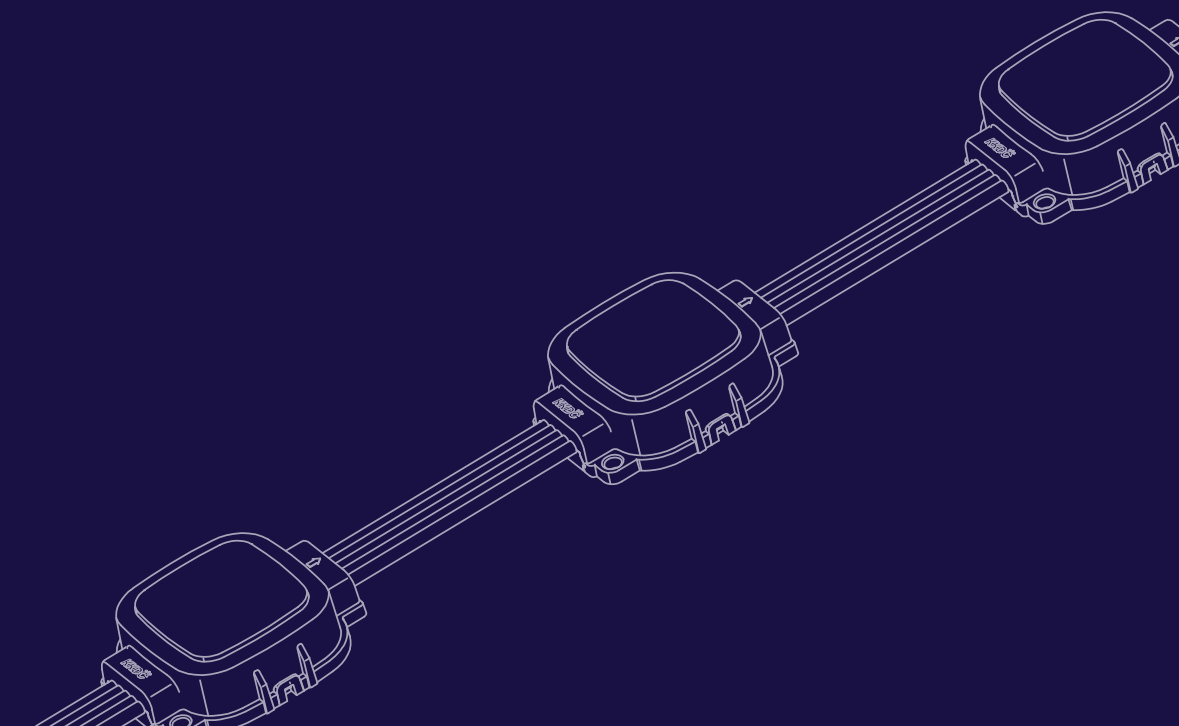
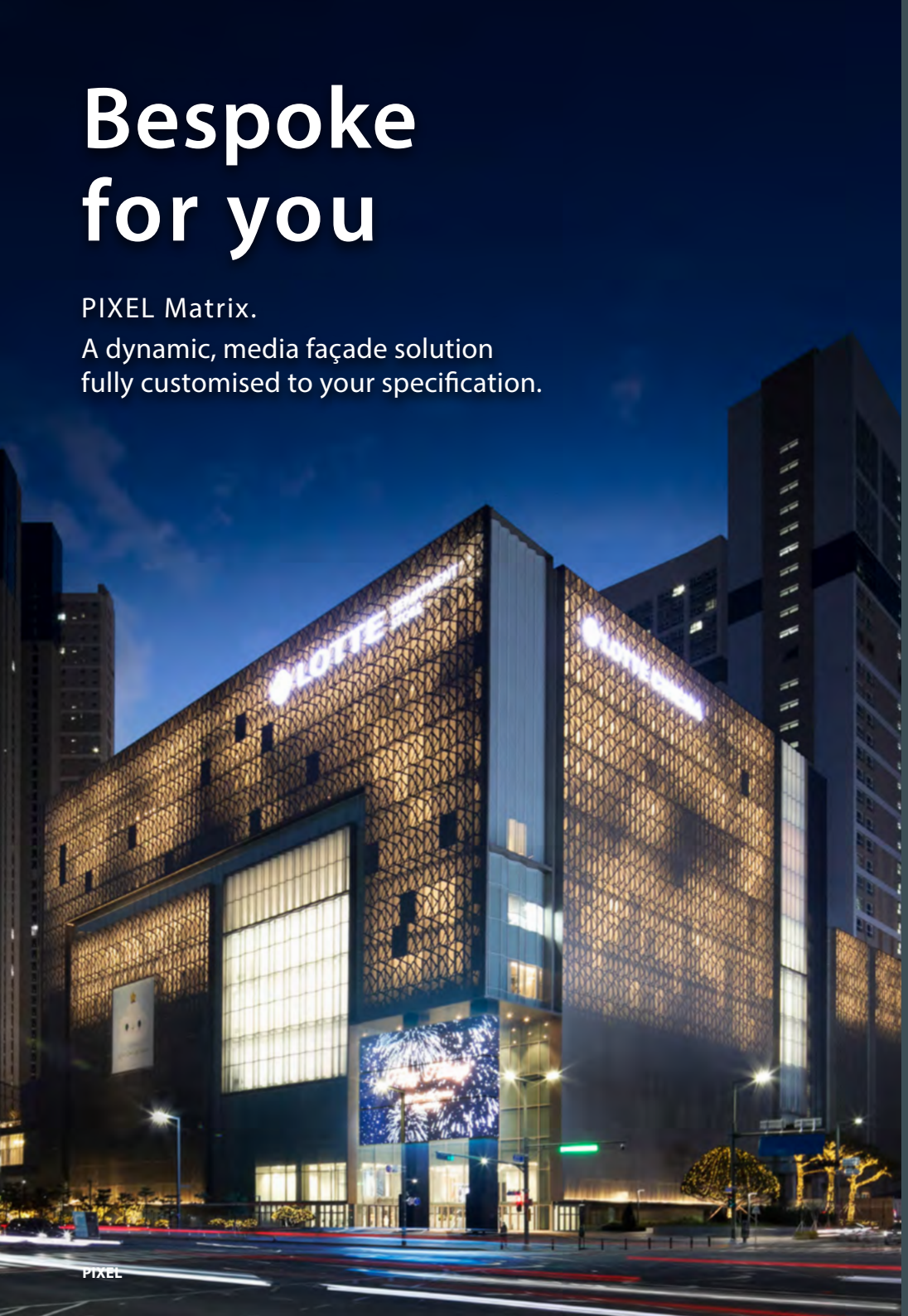
PIXEL Matrix

