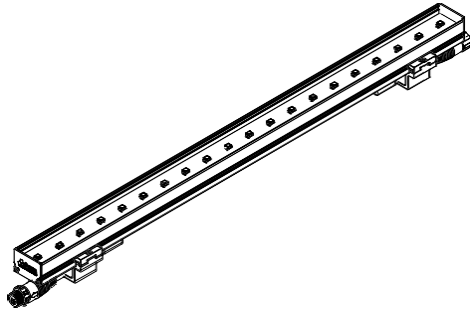


Date \_\_\_\_\_  
Company \_\_\_\_\_  
Project \_\_\_\_\_



## Explanation

Sword® XS RGBA Series, provides optimum illumination with excellent colour harmony for media facade lighting, bridges, stadiums, creative stage lighting, and specialized lighting design. With RGB + smart white algorithms, the 3-channel system controls 4 colors per pixel. This feature provides white color in better quality, thereby improves the display brightness and efficiency. Sword® XS RGBA fixture provides a dynamic lighting solution with unlimited pixel options, advanced accessory alternatives and easy assembly structures.

- Sword® XS RGBA can be used in 4 channels through DMX Personality. The 3-channel system can control 4 colors per pixel through RGB + smart white algorithms. All customization options can be chosen remotely through DMX512 protocol.
- Sword® XS RGBA 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.
- Sword® XS RGBA fixtures enable flexible application using very long starter and jumper cables, since they operate in a 48V DC voltage range.
- 30 cm 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 received on data.
- Sword® XS RGBA fixtures work through Madrix® software and hardware in coordination. Pixel mapping can be made easily by selecting fixtures in Madrix® library.
- Sword® XS RGBA creates a continuous linear appearance. Due to the special side-cover design, fixtures are mounted side-by-side and no shadows are formed between them.
- Available for different forms of applications in different lengths: 300mm, 600mm, 900mm, 1200mm, 1500mm. Sword® XS RGBA has extra flexible mounting feature for confined spaces, with mounting bracket that can move on the fixture.
- Sword® XS RGBA fixture is in IP67 protection class and it is designed to meet challenging requirements of exterior facade applications with its robust and durable structure. Sword® RGBA is resistant to impact, vibration and other harsh conditions due to aluminum housing and special filler material.
- Sword® XS RGBA provides power and data transmission via input and output connectors. IP67 connectors are in push-lock structure. They can be easily rotated and assembled, and leave sufficient gaps between the fixtures. There is no need to use extra junction-box via input and output.
- The slim profile (30mm) ensures to integrate and camouflage the different types of facade coatings easily. It is produced in RAL9005-black color as standard, and it is also available in different colors in RAL code upon request.

### Output

Light Source:	40pcs/m High intensity 4 in 1 Chip RGBA LEDs
LED Pitch:	25mm
Lumen Maintenance:	60.000 > hours L70 @ 50° C (full output)
Color Range:	16.7 Million additive RGB colors,
Ra(CRI):	AMBER
Beam Angle:	10° , 40° , 50° , 15°+45° ,
Luminous Flux:	846 lm/m
Efficacy (lm/W):	35,25 lm/W

*\*Photometric performance is measured in compliance with IESNA LM 79-08*

### Control & Programming

Pixel Pitch:	Pixel pitch is 1 feet 1 pixel
Color Resolution:	4 x 16-bit (Gamma correction)
Auto White:	Algorithms enable auto control of AMBER LED by 3-channel RGB values
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:	4ANSI/ESTA E1.20-2010

### Electrical

Operating Voltage:	48V DC
Power Consumption:	24 W/m Maximum at full output, steady state

Maximum in Chain:	Max 11 meters or 32 pieces (varies by selected dmx personality)
Connections:	Push Lock Type 2+4 Pin Waterproof Connector

### Physical

Housing:	Extruded Aluminium
End Cap Material:	Aluminium
Installation Brackets:	Die-Cast Aluminium
Hardware:	Stainless Steel
Gasket:	Silicon
Surface Finish:	RAL 9005 Electrostatically polyester powder coat (standard) or custom any RAL (optional)

