

LUMASCAPE LS6550 PowerSync PS4 Data Injector Instruction Manual

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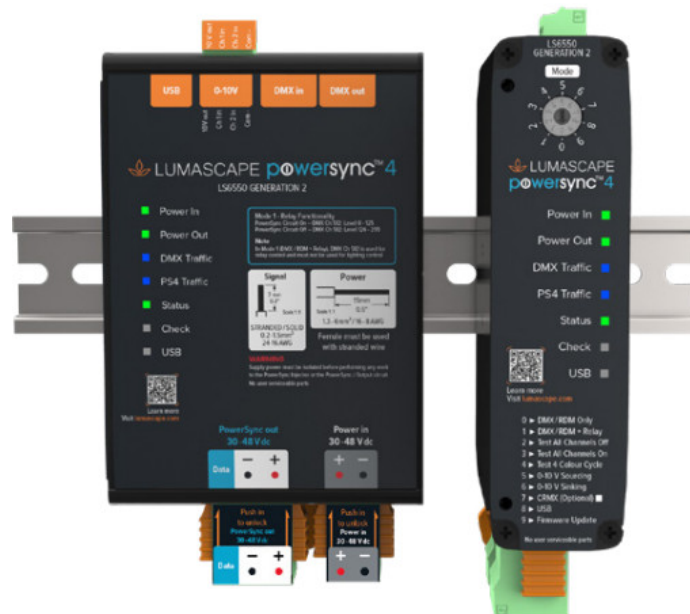


LUMASCAPE

PowerSync™ PS4 Data Injector LS6550

Installation Instructions

GENERATION 2



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LS6550 PowerSync PS4 Data Injector

DANGER



ISOLATE DEVICE FROM POWER