KKDC



Bespoke for you

PIXEL Matrix.
A dynamic, media façade solution fully customised to your specification.



PIXEL

PIXEL Matrix

Individually controllable 'PIXEL' LED modules from KKDC, designed for large scale Media façade applications, with a robust exterior casing (IP67) and reinforced cables to create dynamic, durable bespoke lighting installations.

Multiplexed control via computer software application and KKDC interface, customised to order.

Please contact your local KKDC representative to discuss any custom media projects requirements you may have.

Key Points:

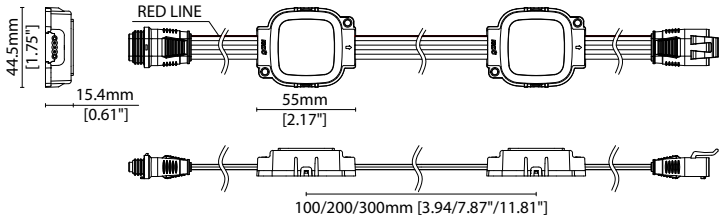
- 24V Media Façade module (string or grid)
- White, RGB and RGBW LED options
- Endless possibilities for creative lighting effects (Video display / RGB wave / Chasing effects / Dynamic Light Art)
- Exterior large scale building façades / Stage shows / Events & Exhibitions
- Robust exterior rated housing for longevity against the elements (Grey, Black or Transparent finish available)