### Measurements:

Weight:	300mm	0,400kg (0,81lb)
	600mm	0,830kg (1,82lb)
	900mm	1,26kg (2,77lb)
	1200mm	1,60kg (3,52lb)
	1500mm	2,00kg (4,40lb)
Dimensions: (H x W x D)	300mm	40,5x303x45,5 mm (1,6x11,8x1,8 in)
	600mm	40,5x603x45,5 mm (1,6x23,6x1,8 in)
	900mm	40,5x903x45,5 mm (1,6x35,4x1,8 in)
	1200mm	40,5x1203x45,5 mm (1,6x47,2x1,8 in)
	1500mm	40,5x1503x45,5 mm (1,6x59x1,8 in)

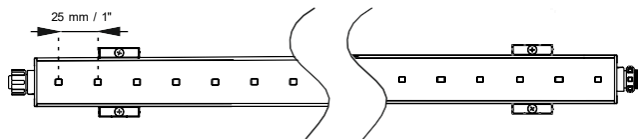
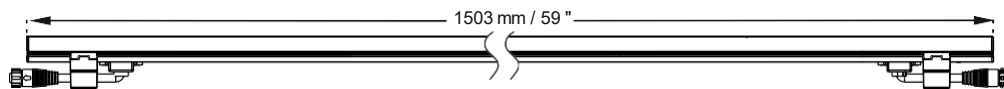
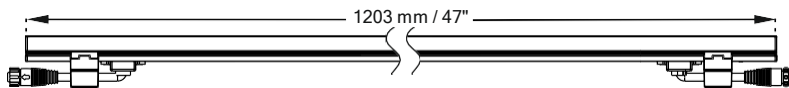
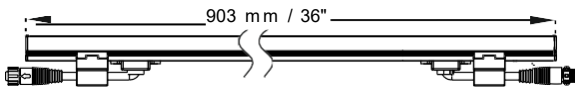
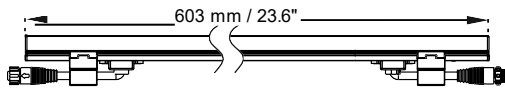
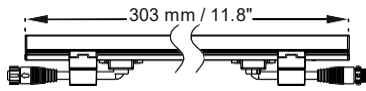
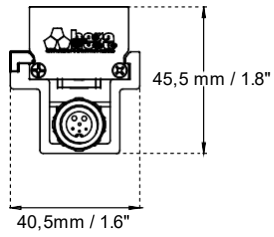
### Environmental

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 standard
Ingress Protection Rating:	IP67
Impact Resistance Rating:	IK10
Humidity (max.):	0 to 98%, non-condensing