Failure to isolate power supply before installation or maintenance may result in fire, serious injury, electric shock, death and may damage the device.

Product Warranty is void if product is not installed as per installation instructions and in compliance with the local electrical code.

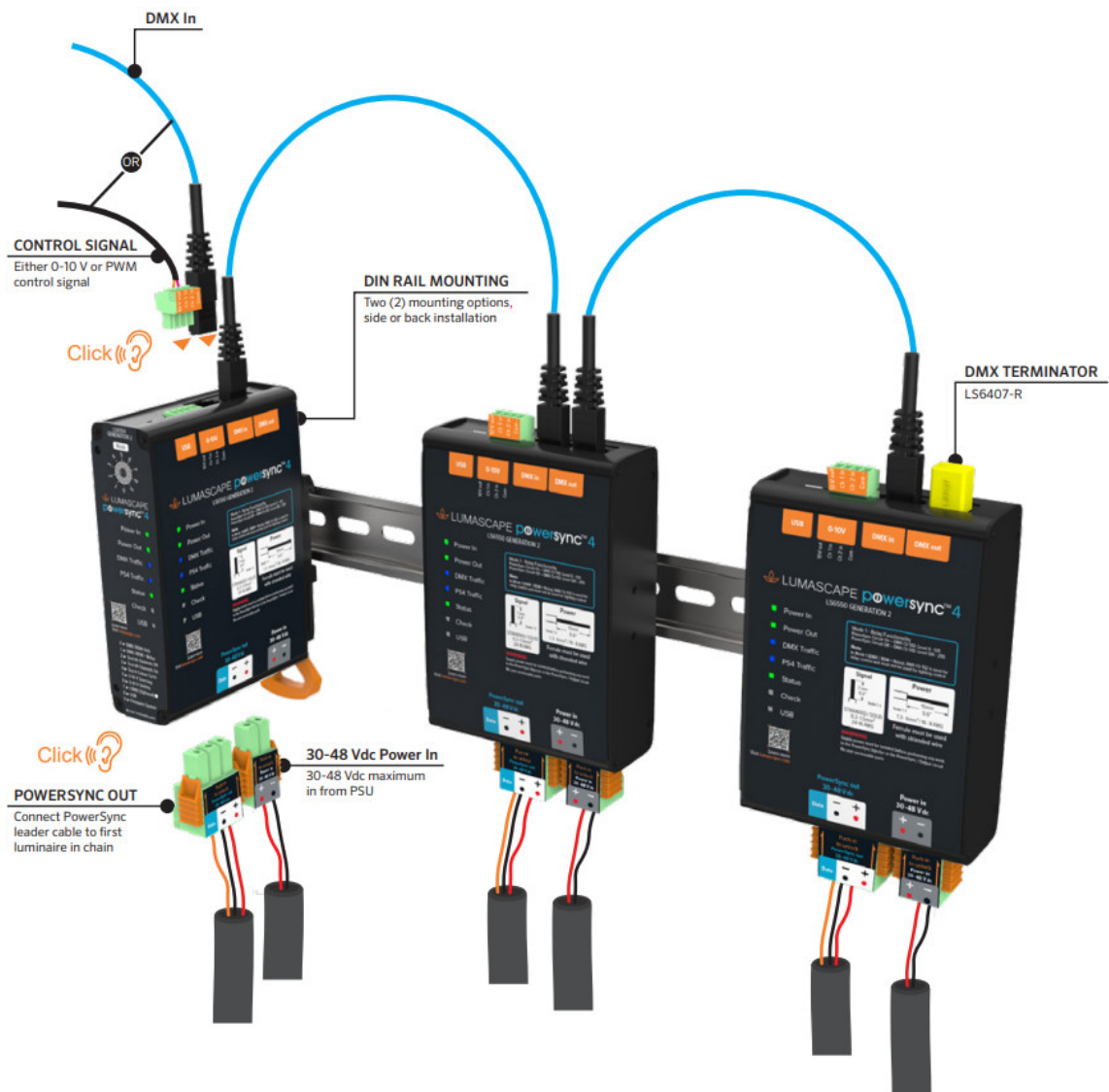
NO POWER TOOLS	DO NOT USE SILICONE ON OUTSIDE SURFACE	KEEP ELECTRONICS FREE FROM DIRECT AND MOISTURE	DO NOT HOSE OR PRESSURE CLEAN

