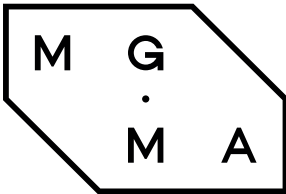


9-038 - Huyton Gateway

Archway Road Rail Bridge, Huyton, Knowsley

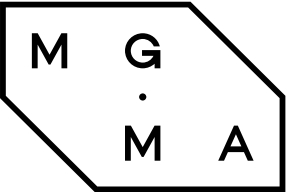
Design Manual

by MGMA Architects



CLIENT/ SITE INFORMATION		DESIGN TEAM INFORMATION		CONTENTS	
Client	KMD Planning and Property Management Limited	Architect	MGMA Architects	03-04	PROJECT INFORMATION
Site address	Archway Road Bridge Huyton Knowsley	Planning Consultant	Greyside Planning		1.1 Applicant
		Heritage Consultant	Liath Heritage		1.2 Site address
LPA	Knowsley Borough Council			05-07	1.3 Summary of Proposed Development
					DESCRIPTION OF SITE
					2.1 Existing site form & character
				08-12	PROPOSED DEVELOPMENT
					3.1 Development Description
					3.2 Development Visualisations
					3.3 Development Details
					3.4 Development Fittings
DOCUMENT ISSUE					
DATE	STATUS	NOTES			
21.04.2021	Planning	Issue to Greyside Planning.			

PROJECT INFORMATION



1.1 APPLICANT

It is understood that the Client is KMD Planning and Property Management Limited t/a Greyside Planning (“Greyside”) who are acting as lead consultant for Lighting & Illumination Technology Experience Limited (“LITE”). LITE are delivering the lighting installations on behalf of Knowsley Borough Council (“KBC”) and the rail bridge is owned by Network Rail (“NR”).

The applicant is LITE, and the agent for the application is Greyside.