PIXEL Matrix Specifications

24V DC | 1.95W | 33.85 lm/W | IP67 | CE

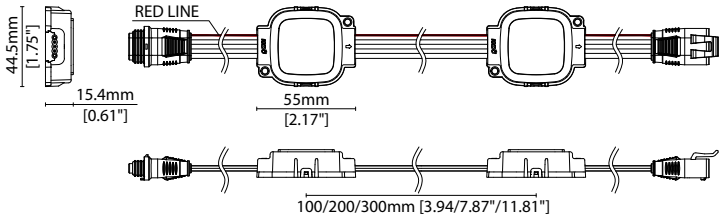
Luminous flux:	54.16lm/module (RGBW)
Dimension:	L55/W44.5/H15.4mm
Beam angle:	120°
Colours:	White: 3000K RGB RGBW
CRI:	≥80
Lifetime:	50,000 hours @ 25°C
Operating temp:	T_a = -25 to 50°C (T_c max = 66°C)
IP rating:	IP67
Finish:	Black/Grey/Transparent ABS
Cover/Lens:	Clear
Mounting:	Screw fixing / Clips
Connection:	PIXEL to DMX512 device: 3pin or 5pin XLR connector
Control:	Cluster system via DMX512 (Speak to KKDC for further details)

RGB/ White LED



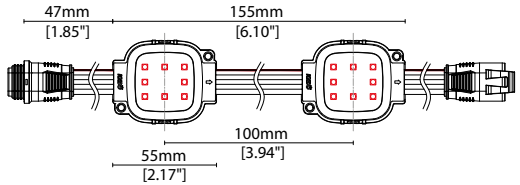
100mm [3.94"] Pitch = 55 ~ 16955mm [2.17 ~ 667.5"]
200mm [7.87"] Pitch = 55 ~ 33855mm [2.17 ~ 1332.8"]
300mm [11.81"] Pitch = 55 ~ 50755mm [2.17 ~ 1998.2"]

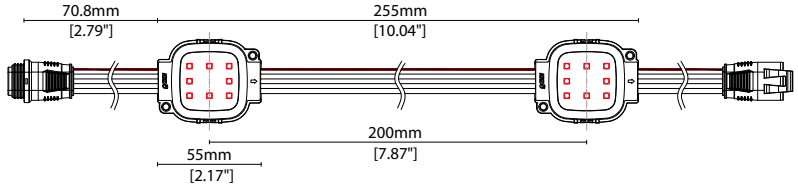
RGBW LED

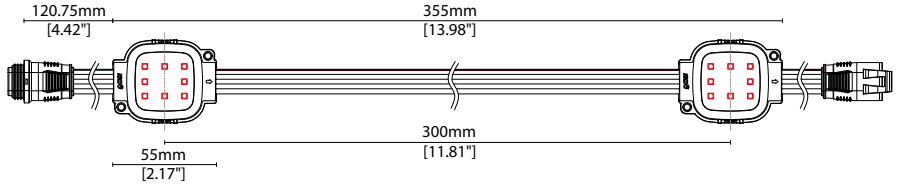


100mm [3.94"] Pitch = 55 ~ 12755mm [2.17 ~ 502.1"]
200mm [7.87"] Pitch = 55 ~ 25455mm [2.17 ~ 1002.1"]
300mm [11.81"] Pitch = 55 ~ 38155mm [2.17 ~ 1502.1"]

