



PIXREAL
ENGINEERED FOR LONGEVITY

SPARK
PRODUCT BROCHURE



SPARK Series

A creative led strip, cross-over between video and lighting

Indoor | Outdoor | Creative Display



SPARK: Boundary-Breaking LED Video Strip

Most LED strips are lighting tools dressed up as video. SPARK is neither. It is a purpose-built LED video strip that operates exactly at the intersection of video content and dynamic light. With the pixel density, brightness, and processing power to carry both roles without compromise.

Available in standard lengths of 50, 100, and 200cm, SPARK panels snap together into runs of up to 60 meters on a single power and data connection. Every pixel is freely mappable, which means any video content can be distributed across structures, trusses, ceilings, and interiors in any configuration the designer imagines.

With 15,000 nits of calibrated output, the SPARK delivers broadcast-grade image quality under stage lighting, festival sunlight, and camera scrutiny.

The SPARK NERO runs at 8,000 nits and doubles the contrast ratio, purpose-built for environments where deep blacks and visual punch are non-negotiable. IP65 front and rear means both work outdoors without a second thought. NovaStar and Brompton compatibility means either drops into existing workflows without dedicated processing hardware.

SPARK is where lighting designers and video engineers meet. It gives both the control they expect and the visual quality their work demands.



Key features

SPARK is built around one principle: remove every obstacle between the designer's idea and the finished installation. A 60-metre single-cable run, freely mappable pixels, full IP65 protection, and a modular mounting system gives lighting, set designers and video engineers the tools to build any shape, in any environment, without compromise. Native NovaStar and Brompton compatibility means it connects directly to the platforms your operation already runs.

60 meter on a single-Cable run

Up to 60 meters on a single power and data connection. No injection points.

No extra cable runs through structure.

Modular construction

Ten coupler types cover every rigging scenario. SPARK strips flex concave to convex.

Any shape is buildable.

Freely mappable pixels

Every LED is independently addressable. Video content maps across any structural configuration. Straight lines, curves, cubes, angled arrays. The design intent drives the layout.

Fully IP65

SPARK runs outdoors without enclosures, through festival weather and open-air stages, and returns to the warehouse ready for the next show.

15.000 / 8.000 Nits, Two LED Options

White LED reaches 15,000 calibrated nits for outdoor stages and mixed-light environments. Black LED delivers 8,000 nits with an 8,000:1 contrast ratio for theatre, interiors, and controlled-light applications.

Pixel density

Six rows of 60 pixels across every 50 cm of strip deliver the pixel density that makes SPARK perform as a precision image surface.

Two LED variants. One modular system.

The right output for every environment. The SPARK delivers maximum brightness for outdoor stages, festivals, and broadcast. The SPARK NERO delivers maximum contrast for theatre, interiors, and controlled-light applications. Same system, same accessories, different performance profile.



SPARK

- 15,000 calibrated nits
- SMD2727 White LED
- Contrast ratio 4,000:1
- Optimized for outdoor stages, festivals, and broadcast environments



SPARK NERO

- 8,000 calibrated nits
- SMD2727 Black LED
- Contrast ratio 8,000:1
- Recedes into the set when unlit
- Optimized for theatre, interior installations, and controlled-light environments

Complete line of tool free Accessories

The SPARK line extends beyond the panel. A complete set of rigging accessories lets crews build the shapes the design calls for: squares, V-configurations, horizontal or vertical runs.

Everything connects through the integrated slide profile. Couplers and accessories lock into position without screws or additional hardware, cutting assembly time and keeping the rig clean and secure.



*No tools needed
SPARK uses
Click Connections*



SPARK

The SPARK White LED is Pixreal's high-output variant, built for environments where ambient light is a problem to be solved.

With 15,000 calibrated nits and SMD2727 White LED configuration, it holds full brightness and accurate color under stage lighting, direct sunlight, and the unforgiving conditions of outdoor festivals. A contrast ratio of 4,000:1 keeps image detail readable across the entire 160° viewing angle, horizontal and vertical. A 7,680Hz

refresh rate and 15-bit grayscale ensure clean, flicker-free output at any frame rate. Panels curve from concave to convex within a 90° range in either direction, and up to 60 meters can be chained on a single power and data connection. IP65 rated front and rear means no enclosures, no workarounds, and no compromises based on weather or location. Compatible with NovaStar and Brompton processing platforms without dedicated hardware. Available in 50, 100, and 200cm panel lengths.

