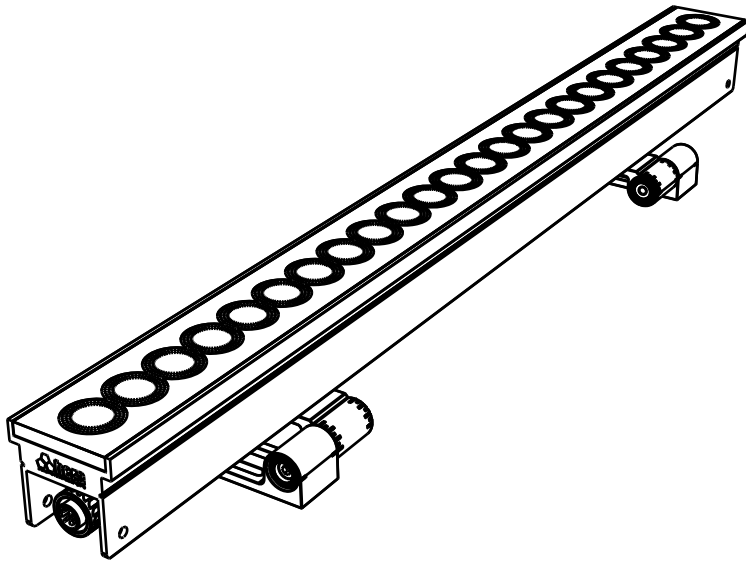


LEOLINE® S12 SC SERIES

Specification Sheets

V.1.3



Date _____
Company _____
Project _____

Explanation



Leoline® S12SC Series is a high-performance and highly durable product range. Despite its high durability, it has a linear, aesthetic and minimal appearance. Leoline® S12SC Series is designed specifically for "wall washing" or "wall grazing" applications as a surface-mounted exterior architectural lighting product. Leoline® S12SC Series consists of 12 High Power LEDs in single color: Red, Green, Blue, Amber, Warm White, Natural White, Cool White, at every 315mm (1ft). It is available in different lengths, 315mm (1ft), 615mm (2ft), 915mm (3ft), 1215mm (4ft), 1515mm (5ft) and 5 different beam angles, as standard. Each 315mm (1ft) section can be individually addressed for more detailed animations. It is produced from a single piece of extruded aluminum and processed meticulously in CNC machines. Thus, Leoline® S12SC Series is produced without the side cover and its durability allows it to work for many years even in the most demanding conditions. Push-lock connectors are used as "in/out" without any space. Since the connector areas are hidden, no cable is visible when viewed externally in linear use. Leoline® S12SC Series provides easy setup and programming with standard DMX512 and RDM protocols without the need for special and complex communication protocols. The mounting bracket is at 10° angle and fixed at the adjusted angle due to a locked thread and does not change direction according to the weather conditions. In addition, it provides a linear and spaceless form when mounting to the floor using the U bracket.