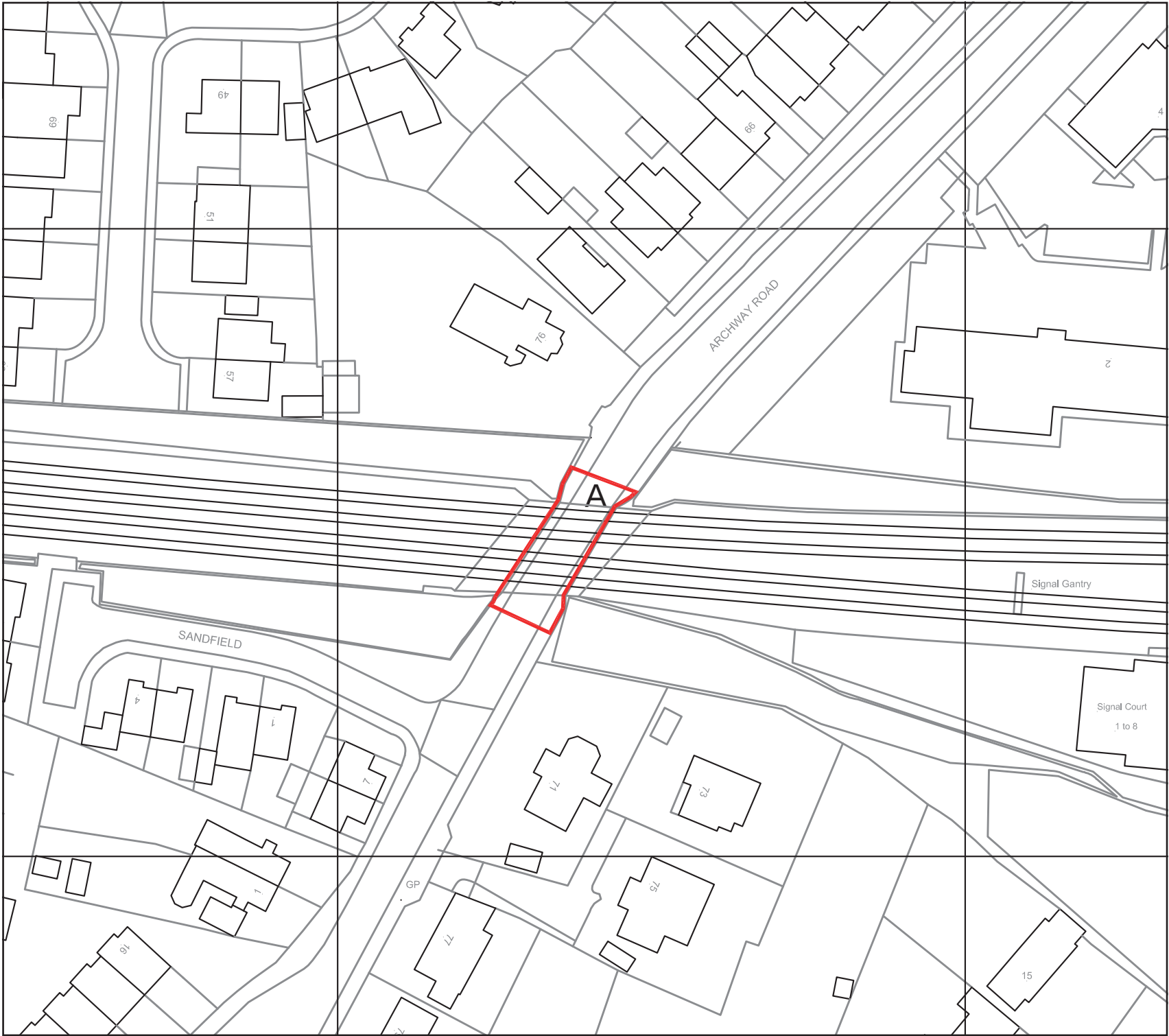
1.2 APPLICATION SITE

The site comprises a C19 single span grade II listed masonry arch rail bridge carrying the Liverpool – Manchester rail line over Archway Road, Huyton, Knowsley. The bridge is identified by NR asset reference DSE/54.

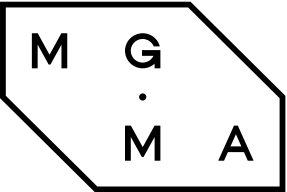
The LPA is Knowsley Borough Council. The site area (A) is 2,640m².

1.3 SUMMARY OF PROPOSED DEVELOPMENT

The applicant proposes supply and fix exterior lighting installations at the Archway Road rail bridge site in Huyton, Knowsley, as part of the Huyton Gateway project.



DESCRIPTION OF THE SITE



DESCRIPTION OF THE SITE

2.1 EXISTING SITE FORM & CHARACTER

The single span rail bridge is constructed of dressed sandstone with a segmented arch, with a clay brickwork interior at a diagonal to the carriageway of Archway Road.

The bridge was completed 1828-30 for the Liverpool & Manchester Railway by noted engineer George Stephenson, and remains in active use carrying frequent services. The rail line is now electrified with overhead cables.

The site is located within a predominantly residential area at the entry point to central Huyton. The bridge currently has no lighting provision to assist pedestrians or motorists.

The site photographs illustrate the setting and condition of the existing masonry structure.

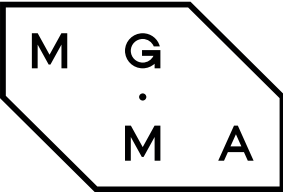


Photographs left to right:
From north of the site on Archway Road; From south of the site on Archway Road.



Photographs left to right:
From underside of bridge looking south; At the north face of the
bridge entrance; Focus shot on entrance detailing to the spring of
the arch at the north face.

PROPOSED DEVELOPMENT



3.1 DEVELOPMENT DESCRIPTION

The applicant proposes supply and fix exterior lighting installations at the Archway Road rail bridge site in Huyton, Knowsley, as part of the Huyton Gateway project.