7.680 HZ REFRESH RATE	160° VIEWING ANGLE	15 bit GRAYSCALE DEPTH	15.000 NITS
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Applications			
LIVE EVENTS & TOURING	FIXED INSTALLATION	BROADCAST STUDIO	CREATIVE & EVENT DESIGN

Specifications	SPARK 50 WHITE	SPARK 100 WHITE	SPARK 200 WHITE
DIFFERS PER MODEL			
Panel dimension	50 × 5.9 × 7.2 cm	100 × 5.9 × 7.2 cm	200 × 5.9 × 7.2 cm
Fixture resolution (H x V)	6 × 60	6 × 120	6 × 240
Weight	1.8 kg	2.9 kg	5.1 kg
Power consumption max / avg	25W / 13W	50W / 25W	100W / 50W
IDENTICAL ACROSS ALL MODELS			
Pixel pitch	8.33 mm		
Frame material	Aluminum profile		
Scan ratio	1/2		
LED configuration	SMD2727		
Max brightness (calibrated)	15,000 nits		
Contrast ratio	≥4,000:1		
Viewing angle (H/V)	160° / 160°		
Refresh rate	7,680 Hz		
Gray scale	15-bit		
Curving (concave / convex)	Concave 90° ~ Convex 90°		
Max frame rate	120 Hz		
Operating environment	-20°C ~ +50°C / 10% ~ 90% RH		
Processing platform	NovaStar / Brompton		
IP rating	IP65		
Certifications	CE, ETL, FCC, RoHS, WEEE		



SPARK NERO

The **SPARK NERO** is Pixreal's high-contrast variant, engineered for environments where darkness is as important as light.

Built on the same modular platform as the regular SPARK, it uses SMD2727 Black LED configuration to deliver a contrast ratio of 8,000:1 at 8,000 calibrated nits. Where the White LED version competes with ambient light, the Black LED version works with controlled light to produce the kind of depth that white-face

LEDs cannot match. Deep blacks hold true. Colors stay accurate. The image reads exactly as designed. A 7,680Hz refresh rate and 15-bit grayscale carry that precision through to the output. The same 60-metre single-cable run capability, the same concave-to-convex curving range, and the same full accessory ecosystem apply. IP65 rated front and rear. Compatible with NovaStar and Brompton processing platforms without dedicated hardware. Available in 50, 100, and 200cm panel lengths.

7.680 HZ REFRESH RATE	160° VIEWING ANGLE	15 bit GRAYSCALE DEPTH	8000 NITS
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Applications			
LIVE EVENTS & TOURING	FIXED INSTALLATION	BROADCAST STUDIO	CREATIVE & EVENT DESIGN

Specifications	SPARK 50 NERO	SPARK 100 NERO	SPARK 200 NERO
DIFFERS PER MODEL			
Panel dimension	50 × 5.9 × 7.2 cm	100 × 5.9 × 7.2 cm	200 × 5.9 × 7.2 cm
Fixture resolution (H x V)	6 × 60	6 × 120	6 × 240
Weight	1.8 kg	2.9 kg	5.1 kg
Power consumption max / avg	25W / 13W	50W / 25W	100W / 50W

IDENTICAL ACROSS ALL MODELS

Pixel pitch	8.33 mm
Frame material	Aluminum profile
Scan ratio	1/2
LED configuration	SMD2727 Black
Max brightness (calibrated)	8,000 nits
Contrast ratio	≥8,000:1
Viewing angle (H/V)	160° / 160°
Refresh rate	7,680 Hz
Gray scale	15-bit
Curving (concave / convex)	Concave 90° ~ Convex 90°
Max frame rate	120 Hz
Operating environment	-20°C ~ +50°C / 10% ~ 90% RH
Processing platform	NovaStar / Brompton
IP rating	IP65
Certifications	CE, ETL, FCC, RoHS, WEEE



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The finishing **Hardware.**

Every SPARK installation is only as strong as the components behind it. This complete range of mounting hardware, cabling, and diffusers gives you full control over how the system goes up, connects, and performs... Whatever the configuration demands.

SPARK ACCESSORIES

Basic Connection Accessories

The integrated slide profile accepts the full mounting line without screws or loose hardware.