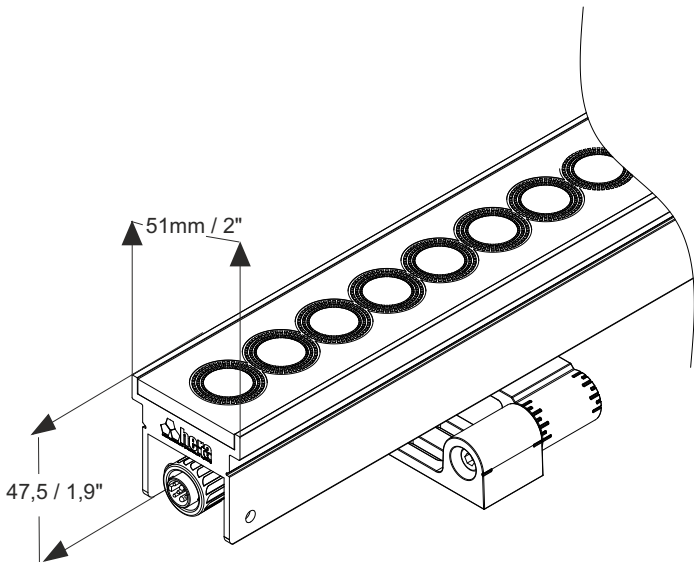
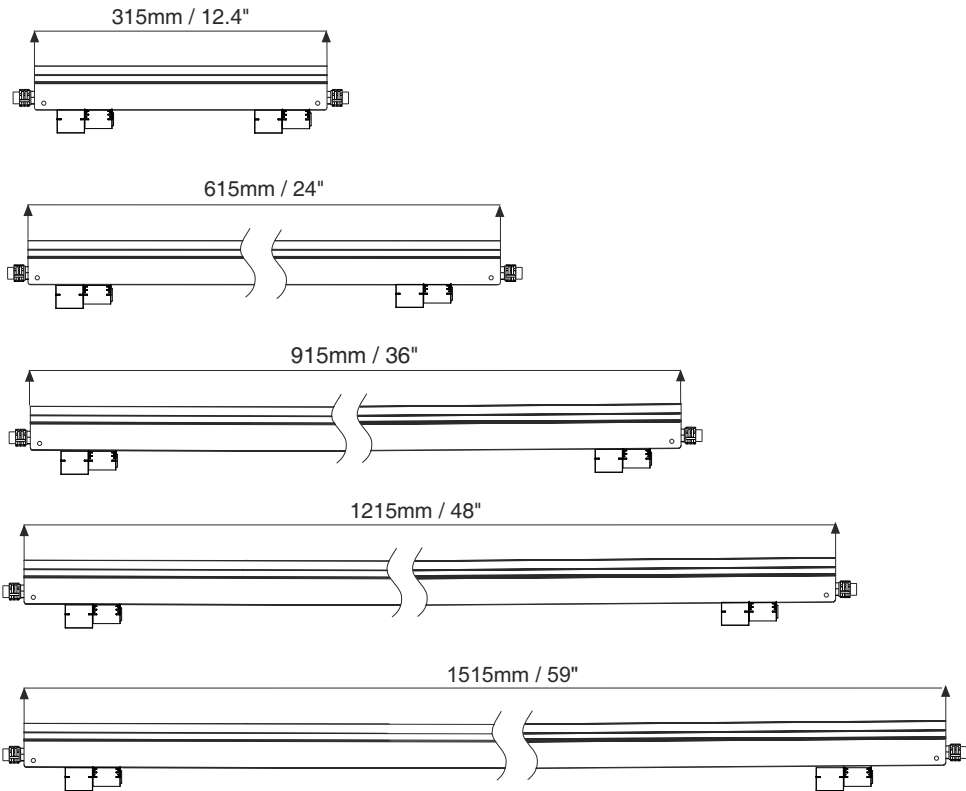
- Leoline® S12SC Series provides compatible communication with other fixtures using standard DMX512 and RDM protocols without requiring any other special communication protocol or production ID. They are remotely addressable in group via RDM protocol. This feature allows for easy pixel mapping and addressing after all installations have been completed.
- Leoline® S12SC fixtures enable flexible application using very long starter and jumper cables, since they operate in a 48V DC voltage range.
- The operating characteristics of the fixtures are able to be changed through the DMX Personality, therefore it is possible to change the number of pixels of the products as well. The number of pixels of the fixtures can be changed to be optimized for appearance and scenario variations. For example, each 315mm (1ft) can be 1 pixel, or a single fixture as 1 pixel.
- Through RDM monitoring and software, it is possible to follow and determine; whether the fixtures are working properly, by displaying voltage input and output warnings, serial number, display of regional temperature values and DMX address. The user is informed by e-mail according to incoming data thus, automatic interventions are possible based on received data.
- Leoline® S12SC fixtures work through Madrix® software and hardware in coordination. Pixel mapping can be made easily by selecting fixtures in Madrix® library.
- Available in 5 different beam angles: 15° / 30° / 45° / 60° / 35°+15°. Custom product can be produced in different beam angles according to specific projects.
- Each 315mm (1ft) consists of 12 High Power LEDs.
- Due to its special side design, fixtures are mounted side-by-side and no shade is formed between them. Creates a continuous linear view.
- Leoline® S12SC is manufactured in 315mm (1ft), 615mm (2ft), 915mm (3ft), 1215mm (4ft), 1515mm (5ft) for different forms of applications in different lengths.
- Leoline® S12SC fixture is in IP67 class, and it is designed to meet challenging requirements of exterior facade applications with its robust and durable structure.
- Leoline® S12SC is resistant to shock, vibration and other harsh conditions with its aluminum integrated body structure and 6mm thick tempered glass.
- As an optional accessory, Dark Light Louver prevents glare and does not cause dazzling.
- Suitable for using Glare Shield as an option for situations where light sources are not intended to be seen.
- Leoline® S12SC provides power and data transmission via input and output connectors. IP67 push-lock connectors are used via "in/out" without space. There is no need to use extra junction-box via input and output.
- Leoline® S12SC Series is produced in clear anodized coated color as standard. It can be coated in different anodized color upon request.