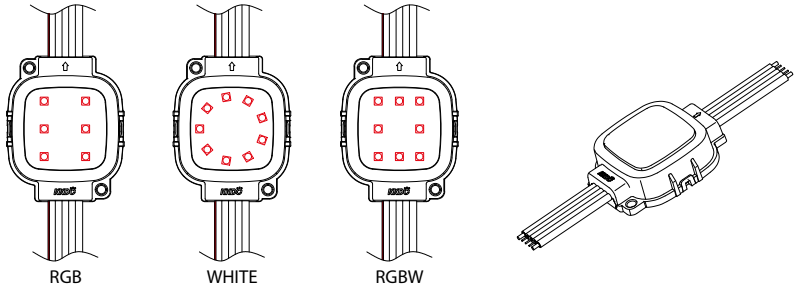
PIXEL pitch options







LED array pattern



How to Specify PIXEL Matrix

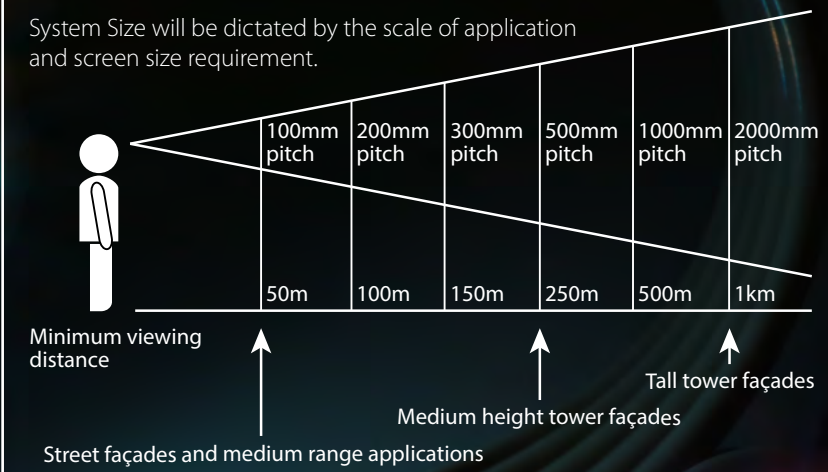
Due to the technically complex nature of media façade installations and control variations it is always recommended to discuss your project requirements with your local KKDC sales engineer who can support you with creating your PIXEL Matrix specification.

The information provided in this brochure will provide some key pointers and basic parameters to help narrow down your system setup requirements.

To aide the specification process please follow the steps below:

Please see guide diagram below to help determine LED pitch:

System Size will be dictated by the scale of application and screen size requirement.



Check List:

1 Identify the application / installation type:

- Building façade screen video display?
- Abstract building façade effects (eg: twinkling starfield / rain effects)?
- Dynamic linear Cove Lighting?
- Dynamic linear façade effects (eg: Chasing / pulse effects)?
- Static image?

2 Identify LED colour requirements:

- White LED or single colour?
- RGB colour mixing?
- Housing Colour (Grey / Black / Transparent)?

3 Identify the media input:

- Video?
- Static images?
- Abstract animations?

4 Identify PIXEL module installation location:

- Approximate viewing distance?
- Direct or Indirect lighting?
- Direct exposed?
- Concealed within cove / architectural detail?
- Positioned behind diffuser?

5 Identify PIXEL module LED pitch / Qty:

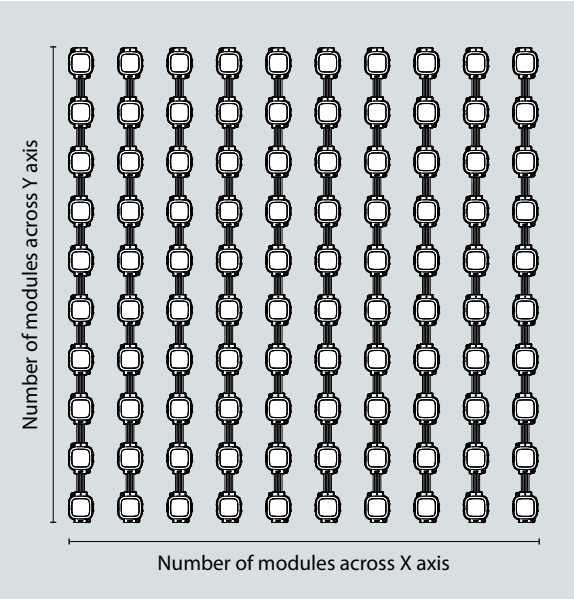
- Tight pitch, more modules (Best for video & image display or closer viewing distance).
- Wide pitch, fewer modules (Good for abstract lighting effects or far viewing distance).

Matrix Installation (Grid Array)

Applications: Building Media façade / Video display / Stage show backgrounds / Abstract pattern effects

PIXEL Matrix modules can be installed in a grid array that represents a large pixel display screen. This can be used to play video, static images and abstract effects.