There will be 32no. fittings mounted on the existing bridge structure as per the specification and locations noted on the accompanying application drawings. The diagram shown right demonstrates the lighting directions of the fittings, designed to illuminate the interior surface of the bridge structure.

The proposed development seeks to celebrate this heritage structure as a gateway to Huyton.



Huyton Gateway Proposal



32 x ColorGrazie RGBW (16 each side)



Proposal



3.2 DEVELOPMENT VISUALISATIONS

The visualisations right demonstrate the variations of lighting scheme which will be possible using the fittings specified as part of the proposed development.

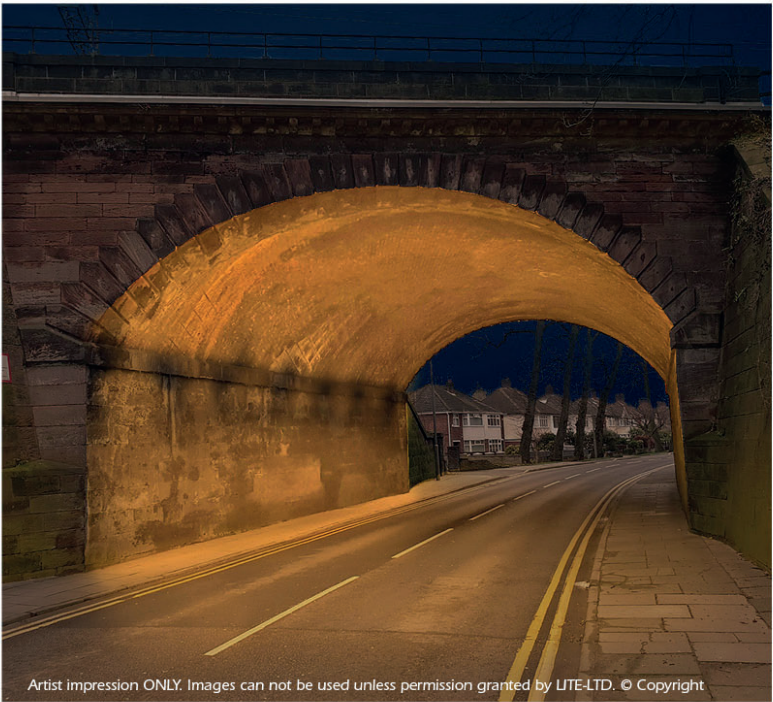
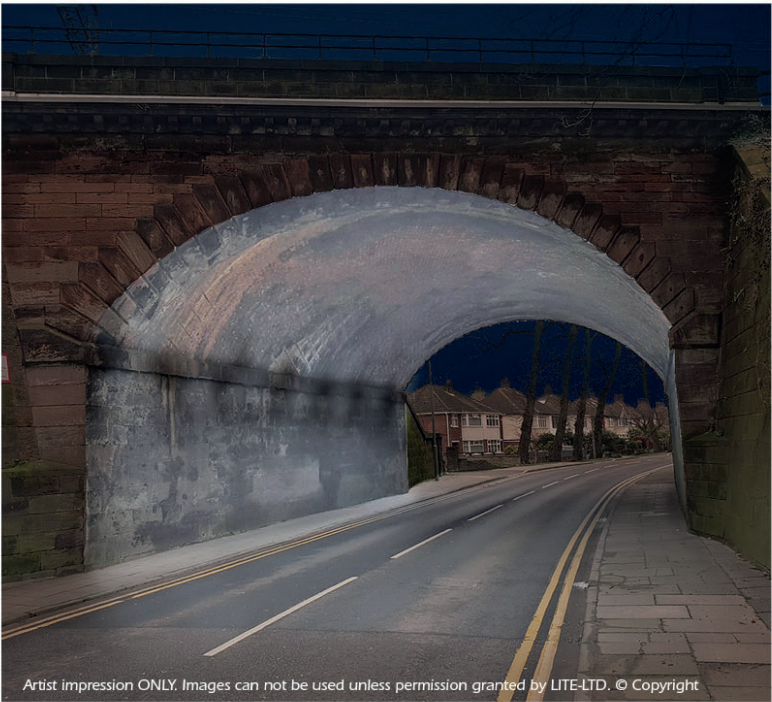
Alongside improving appearance and safety in the normal operation mode shown right, the lighting scheme will be able to celebrate civic events or notable occasions with special colour schemes, illustrated by the examples shown below.