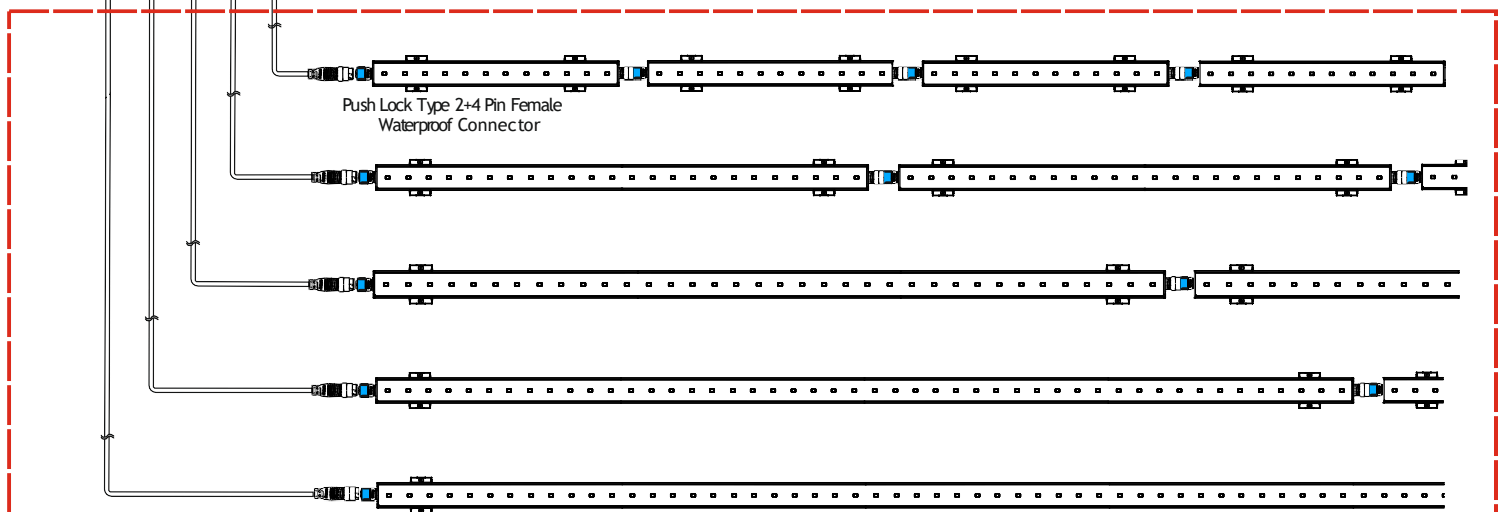
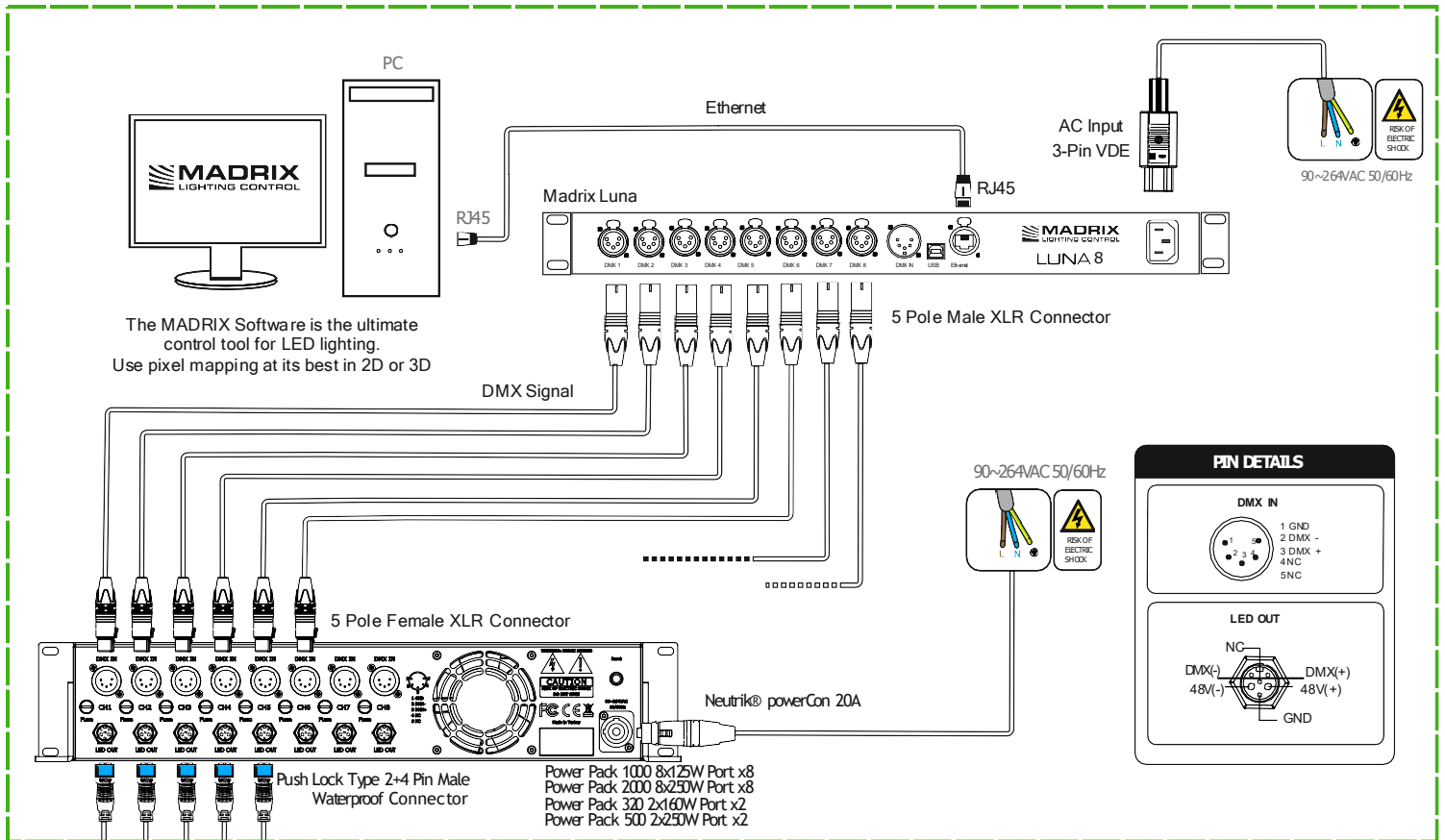
<b>Test:</b>	All Hera LED products are assessed by a stringent 100 hour test, above and beyond what they would come across in the real world. This can be seen from our advanced RDM Monitoring System as well, leaving no place for doubt. This strict testing, builds trust, when your reputation is on the line. It is our company's culture and heritage, also our way of securing our worthwhile Customers.
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### Certification