- The resolution and screen size is entirely dependant on the PIXEL module pitch and quantity which is customised to your specification.
- The viewing distance of the installation is a key factor to consider during the design & specification stage.

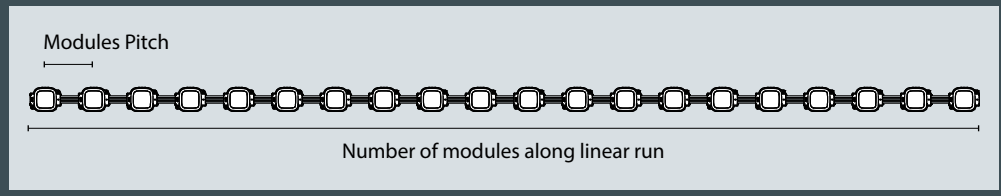


String Installation (Linear Array)

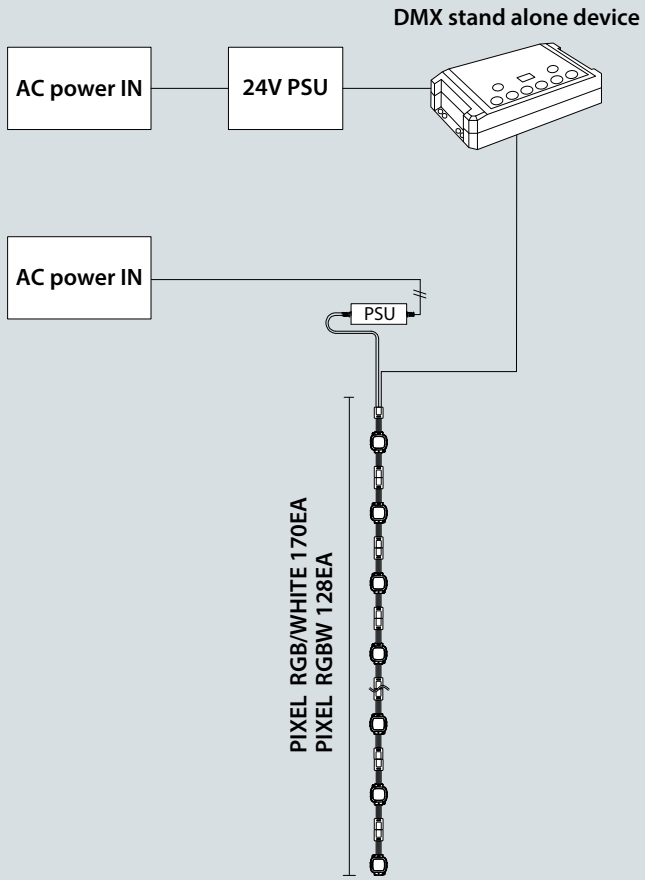
Applications: Building outline highlighting / Chasing wave effects / Cove lighting

PIXEL Matrix string modules can also be installed to create dynamic linear applications, such as within cove details for indirect colour washing or direct view to create chasing, wave, random / patterns effects customised to your specification (eg: Chasing effects around building exterior façade).