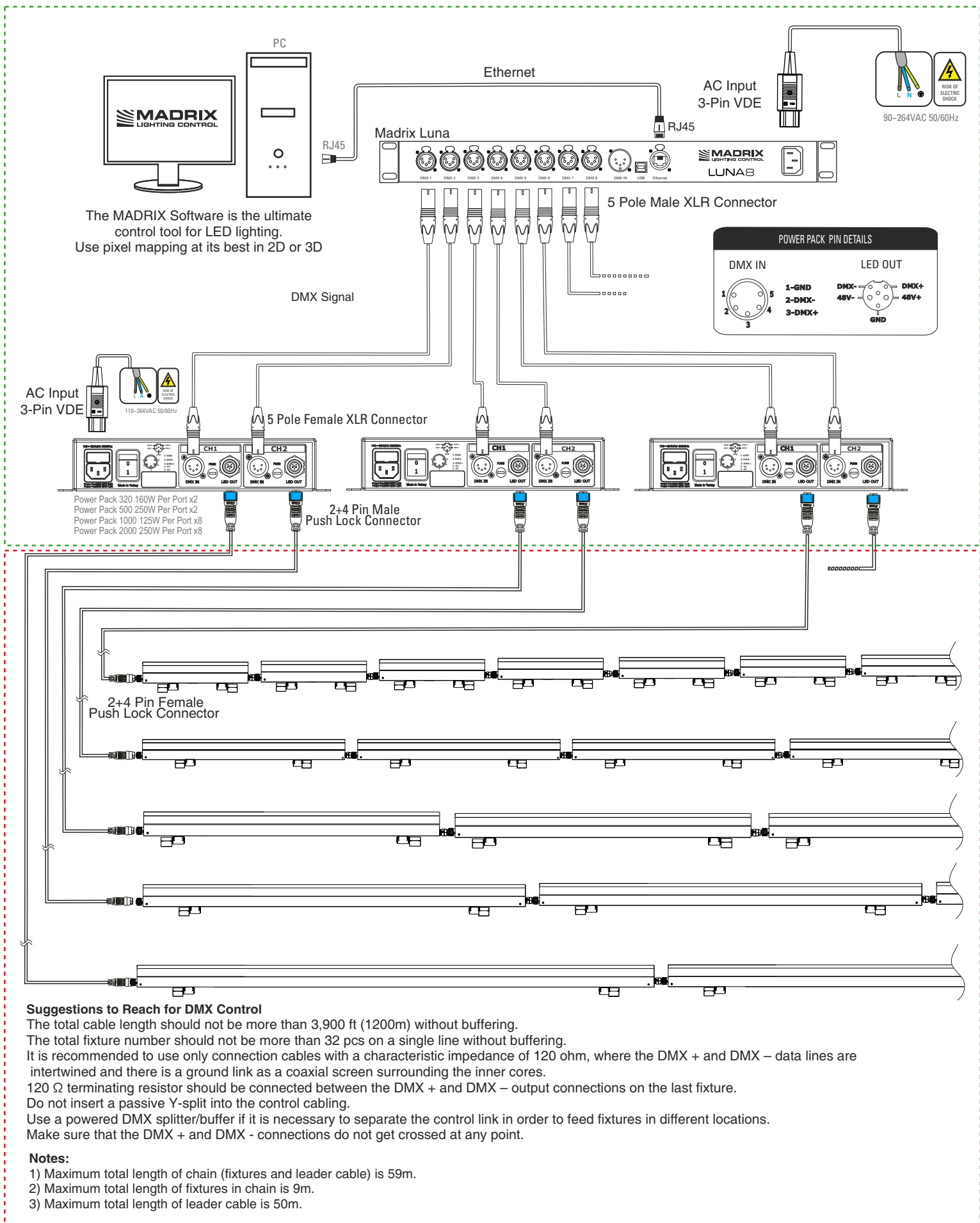
Specifications	315mm	615mm	915mm	1215mm	1515mm
Output					
Light Source:	12 High Power LEDs per foot				
LED Pitch:	25mm				
Lumen Maintenance:	60.000 > hours L70 @ 50° C (full output)				
Color Range:	Red, Green, Blue, Amber, Warm White, Natural White, Cool White				
Ra(CRI):	White product 2200K-5700K > 80CRI / 6500K > 70CRI				
Beam Angle:	15° / 30° / 45° / 60° / 35°+15°				
	<i>*The lens options above are produced as standard. Please contact us for special beam angles.</i>				
Luminous Flux:	1037 lm	2074 lm	3111lm	4147 lm	5184 lm
Luminous Intensity:	6797 cd	13594 cd	20391 cd	27188 cd	33985cd
Efficacy (lm/W):	68,4 lm/W				
	<i>*The values above are measured data in 3000K Warm White and using a 15° lens. Please see IES/LTD files and photometric measurements for different lens beam angles.</i>				
	<i>*Photometric performance is measured in compliance with IESNA LM 79-08</i>				
Control & Programming					
Pixel Pitch:	Pixel pitch is configurable via RDM, max 1pixel/foot				
Color Resolution:	1 x 14-bit (Gamma correction)				
Addressing:	RDM (Group of Remote Addressable Systems)				
Monitoring:	Voltage Monitoring, Temperature Monitoring, Status Monitoring, Power Cycle Monitoring, Lumen-Maintenance Life Monitoring				
PWM Frequency:	1,600Hz flicker free dimming to 0.1%				
DMX Compliance:	USITT DMX512-1990				
RDM Compliance:	ANSI/ESTA E1.20-2010				
Electrical					
Operating Voltage:	48VDC				
Power Consumption:	Red 38,3W/m, Green 51,7W/m, Blue 50,6W/m, Amber 38,9W/m, Warm White 47,8W/m, Natural White 47,2W/m, Cool White 49,4W/m				
	Maximum at full output, steady state				
Maximum in Chain:	Max 9-12 meters				
Connections:	Push Lock Type 2+4 Pin Waterproof Connector				
Physical					
Housing:	Extruded Aluminium				