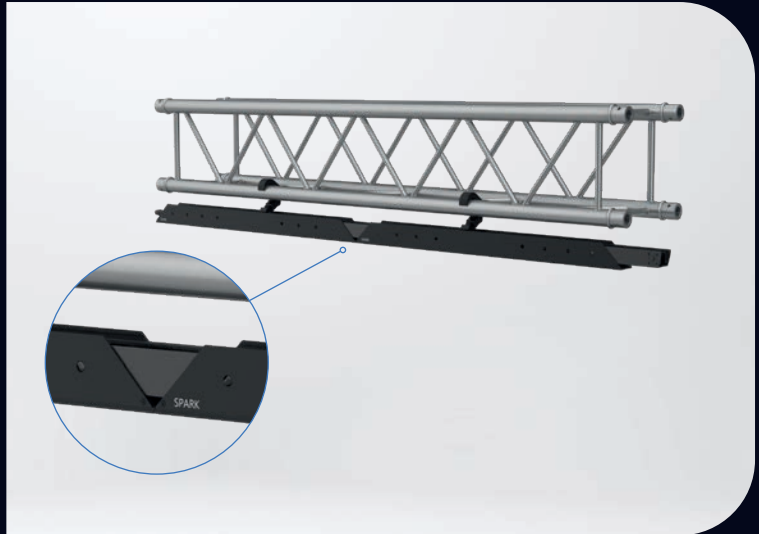
Connectors, corner fittings, and wall mounts lock into place on site, fast to build, safe to fly, and ready for any configuration.

Straight Connector

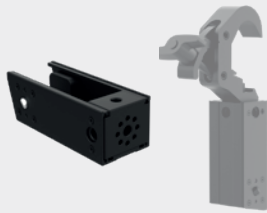


Product code: PSA-SC

Width	247 mm
Depth	54 mm
Height	47 mm
Weight	0,46 kg
Material	Black Anodized Aluminum



Vertical End Connector



Product code: PSA-VEC

Width	139 mm
Depth	54 mm
Height	47 mm
Weight	0,38 kg
Material	Black Anodized Aluminum

The vertical end connector is supplied without a connecting piece such as an eye-nut, clamp, or truss half-coupler. This must be ordered separately.



Available connections:

Eye-nut



Quick Release Coupler



Quick Coupler



Truss halfcoupler



Basic Connection Accessories

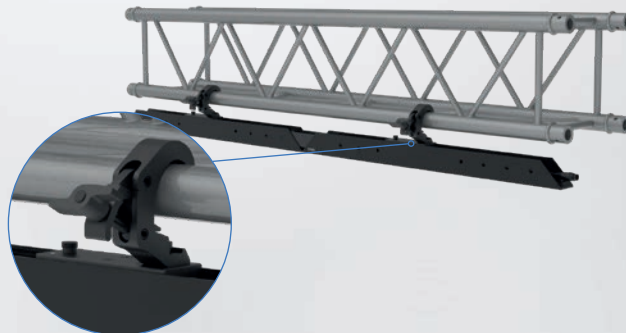
Truss Connector



Product code: PSA-TC

Width	170 mm
Depth	53 mm
Height	12 mm
Weight	0,27 kg
Material	Black Anodized Aluminum

The truss connector is supplied without a connecting piece such as an eye-nut, clamp, or truss half-coupler. This must be ordered separately.



Available connections:

Eye-nut



Quick Release Coupler



Quick Coupler



Truss halfcoupler



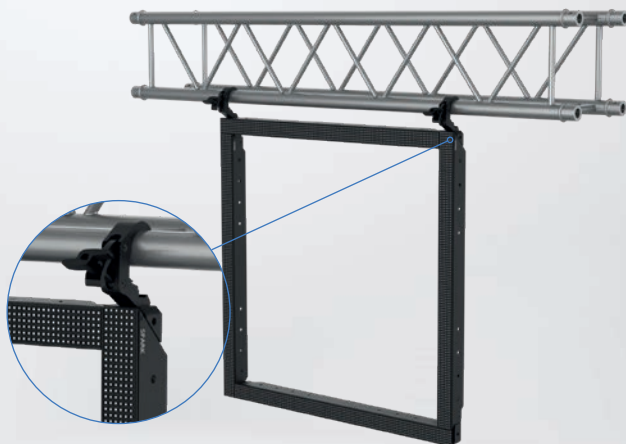
Front Square Connector



Product code: PSA-FSC

Width	191 mm
Depth	129 mm
Height	47 mm
Weight	0,9 kg
Material	Black Anodized Aluminum

The square connector is supplied without a connecting piece such as an eye-nut, clamp, or truss half-coupler. This must be ordered separately.



