ANSI E1.20 – 2010 (RDM)
	ANSI E1.37-1 – 2012 (R2017) Additional Message Sets for ANSI E1.20 (RDM) – Part 1
	ANSI E1.37-7 – 2019 Additional Message Sets for ANSI E1.20 (RDM) – Gateway & Splitter Configuration Messages
DMX port isolation:	Optical and galvanic isolation per port
Short circuit protection:	Yes
DMX port termination/biasing:	Yes
DMX input (XLR model):	2x gold plated Neutrik 5-pin XLR (male – front)
	2x gold plated Neutrik 5-pin XLR (male – rear/thru)
DMX input (EtherCon model):	2x Shielded Neutrik etherCON connectors (front)
	2x Shielded Neutrik etherCON connectors (rear/thru)
DMX output (XLR model):	10x gold plated Neutrik 5-pin XLR (female)
DMX output (EtherCon model):	10x Shielded Neutrik EtherCON connectors

For the **LumiSplit equipped with RJ45 EtherCon ports** we are using the following connection schedule from the ANSI E1-11 DMX Standard: Table 4 Connection Schedule for DMX512 Equipment Using IEC 60603-7 8-Position Modular Connectors

Pin (Wire) #	Wire Color	DMX512 Function
1	White / Orange	Data 1+
2	Orange	Data 1–
3	White / Green	Data 2+ (optional)
6	Green	Data 2- (optional)
4	Blue	Not assigned
5	White / Blue	Not assigned
7	White / Brown	Data link common (common reference) for data 1 (0V)
8	Brown	Data link common (common reference) for data 2 (0V)
	Drain	

Note 1: Pin numbering and colour in accordance with ANSI/TIA/EIA-568 scheme T568B.
Note 2: Pin 8 should be wired as signal common even if pins 3 and 6 are NOT wired so that both conductors 7 and 8 are at equal potential.
Data 2 is NOT being used in the LumiSplit.

6.2 SUPPORTED RDM PIDS

PID VALUE	RDM Parameter ID's
0x0001	DISC_UNIQUE_BRANCH
0x0002	DISC_MUTE
0x0003	DISC_UN_MUTE
0x0020	QUEUED_MESSAGE
0x0030	STATUS_MESSAGES
0x0031	STATUS_ID_DESCRIPTION
0x0032	CLEAR_STATUS_ID
0x0050	SUPPORTED_PARAMETERS
0x0051	PARAMETER_DESCRIPTION
0x0060	DEVICE_INFO
0x0080	DEVICE_MODEL_DESCRIPTION
0x0081	MANUFACTURER_LABEL
0x0082	DEVICE_LABEL
0x0090	FACTORY_DEFAULTS
0x00C0	SOFTWARE_VERSION_LABEL
0x00E0	DMX_PERSONALITY
0x00E1	DMX_PERSONALITY_DESCRIPTION
0x0141	DMX_FAIL_MODE
0x0142	DMX_STARTUP_MODE
0x0200	SENSOR_DEFINITION
0x0201	SENSOR_VALUE
0x0501	DISPLAY_LEVEL
0x0641	LOCK_STATE
0x0642	LOCK_STATE_DESCRIPTION
0x0900	ENDPOINT_LIST
0x0901	ENDPOINT_LIST_CHANGE
0x0902	IDENTIFY_ENDPOINT
0x0903	ENDPOINT_TO_UNIVERSE
0x0904	ENDPOINT_MODE
0x0905	ENDPOINT_LABEL
0x0906	START_CODE_FILTER
0x0907	DISCOVERY_STATE
0x0909	ENDPOINT_TIMING
0x090A	ENDPOINT_TIMING_DESCRIPTION
0x090B	ENDPOINT_DEVICES
0x090C	ENDPOINT_DEVICE_LIST_CHANGE
0x090D	BINDING_CONTROL_FIELDS
0x1000	IDENTIFY_DEVICE
0x1010	POWERSTATE
0x1030	CAPTURE_PRESET
0x1041	PRESET_INFO
0x1042	PRESET_STATUS
0x9000	STORE_USER_PRESET
0x9001	RECOVER_BACKUP_MODE
0x9002	BACKUP_AUTORECOVER
0x9003	BACKUP_TIMEOUT
0x9004	STORE_SNAPSHOT