Front Material:	Clear Tempered Glass				
End Cap Material:	Integrated Body				
Installation Brackets:	Die-Cast Zinc 10° Multi-positional, locking hinges				
Hardware:	Stainless Steel				
Gasket:	Silicone				
Surface Finish:	Clear Anodized (standard) or Custom Any Anodized (optional)				
Measurements:					
Weight:	1,1Kg (2,4lb)	2,3Kg (5,1lb)	3,4Kg (7,4lb)	4,2Kg (9,2lb)	5,3Kg (11,5lb)
Dimensions:	47,5x51x315mm	47,5x51x615mm	47,5x51x915mm	47,5x51x1215mm	47,5x51x1515mm
(H x W x D)	2x1,9x12,4in	2x1,9x24in	2x1,9x36in	2x1,9x48in	2x1,9x59in
Environmental					
Storage Temperature:	-40°C - 85°C - (-40°F - 185°F)				
Start-up Temperature:	-25°C - 50°C - (-13°F - 122°F)				
Operating Temperature:	-40°C - 50°C - (-40°F - 122°F)				
Thermal Protection:	Automatic over temperature protection				
Cooling:	Cooling by free air convection				
Vibration Resistance:	Complies with ANSI C136.31-2010				
Corrosion Resistance:	Complies with ASTM B117				
Ingress Protection Rating:	IP67				
Impact Resistance Rating:	K09				
Humidity (max.):	0 to 98%, non-condensing				
Test:					
	All Hera LED products are assessed by a stringent 100 hour test, above and beyond what they would come across in the real world. This can be seen from our advanced RDM Monitoring System as well, leaving no place for doubt. This strict testing, builds trust, when your reputation is on the line. It is our company's culture and heritage, also our way of securing our worthwhile Customers.				
Certification					
EU Safety:	EN 60598-1, EN 60598-2-5, EN 60598-2-13, EN 62471, EN 60529, EN 62262				
EU EMC:	EN 55015, EN 61000-3-2, EN 61000-3-3, EN 61547, EN 61000-4-2, EN 61000-4-3, EN 61000-4-4, EN 61000-4-5, EN 61000-4-6, EN 61000-4-8, EN 61000-4-11				
US Safety:	UL 1598				
US EMC:	FCC Part 15 Class A				
Warranty:	5-year Limited Warranty				