READ ALL SAFETY INSTRUCTIONS FIRST

- Follow instructions carefully; failure to do so will void warranty.
- Ensure installation complies with local laws and applicable standards.
- Keep PowerSync free from debris and in an easily accessible location.
- Only use Lumascape power supplies, and leader cables.
- Ensure mains input power is surge protected.
- Never make connections whilst power is connected.
- Do not make modifications or alter product.
- Connections and LS6550 Data Injector is to be kept clean and dry at all times.
- A PowerSync terminator is required on the last fitting of run.

Products and specifications are subject to change without notice.

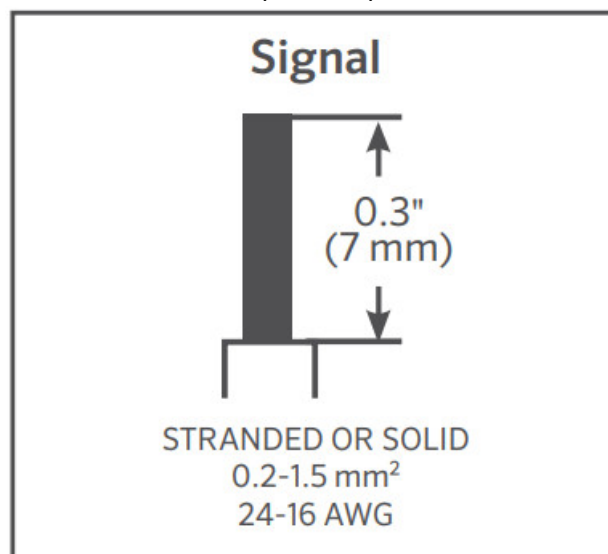
IN0194-230510



Control via 0-10 V or PWM Input

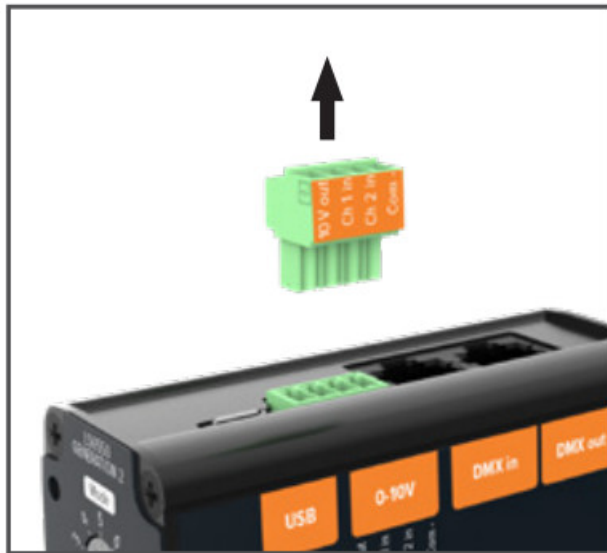
STEP 1

Strip the individual wire strands of the data cable as per the specification below.



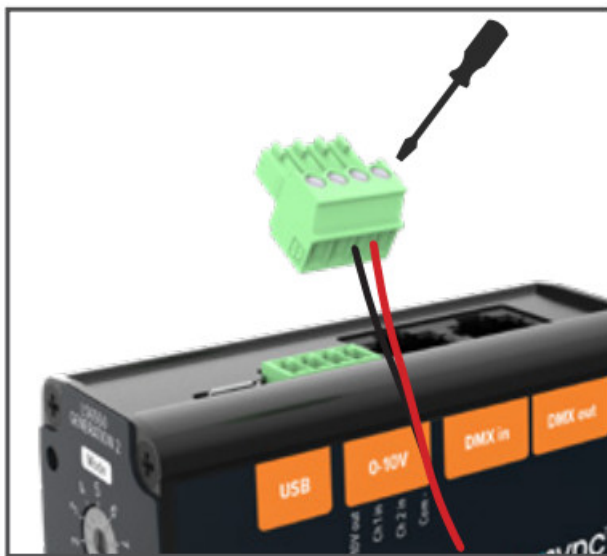
STEP 2

Pull up to remove terminal block.



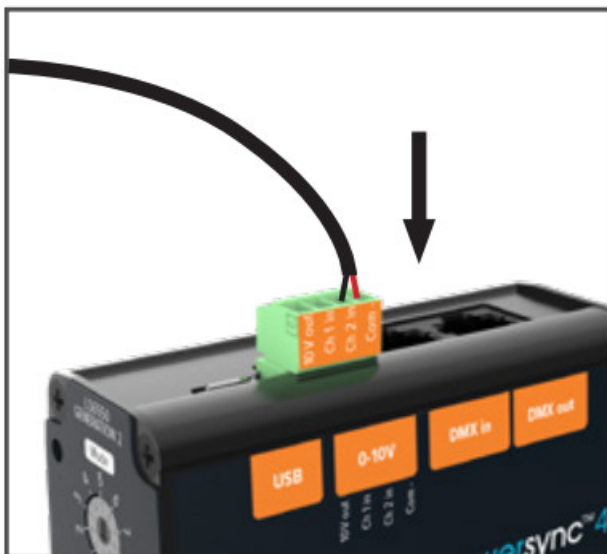
STEP 3

Using a screwdriver, loosen the screw to open the terminal and insert stranded wire, then screw back up.



STEP 4

Reconnect terminal block.