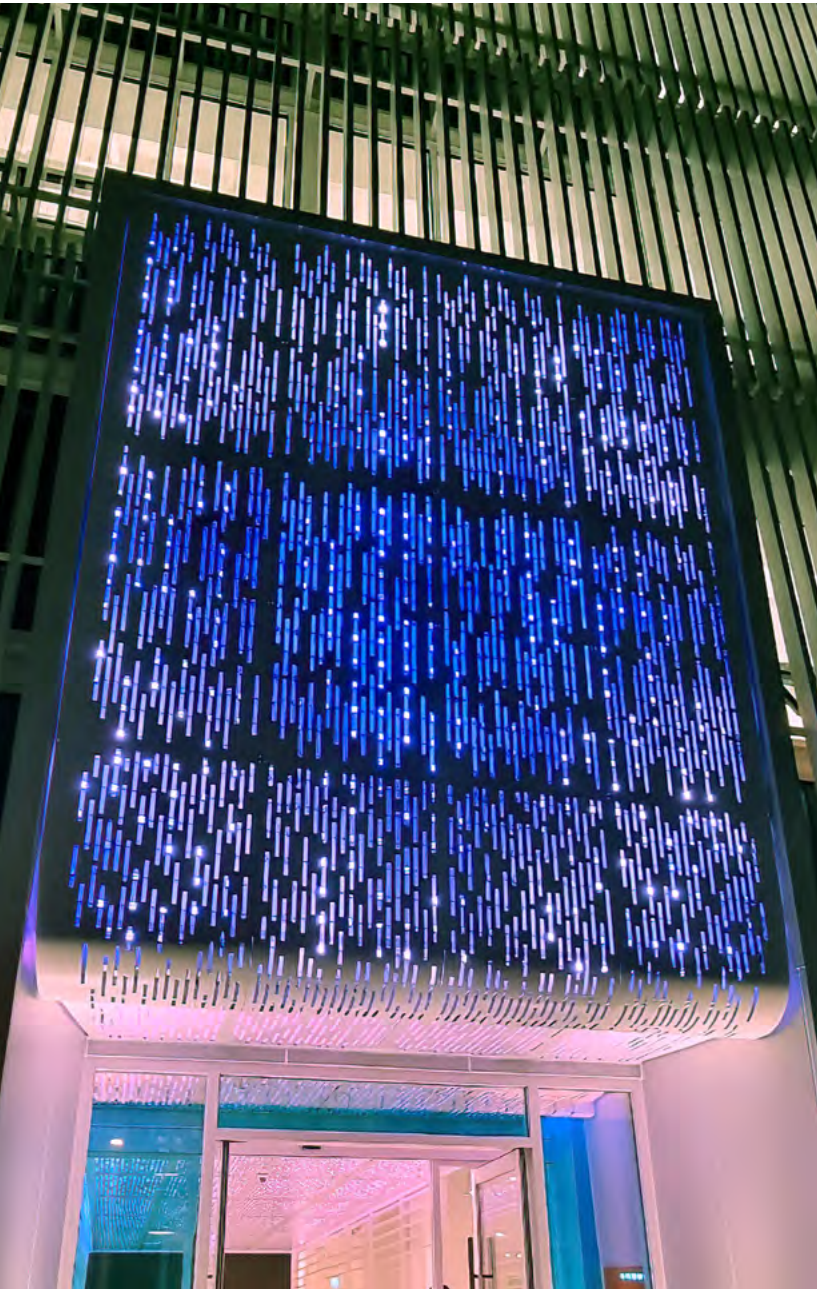
- Can be installed as direct view (LED visible) or indirect (concealed within cove or mounted behind a diffusion medium).
- Run length and module pitch is a key factor to be considered at design & specification stage.