"IEC/TR 62778: Risk Group 2

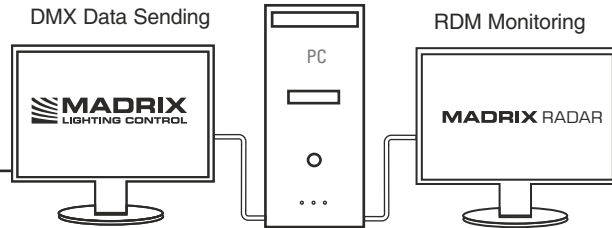
Possibly hazardous optical radiation emitted from this product. Do not stare at operating lamp. May be harmful to the eye.

"The luminaire should be positioned so that prolonged staring into the luminaire at a distance closer than 25 m is not expected."

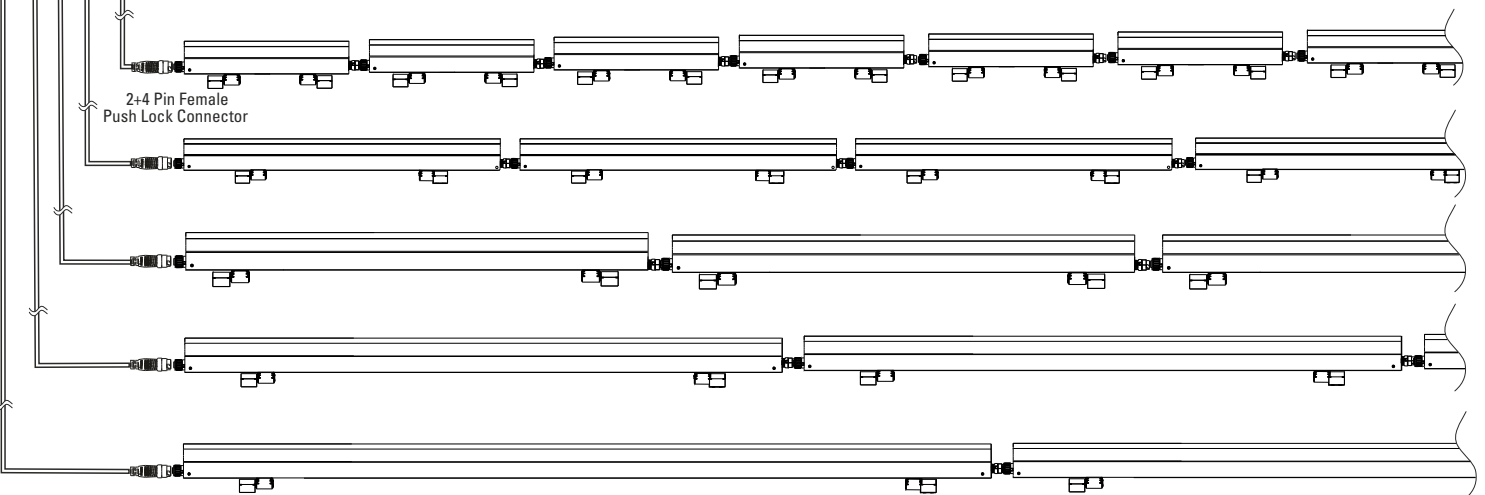
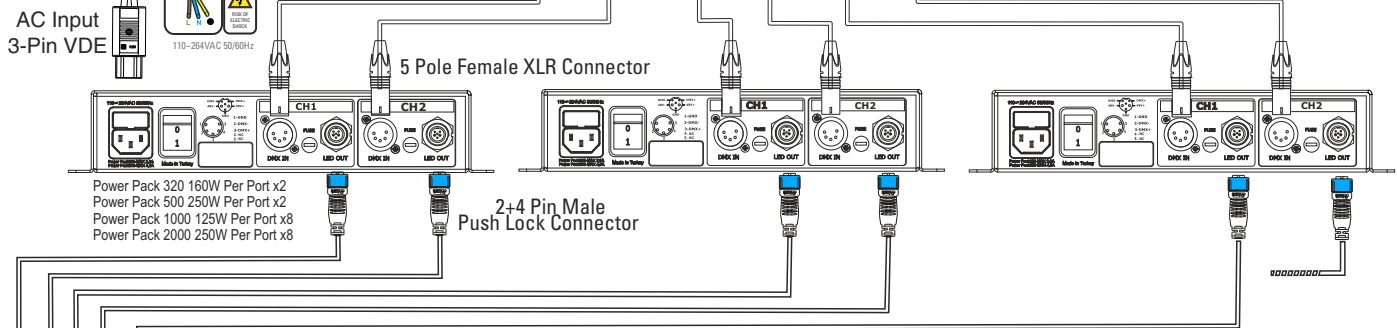
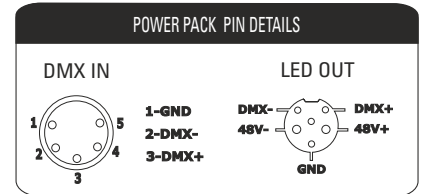




The MADRIX Software is the ultimate control tool for LED lighting. Use pixel mapping at its best in 2D or 3D



Voltage Monitoring, Temperature Monitoring, Status Monitoring, Power Cycle Monitoring, Lumen-Maintenance Life Monitoring



Suggestions to Reach for DMX Control

The total cable length should not be more than 3,900 ft (1200m) without buffering.

The total fixture number should not be more than 32 pcs on a single line without buffering.

It is recommended to use only connection cables with a characteristic impedance of 120 ohm, where the DMX + and DMX - data lines are intertwined and there is a ground link as a coaxial screen surrounding the inner cores.

120 Ω terminating resistor should be connected between the DMX + and DMX - output connections on the last fixture.