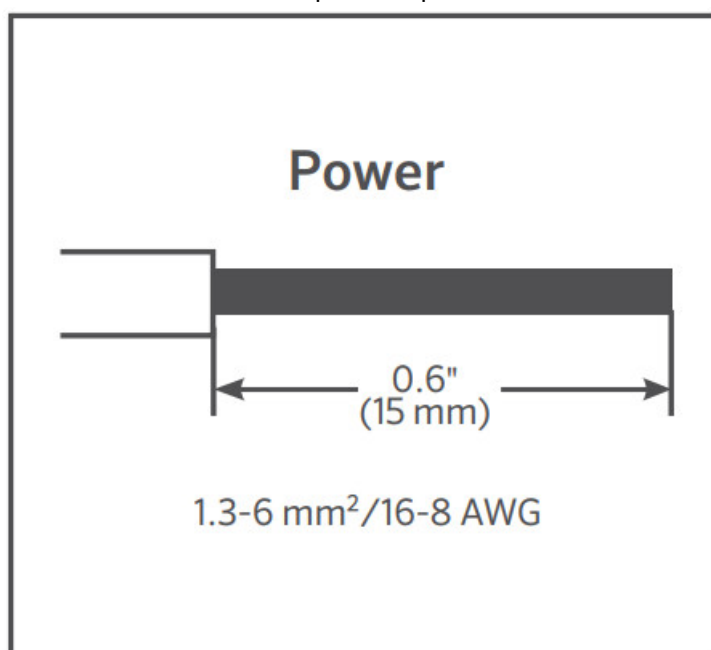
Label	Designation		
	Use with 0-10 V Sinking Dimmers ¹	Use with 0-10 V Sourcing Dimmers ²	PWM ³
10 V Out	10 V source	Not connected	Not connected
Ch 1 In	Channel 1 return	Channel 1 +	Channel 1 +
Ch 2 In	Channel 2 return	Channel 2 +	Channel 2 +
Corn-	Not connected	Common –	Common –

¹Mode 5, ²Mode 3, ³Mode 4
Refer to Mode Switch table

PSU Connections

STEP 1

Strip the individual wire strands of the data cable as per the specification below.



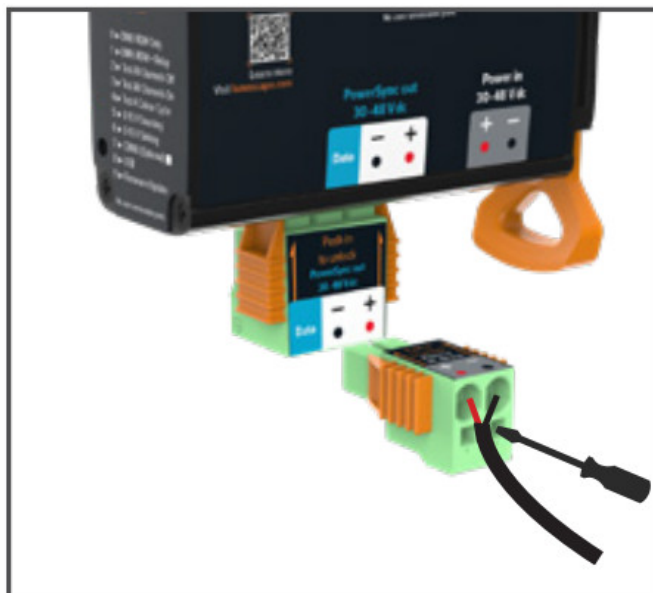
STEP 2

Push Orange sliders in then pull down to remove terminal block.



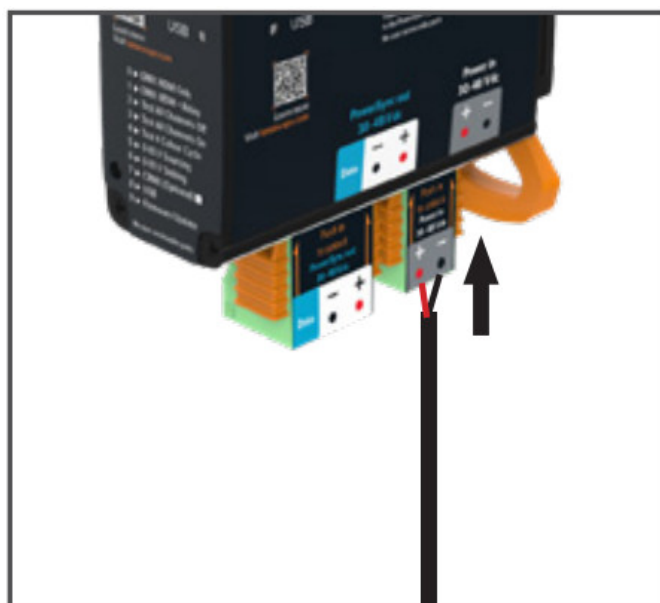
STEP 3

Using a screwdriver, insert into hole, push to hold open terminal while inserting stranded wire.