Available connections:

Eye-nut



Quick Release Coupler



Quick Coupler



Truss halfcoupler



Basic Connection Accessories

Outer Square Connector



Product code: PSA-OSC

Width	117 mm
Depth	117 mm
Height	64 mm
Weight	0.96 kg
Material	Black Anodized Aluminum

The outer square truss connector is supplied without a connecting piece such as an eye-nut, clamp, or truss half-coupler. This must be ordered separately.



Available connections:

Tube with Quick Release Coupler



Quick Release Coupler



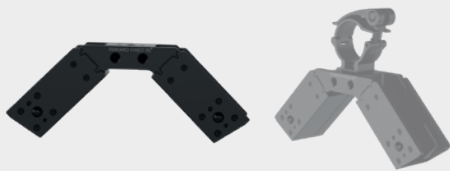
Quick Coupler



Truss halfcoupler



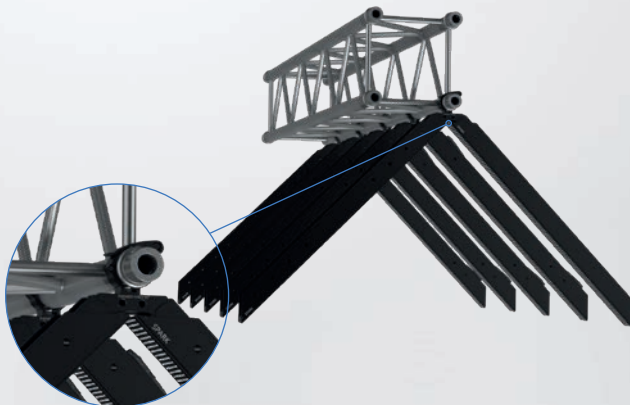
Inner Square Connector



Product code: PSA-ISC

Width	270 mm
Depth	54 mm
Height	104 mm
Weight	0.75 kg
Material	Black Anodized Aluminum

The inner truss connector is supplied without a connecting piece such as an eye-nut, clamp, or truss half-coupler. This must be ordered separately.



Available connections:

Eye-nut



Quick Release Coupler



Quick Coupler



Truss halfcoupler



Basic Connection Accessories

Multi Angle Connector



Product code: PSA-AC

Width	324 mm*
Depth	54 mm
Height	29 mm
Weight	0.58 kg
Material	Black Anodized Aluminum

The multi angle connector is supplied without a connecting piece such as an eye-nut, clamp, or truss half-coupler. This must be ordered separately.

* Measured flat



Available connections:

Tube with Quick Release Coupler



Quick Release Coupler



Quick Coupler



Truss halfcoupler



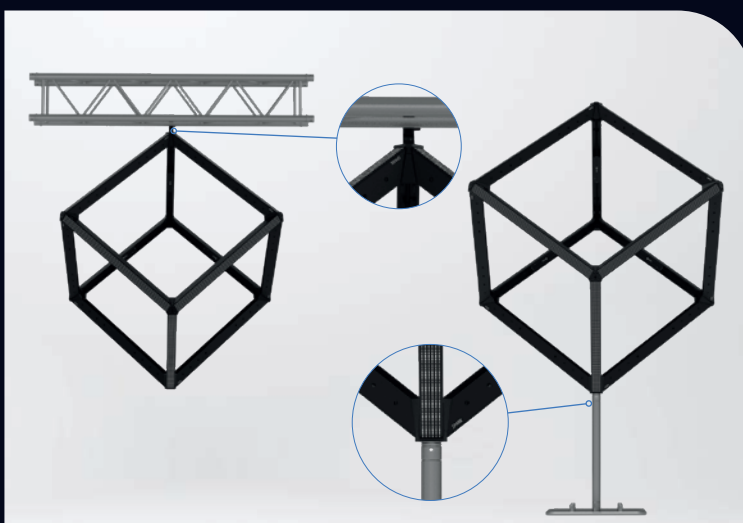
Cube Connector



Product code: PSA-CC

Width	224 mm
Depth	194 mm
Height	129 mm
Weight	1.4 kg
Material	Black Anodized Aluminum

The cube connector is supplied without a connecting piece such as an eye-nut, clamp, or truss half-coupler. This must be ordered separately.



Available connections:

Eye-nut



Quick Release Coupler



Quick Coupler



Truss halfcoupler





SPARK

A close-up photograph showing a person's hand in a black sleeve sliding a dark, perforated metal strip into a corner connector. The strip has a grid of small circular holes and the word "SPARK" is printed vertically on its side. The background is dark and out of focus, showing other parts of the assembly.

Multi Connector Accessories.