Do not insert a passive Y-split into the control cabling.

Use a powered DMX splitter/buffer if it is necessary to separate the control link in order to feed fixtures in different locations.

Make sure that the DMX + and DMX - connections do not get crossed at any point.

Notes:

- 1) Maximum total length of chain (fixtures and leader cable) is 59m.
- 2) Maximum total length of fixtures in chain is 9m.
- 3) Maximum total length of leader cable is 50m.

RDM Explanation

Leoline® S12SC Series complies with the RDM Monitoring Command System. In order to use RDM Monitoring System, a compatible controller is required depending on the installation. Through DMX data connection, it is possible to control or change the fixture's settings, send commands and receive or monitor the fixture's data. The recommended RDM controller and the wiring diagram can be found on page 5. RDM command functions supported by Leoline® S12SC Series are given in the list below.

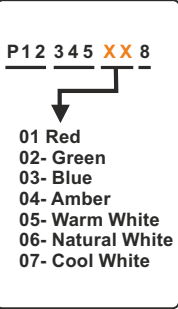
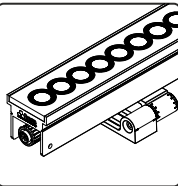
Device Management	Get	Set
Device Info	✓	
DMX Start Address	✓	✓
Identify Device	✓	✓
Device Model Description	✓	
Device Label	✓	✓
Software Version Label	✓	
DMX Personality	✓	✓
DMX Personality Description	✓	
Device Hours	✓	
Lamp Hours	✓	
Device Power Cycles	✓	
Status Message	✓	
Queued Message	✓	
Status ID Description	✓	
Supported Parameters	✓	
Parameter Description	✓	
Factory Defaults		✓
Sensor Definition	✓	
Sensor Value	✓	
Record Sensor		✓
Reset Device		✓
Power State	✓	✓
Perform Self Test		✓
Self Test Description	✓	
Language	✓	

* The command names and command functions used on different RDM controllers may vary.

* Incompatible RDM controllers may cause drawbacks such as partial operation, no-operation, or incorrect fixture information.

* You can check the recommended RDM controllers on the www.heraled.com website.

Products



- P02020XX1 Leoline® S12 315mm DMX SC Surface Mounted Spot Beam 15°
- P02020XX2 Leoline® S12 315mm DMX SC Surface Mounted Medium Beam 30°
- P02020XX3 Leoline® S12 315mm DMX SC Surface Mounted Wide Beam 45°
- P02020XX4 Leoline® S12 315mm DMX SC Surface Mounted Very Wide Beam 60°
- P02020XX6 Leoline® S12 315mm DMX SC Surface Mounted Asymmetric Beam 35°+15°

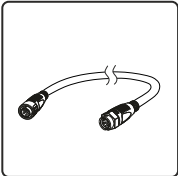
- P02021XX1 Leoline® S12 615mm DMX SC Surface Mounted Spot Beam 15°
- P02021XX2 Leoline® S12 615mm DMX SC Surface Mounted Medium Beam 30°
- P02022XX3 Leoline® S12 915mm DMX SC Surface Mounted Wide Beam 45°
- P02021XX4 Leoline® S12 615mm DMX SC Surface Mounted Very Wide Beam 60°
- P02021XX6 Leoline® S12 615mm DMX SC Surface Mounted Asymmetric Beam 35°+15°

- P02022XX1 Leoline® S12 915mm DMX SC Surface Mounted Spot Beam 15°
- P02022XX2 Leoline® S12 915mm DMX SC Surface Mounted Medium Beam 30°
- P02022XX3 Leoline® S12 915mm DMX SC Surface Mounted Wide Beam 45°
- P02022XX4 Leoline® S12 915mm DMX SC Surface Mounted Very Wide Beam 60°
- P02022XX6 Leoline® S12 915mm DMX SC Surface Mounted Asymmetric Beam 35°+15°