STEP 4

Reconnect terminal block.

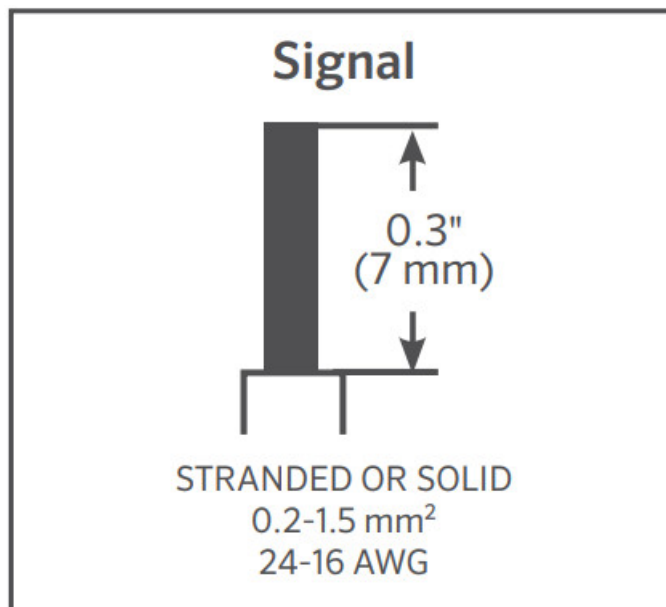


Color	PowerSync Out Cable
	2-Core
Red	Power +
Black	Power –

Connecting Luminaires via PowerSync Leader Cable

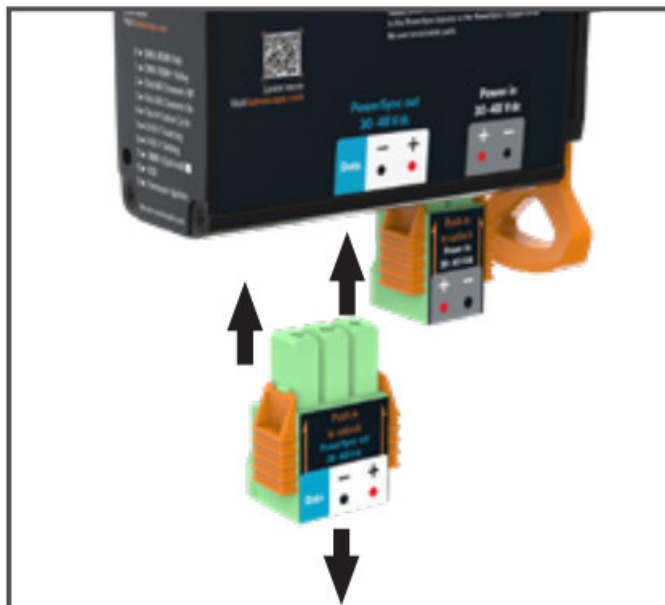
STEP 1

Strip the individual wire strands of the data cable as per the specification below.



STEP 2

Push Orange sliders in then pull down to remove terminal block.