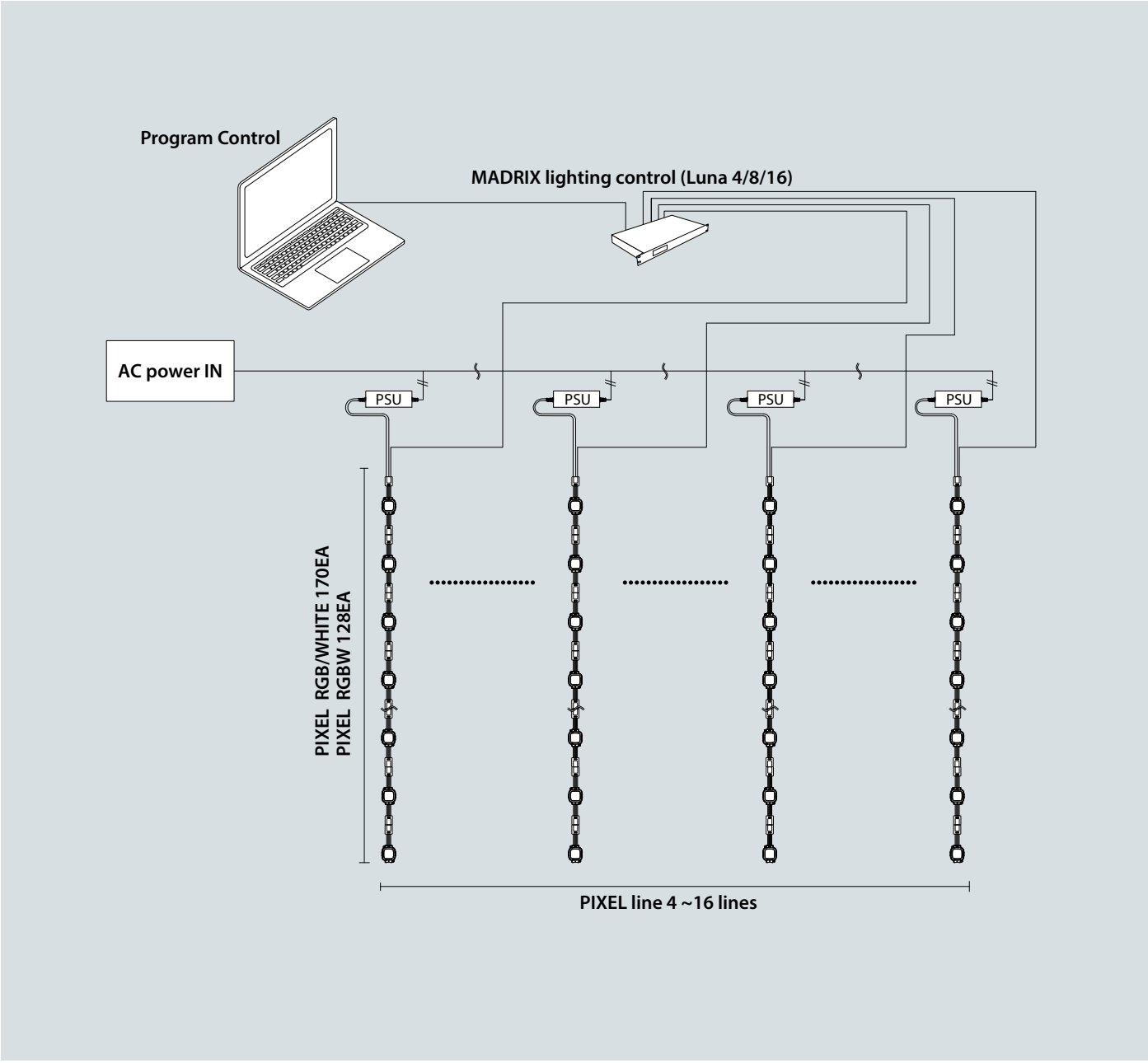


PIXEL Matrix System Setup (Small)