Proposal



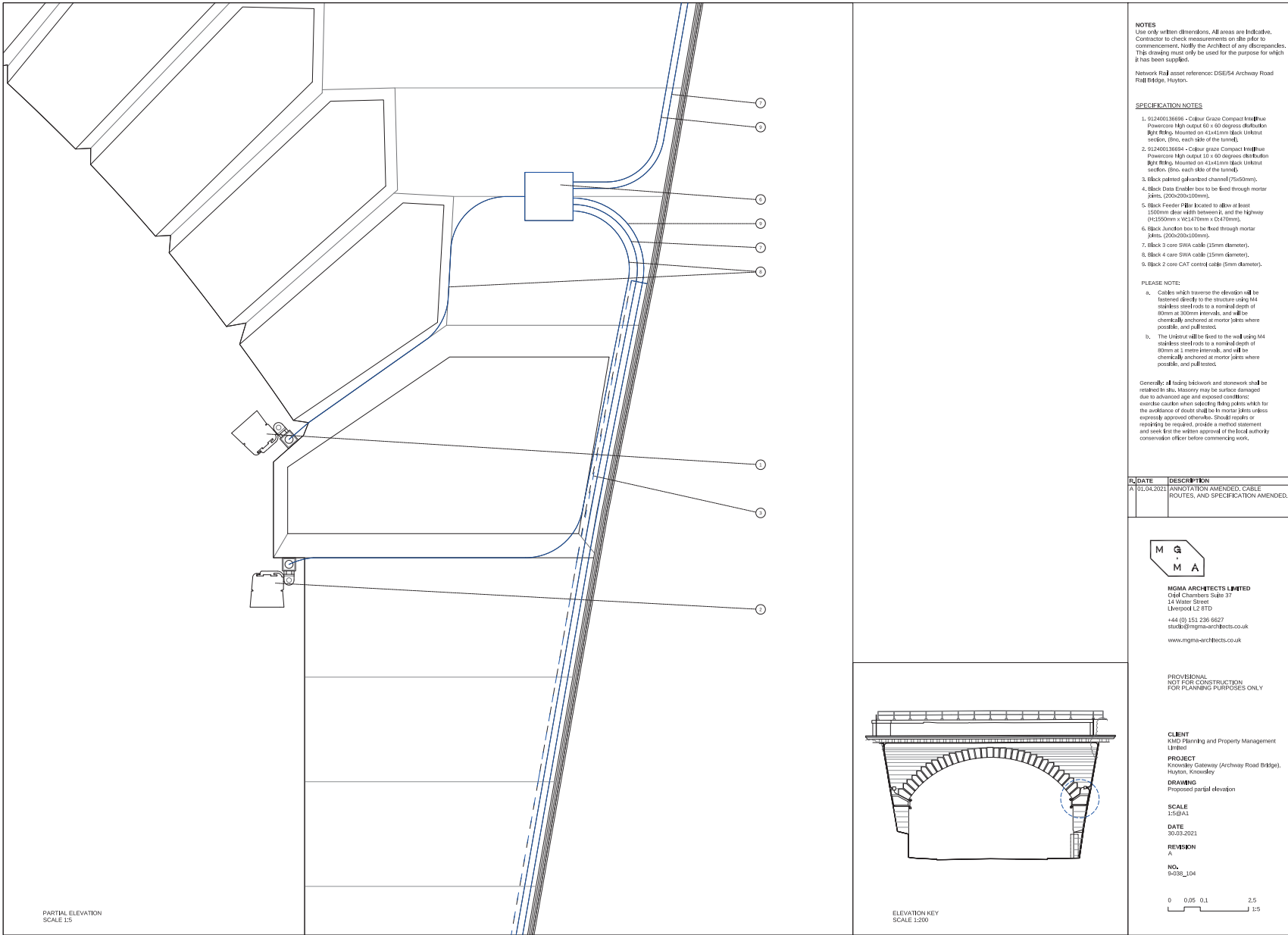
Proposal



3.3 DEVELOPMENT DETAILS

The application drawings show the locations of the fittings and the associated cable routes and connection units required for the proposed development.

Drawing 9-038_104 describes the locations of the mountings for the fittings, and how the wiring routes have been sensitively considered to follow mortar joints and the edges of the structure where possible.



3.4 DEVELOPMENT FITTINGS

The accompanying application pack contains specification details of the luminaires shown right, and the drawings illustrate the fixing methods and locations, to enable the local authority to fully assess the proposed development.

Graze Compact Powercore

Date: _____
Type: _____
Firm Name: _____
Project: _____

IntelliHue, 100 to 277 VAC, High Power, 10° x 60°, 1219 mm (4 ft)

Exterior compact linear grazing luminaire
with intelligent white and color light

Graze Compact is a high-performance, exterior linear luminaire designed to highlight architectural features like molding details, archways and windows up to two stories high. Graze Compact IntelliHue utilizes Color Kinetics IntelliHue technology to produce millions of saturated colors, pastels, and high-quality white light, in the same precisely controllable luminaire. Multiple luminaire lengths and beam angles support a large range of façade or surface illumination applications. The brand new low-profile housing, connectorized cabling, a universal power input range, and direct line voltage make Graze Compact luminaires easy to install and operate.



- Taper light output to specific applications—Available in two standard lengths (1 ft (4 ft), and four standard 10" x 60", 30" x 60", 60" x 60", and 100" x 100" beam angles.
 - Ultra-compact form factor—Graze Compact's ultra-low profile is half the size of Graze, allowing it to fit discretely into almost any layout, from simple to elaborate.
 - Innovative optical design features fully mixed light directly out of the luminaire. This allows for smaller setbacks than many other luminaires.