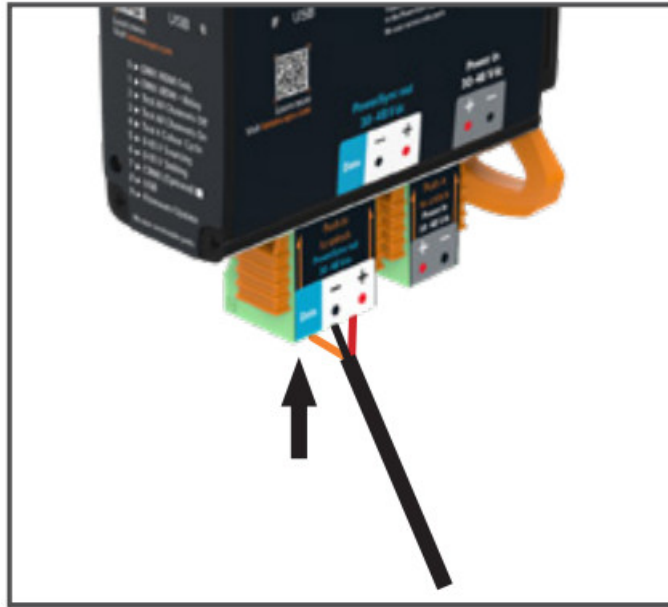
STEP 3

Using a screwdriver, insert into hole, push to hold open terminal while inserting stranded wire.



STEP 4

Reconnect terminal block.



Color	PowerSync In Cable
	3-Core
Red	Power +
Black	Power –
Orange	Data +

10 Position Mode Switch



	Label	Designations
TYPICAL OPERATION MODE	0	DMX/RDM Only
	1	DMX/RDM + Relay
TEST MODES	2	Test All Channels Off
	3	Test All Channels On
	4	Test 4 Color Cycle
	5	0-10 V Sourcing
	6	0-10 V Sinking
	7	CRMV (Optional)
	8	USB
	9	Firmware Update

NOTE:

- This function list is ONLY for Generation 2 PowerSync Injectors.
- Generation 2 is marked on the faceplate of the label on the PowerSync Injector.

The LS6550 provides three (3) test modes for PowerSync luminaires. These require only connected luminaires and power, and no connected input signal. If an input signal is connected, the LS6550 will not respond to this signal in any of the modes below.

NOTE: These test signals apply to the relevant unit's PowerSync output only — it will not be passed through on the DMX/RDM connectors if multiple LS6550 units are connected.

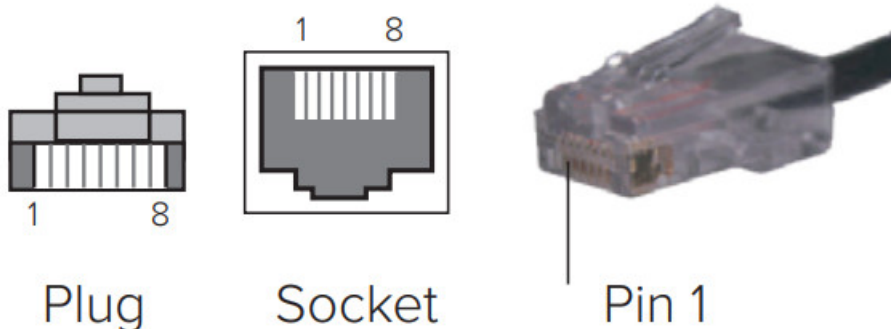
Indicator Lights



INDICATOR LIGHTS

LED Indicator	Event	Appearance
Power In	Main input power	Illuminates
Power Out	Output power relay closed	Illuminates
DMX Traffic	DMX Traffic detected Dimming signal detected	Flashing with signal 1.2 Hz blinking, proportional to input level
PS4 Traffic	PowerSync output enabled	Illuminates
Status	Startup Normal operation	3 flashes 1 flash, every 5 seconds
	Circuit fault detected Over voltage Short circuit	2 flashes, every 5 seconds 3 flashes, every 5 seconds
	PowerSync fault detected Power fault/over temperature	4 flashes, every 5 seconds
Check	Relay open Manual override Startup/Fault detected	Power out, light off Flashing Illuminates
USB	USB connected	Illuminates/flashes with data