- P02023XX1 Leoline® S12 1215mm DMX SC Surface Mounted Spot Beam 15°
- P02023XX2 Leoline® S12 1215mm DMX SC Surface Mounted Medium Beam 30°
- P02023XX3 Leoline® S12 1215mm DMX SC Surface Mounted Wide Beam 45°
- P02023XX4 Leoline® S12 1215mm DMX SC Surface Mounted Very Wide Beam 60°
- P02023XX6 Leoline® S12 1215mm DMX SC Surface Mounted Asymmetric Beam 35°+15°

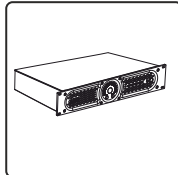
- P02024XX1 Leoline® S12 1515mm DMX SC Surface Mounted Spot Beam 15°
- P02024XX2 Leoline® S12 1515mm DMX SC Surface Mounted Medium Beam 30°
- P02024XX3 Leoline® S12 1515mm DMX SC Surface Mounted Wide Beam 45°
- P02024XX4 Leoline® S12 1515mm DMX SC Surface Mounted Very Wide Beam 60°
- P02024XX6 Leoline® S12 1515mm DMX SC Surface Mounted Asymmetric Beam 35°+15°

Cable



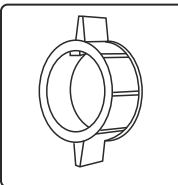
- | | | | |
|-------------|--|------------|---|
| P20202-1 | Push Lock Type 2+4 Pin 1M Extension Cable | P20202-2 | Push Lock Type 2+4 Pin 2M Extension Cable |
| P20202-2.5 | Push Lock Type 2+4 Pin 2.5M Extension Cable | P20202-2.5 | Push Lock Type 2+4 Pin 2.5M Extension Cable |
| P20202-5 | Push Lock Type 2+4 Pin 5M Extension Cable | P20202-3 | Push Lock Type 2+4 Pin 3M Extension Cable |
| P20202-7.5 | Push Lock Type 2+4 Pin 7.5M Extension Cable | P20202-3.5 | Push Lock Type 2+4 Pin 3.5M Extension Cable |
| P20202-10 | Push Lock Type 2+4 Pin 10M Extension Cable | P20202-4 | Push Lock Type 2+4 Pin 4M Extension Cable |
| P20202-15 | Push Lock Type 2+4 Pin 15M Extension Cable | P20202-5 | Push Lock Type 2+4 Pin 5M Extension Cable |
| P20202-20 | Push Lock Type 2+4 Pin 20M Extension Cable | P20202-7.5 | Push Lock Type 2+4 Pin 7.5M Extension Cable |
| P20202-0.5 | Push Lock Type 2+4 Pin 0.5M Extension Cable | P20202-10 | Push Lock Type 2+4 Pin 10M Extension Cable |
| P20202-0.75 | Push Lock Type 2+4 Pin 0.75M Extension Cable | P20202-15 | Push Lock Type 2+4 Pin 15M Extension Cable |
| P20202-1 | Push Lock Type 2+4 Pin 1M Extension Cable | P20202-20 | Push Lock Type 2+4 Pin 20M Extension Cable |
| P20202-1.5 | Push Lock Type 2+4 Pin 1.5M Extension Cable | | |

Power / Data Supplies



- P08002 Power Pack 320 320W 2 Outputs Power Supply
- P08003 Power Pack 500 500W 2 Outputs Power Supply
- P08004 Power Pack 1000 1000W 8 Outputs Power Supply
- P08013 Power Pack 2000 2000W 8 Outputs Power Supply

Accessories



- P20203 2+4 Pin Female Plug Cap



**HERA EĞLENCE VE MİMARİ AYDINLATMA
SİSTEMLERİ İÇ VE DIŞ TİCARET A.Ş.**

Güllübağlar Mah. Kahramanlar Cad. No 3/1
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