 - Color-changing and high-quality white light from the same luminaire—IntelliVue is an advanced approach to color mixing that enables high-quality intelligent color and white light from a single luminaire. Multiple channels of LED light sources combine to produce a full spectrum of precisely controllable light, including millions of saturated colors, pastels, and uniform white light with CRI of greater than 80 in the 2700 K to 4000 K range.
 - Improve color consistency between all LED luminaires in a family with Chromasync technology. During the manufacturing process a calibrated light measurement device creates an algorithm to define a common color gamut for an entire family of LED luminaires. When Chromasync is enabled, color consistency between luminaires is achieved without having to manually adjust color points on each luminaire.
 - Graze Compact patented Powercore technology that controls power output to luminaires directly from line voltage – rapidly, efficiently, and accurately. The Color Kinetics Data Enabler Pro merges line voltage with control data and delivers them to luminaires over a single standard cable, dramatically simplifying installation and lowering total system cost.
 - Graze Compact provides years of reliable use under rugged conditions. Graze Compact raises reliability even further with more protection from corrosion by meeting ASTM B117 standard and ANSI C136.31-2010 standard with a 3G vibration rating.
 - Works seamlessly with the Color Kinetics full range of controllers, including Light System Manager, Video System Manager Pro, Player 3, Ambura (Color keypad), and ColorDial Pro—as well as third-party controllers.
 - Convenient push-and-click connectors let you easily and rapidly install Leader Cables and Junction Cables. Constant torque locking hinges offer simple and consistent position control from various angles.
- For detailed product information, please refer to the Graze Product Guide at www.colorkinetics.com/global/products/intellivue/graze-compact-powercore

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