RJ45

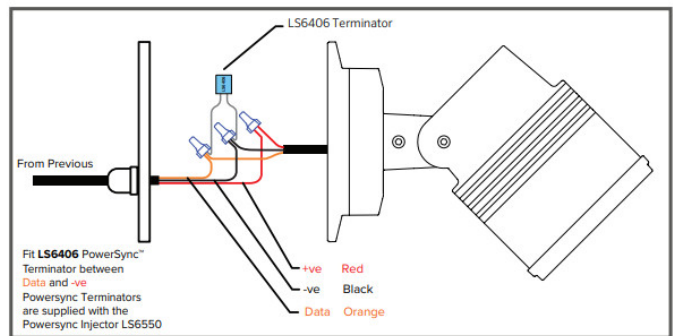
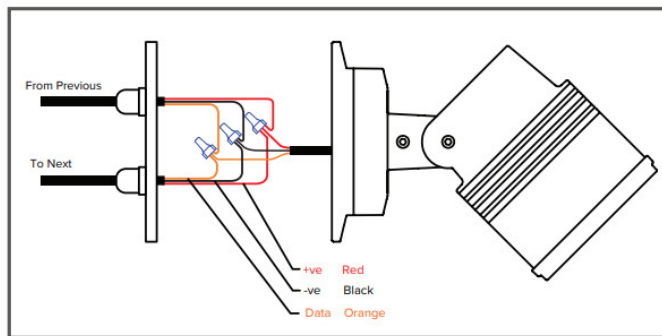
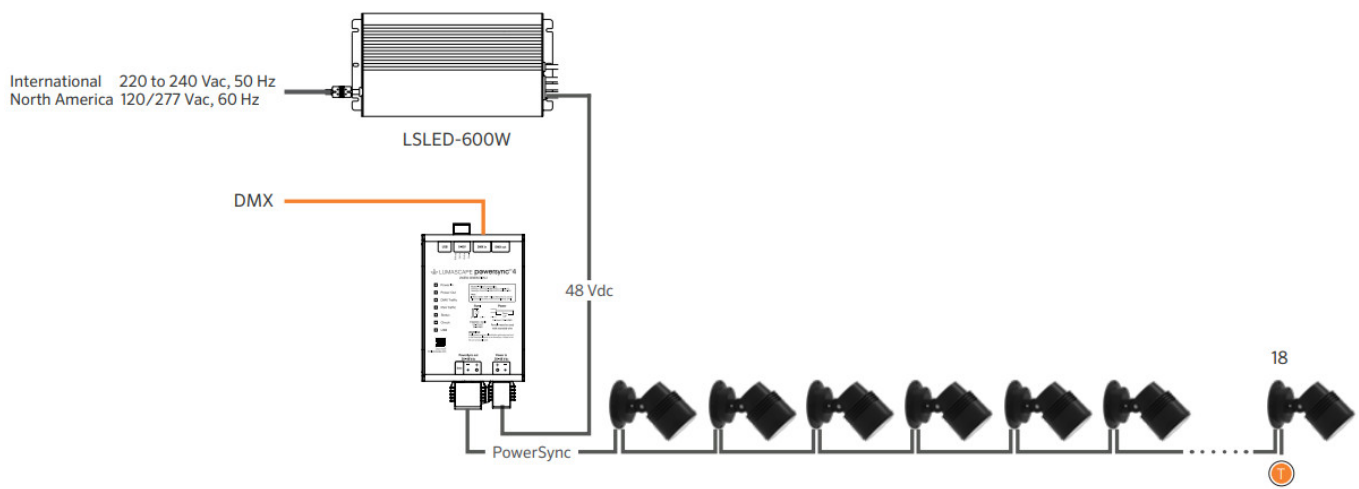