EU Safety:	EN 60598-1, EN 60598-2-3, EN 62471, EN 60950-1, EN 60950-22, EN 60529, EN 62262
EU EMC:	EN 55024, EN 55032, EN 61000-4-3, EN 61000-4-4, EN 61000-4-6, EN 61000-4-8
US Safety:	UL 1598, UL 60950-1, UL 60950-22
US EMC:	FCC Part 15 Class A
Warranty:	5-year Limited Warranty



Indoor Zone



### Suggestions to Reach for DMX Control

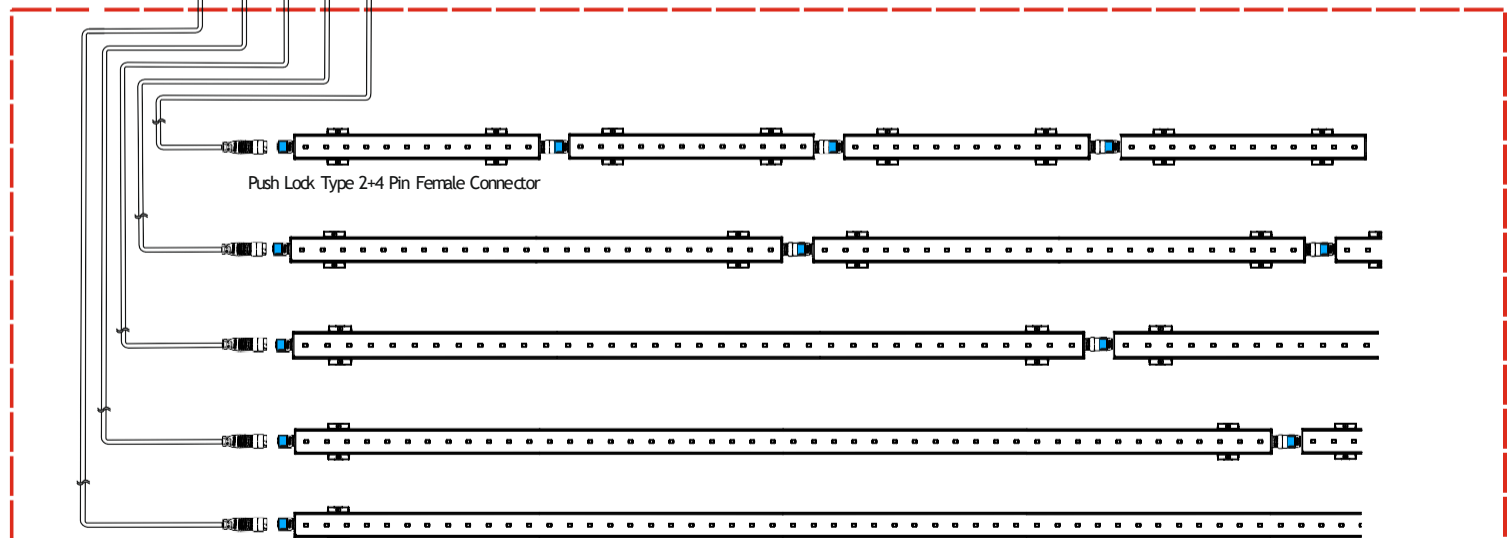
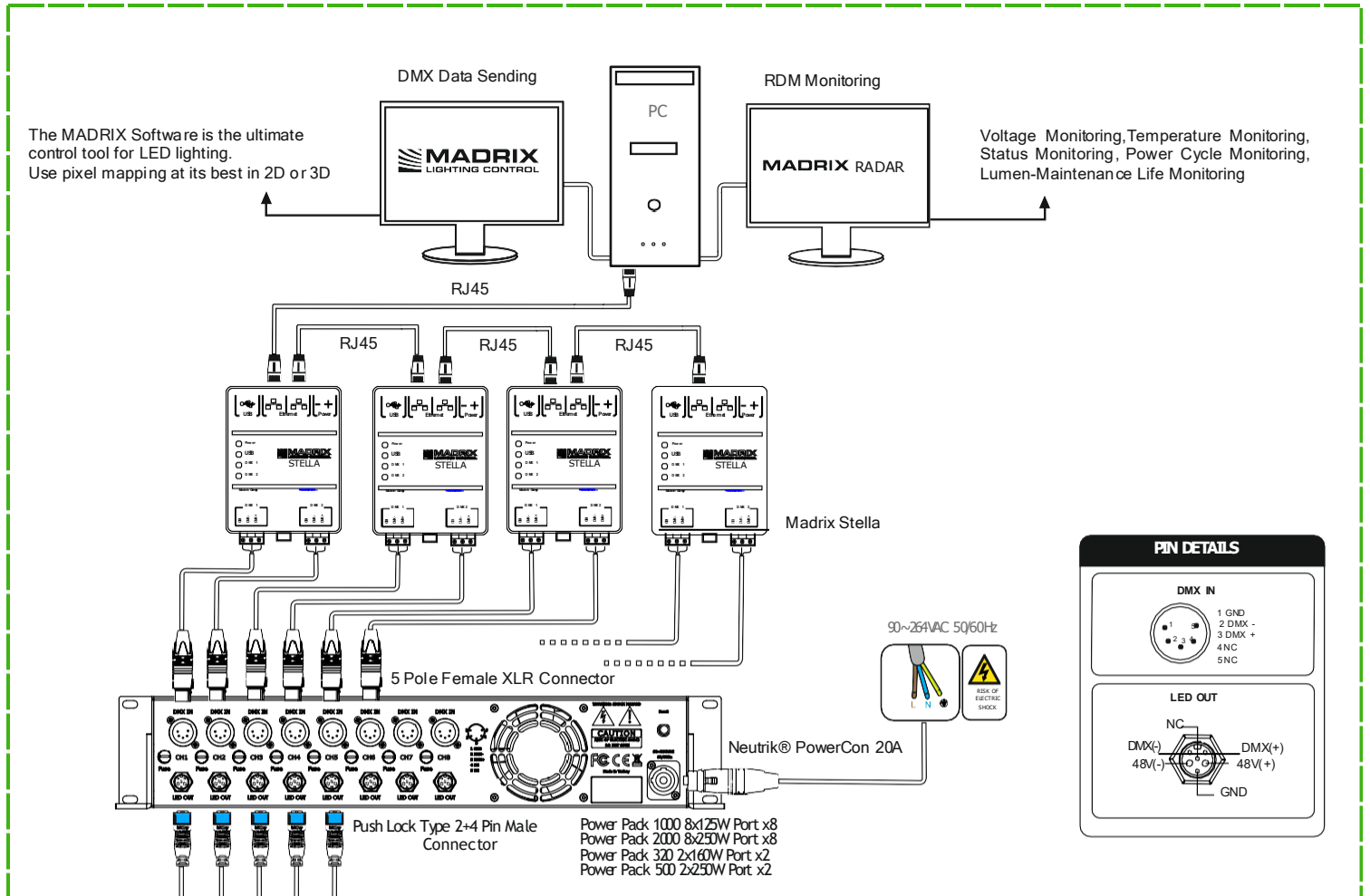
The total cable length should not be more than 3,900 ft (1200m) without buffering.  
 The total fixture number should not be more than 32 pcs on a single line without buffering.  
 It is recommended to use only connection cables with a characteristic impedance of 120 ohm, where the DMX + and DMX - data 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 61m.
- 2) Maximum total length of fixtures in chain is 11m. (Max 11m. or 32 pieces, varies by selected DMX personality)
- 3) Maximum total length of leader cable is 50m.

Outdoor Zone

Indoor Zone



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Outdoor Zone

**RDM Explanation**

Sword® RGBA 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 Sword® RGBA Series are given in the list below.

<b>Device Management</b>	<b>Get</b>	<b>Set</b>
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](http://www.heraled.com) website.