Some installations demand more than a straight run. The Multi Connector is a 60 x 60 x 60 mm corner block that joins SPARK strips at precise angles, enabling T, L, X, Y, and cubic configurations without custom fabrication. Attach the Multi Frame Connector in any orientation to the Multi Connector and slide the SPARK directly onto it, or use the truss connector to build 90-degree configurations.

Multi Connector Accessories

Multi Connector		Multi Frame Connector		Truss Connector	
					
Product code: PSA-MC		Product code: PSA-MFC		Product code: PSA-TC	
Width	60 mm	Width	133 mm	Width	170 mm
Depth	60 mm	Depth	54 mm	Depth	54 mm
Height	60 mm	Height	47 mm	Height	12 mm
Weight	0,46 kg	Weight	0,36 kg	Weight	0,27 kg
Material	Black Anodized Aluminum	Material	Black Anodized Aluminum	Material	Black Anodized Aluminum

Configuration Examples

The Multi Connector supports L, T, X, and X up/down frame connections, with 45-degree rotation on each port for complete creative freedom in three dimensions.



SPARK in combination with the Multi Connector, and Multi Frame Connector.



Combination of the Multi Connector and Truss Connector.



Diffuser, Cables & Cases

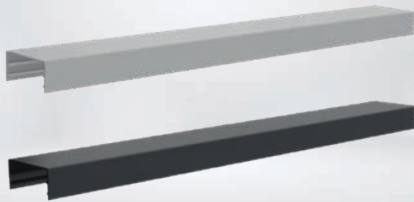
A SPARK rig is defined as much by its finish and its feed as by the fixtures themselves. Diffuser covers determine whether the source reads as a visible line or disappears into the surface, with profiles available in opal white and matte grey. The cable range keeps the signal chain on a single-cable infrastructure: one Power & Data Split at the head of the run, then combi cables in 5, 10, or 15 metre lengths carrying power and data between fixtures over distances of up to 60 meters.

Diffusers

Available in opal white and matte grey, SPARK diffuser covers distribute light evenly across the full strip length, eliminating glare and hard shadows. The right choice for accent lighting, architectural installations, and set designs where the source should disappear into the space.

Both covers fit tool-free into the integrated slide profile and are interchangeable in the field.

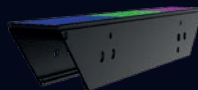
Diffuser for SPARK



Product code	Description
PSA-SSD-50WHITE	Square shaped diffuser White 50%
PSA-SSD-100WHITE	Square shaped diffuser White 100%
PSA-SSD-50GREY	Square shaped diffuser Grey 50%
PSA-SSD-100GREY	Square shaped diffuser Grey 100%

How diffusers work

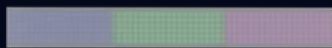
Spark without diffuser



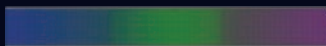
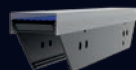
Without a cover attached, the individual LED diodes are directly visible. This results in direct, raw illumination where individual light points stand out clearly.

Position 1: Diffuser close to the SPARK

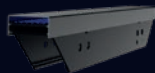
Placing the diffuser in the inner position creates a balanced light dispersion. The individual LED diodes are partially blended, reducing glare while maintaining a clear view of the color transitions.



Diffuser White



Diffuser Grey

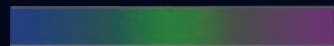


Position 2: Diffuser distanced from the SPARK

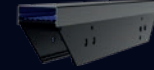
Moving the diffuser to the outer position maximizes the distance between the light source and the cover. This produces a fully blended, smooth illumination gradient with continuous color flow and zero visible LED dots.



Diffuser White



Diffuser Grey



Cables

SPARK runs on a single-cable infrastructure, starting with the Power & Data Split, which combines a PowerCON TRUE1™ connection and a data feed into one line to deliver power and signal directly to the first fixture. Subsequent fixtures are then linked using 2-in-1 power and data combi cables in various lengths, keeping the rig clean and the signal chain uninterrupted up to 60 meters from a single power source.