DMX PIN DESIGNATIONS

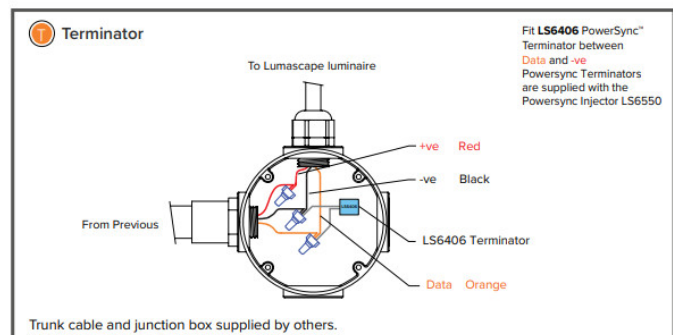
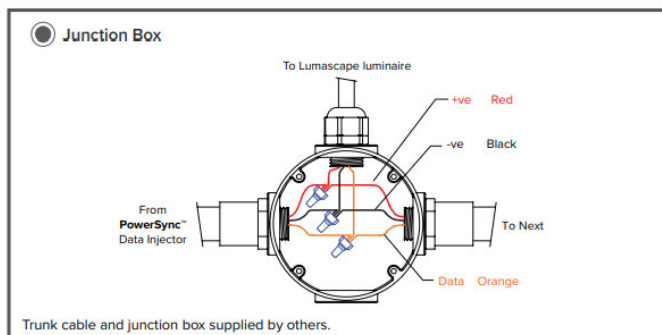
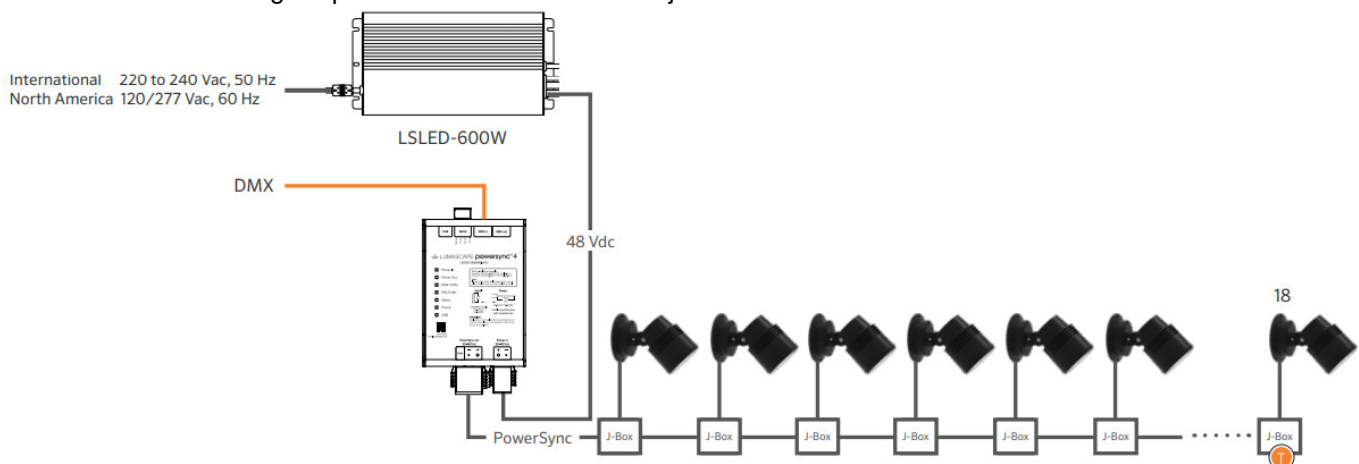
Signal	Connector Type RJ45 Std
Data +	1
Data –	2
Ground	7

Example of Low Voltage Hardwired PowerSync System

OPTION 1: Looping the PowerSync circuit through the luminaires. Not all luminaires allow for connection inside the luminaire.



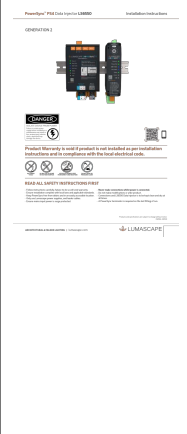
OPTION 2: Connecting drop cables to a Trunk cable in junction boxes.





<https://www.lumascap.com/asset/download/3199/e88a09/in0194-200902.pdf?inline=1>
ARCHITECTURAL & FACADE LIGHTING

Documents / Resources

	<p>LUMASCAPE LS6550 PowerSync PS4 Data Injector [pdf] Instruction Manual LS6550 PowerSync PS4 Data Injector, LS6550, PowerSync PS4 Data Injector, Data Injector, In jector</p>
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