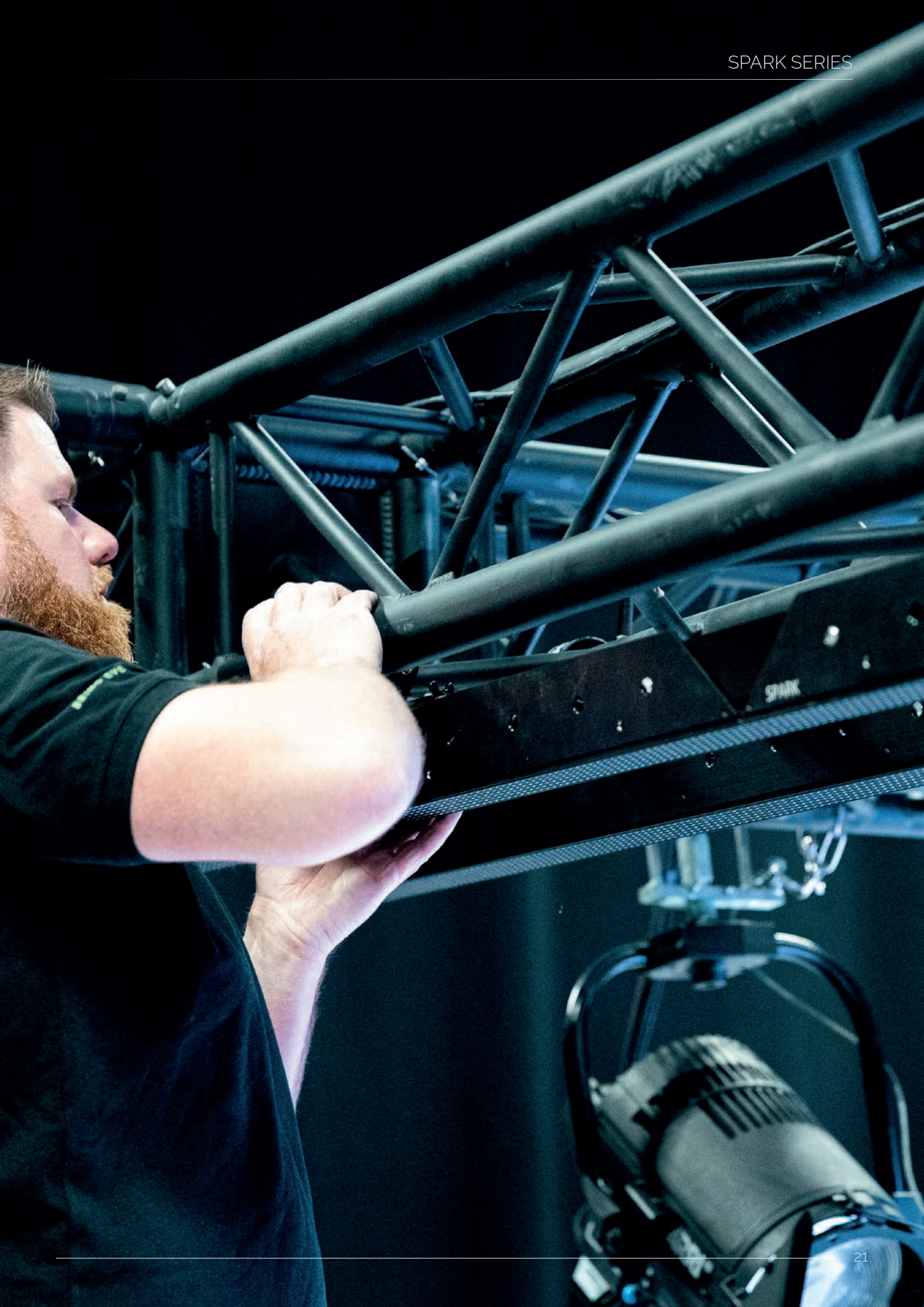
To adapt to complex layouts, input and output power & data splitters allow flexible distribution throughout the setup. If you need to span larger distances or bridge to another zone, an output splitter can convert the feed to run over a long UTP cable. At the new location, simply connect an input splitter to pick up the line and continue the daisy chain.



Cables for SPARK



Product code	Description
PSA-CAB-ISPLIT0.5	Power & Data Splitter 0,5 m Input
PSA-CAB-OSPLIT0.5	Power & Data Splitter 0,5 m Output
PSA-CAB-PD0.3	Power & Data 2in1 0,3 meter
PSA-CAB-PD0.5	Power & Data 2in1 0,5 meter
PSA-CAB-PD1	Power & Data 2in1 1 meter
PSA-CAB-PD3	Power & Data 2in1 3 meter
PSA-CAB-PD5	Power & Data 2in1 5 meter
PSA-CAB-PD10	Power & Data 2in1 10 meter
PSA-CAB-PD15	Power & Data 2in1 15 meter
PSA-CAB-PD20	Power & Data 2in1 20 meter



NOTES



THANK YOU

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