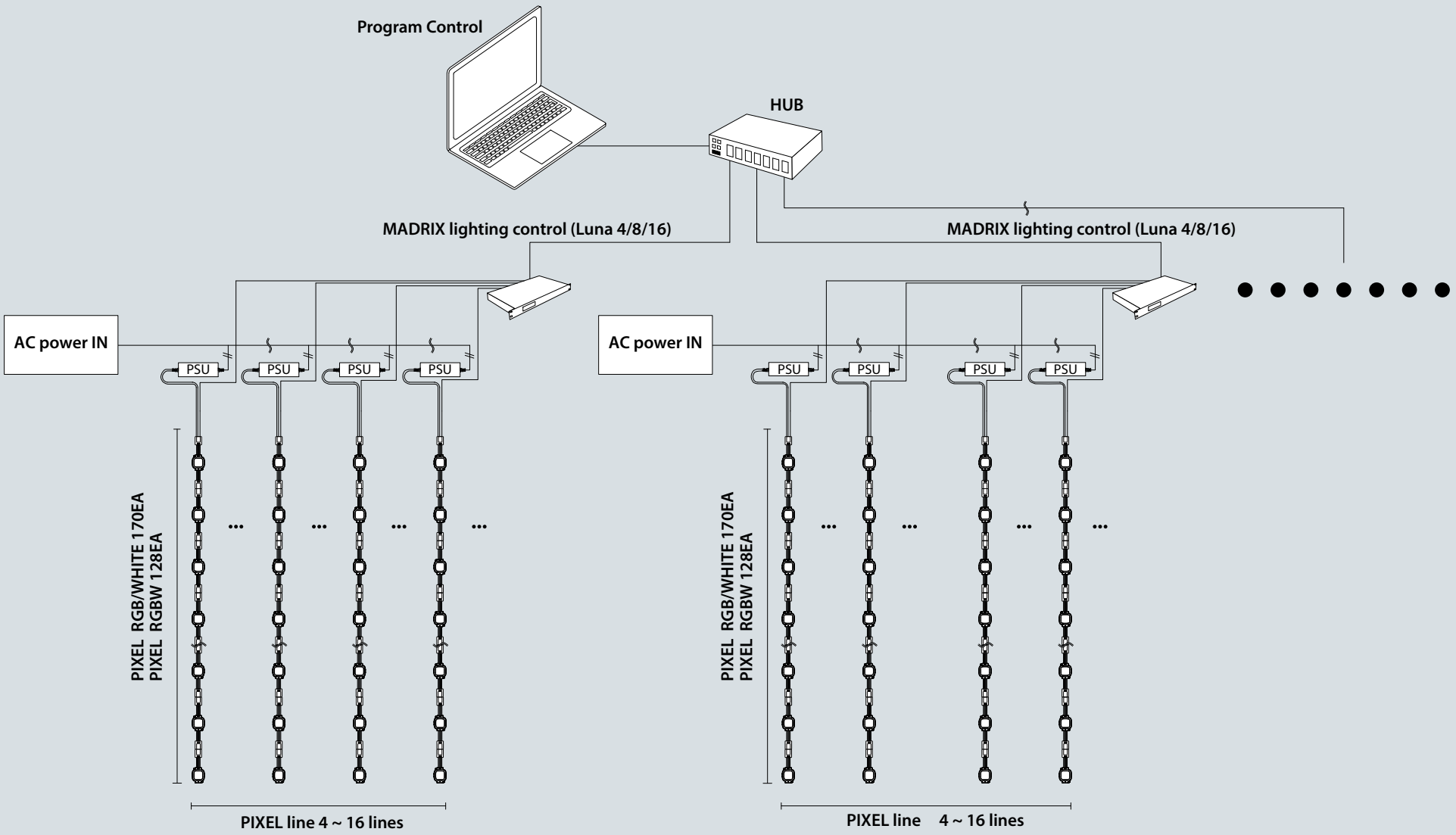


PIXEL Matrix System Setup (Medium)





PIXEL Matrix System Setup (Large)



Controls & Power Supply Options

PC control system:

- DMX or DVI output control through control program
- Video/film output
- Static images
- Abstract lighting tools
- Up-to 1920x1080 resolution (2,073,600 pixels)
- KKDC do not supply this component, but are able to advise on system required, please discuss further with your local KKDC representative

MADRIX DMX Controller:

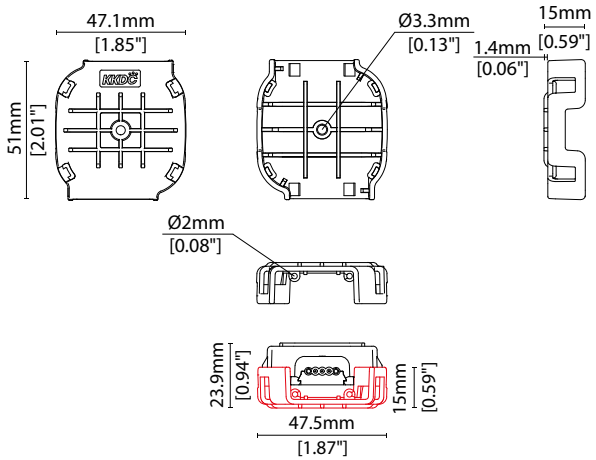
- MADRIX LUNA reliably distributes DMX512 data over long or short distances using Ethernet network or USB
- 3 versions available LUNA 4, LUNA 8, LUNA 16
- More information can be found at website **www.madrix.com**

Distribution and PSU:

- Provides power to PIXEL module runs
- Receives DMX and distributes control signal to PIXEL runs
- Loop-in loop-out to other distributors

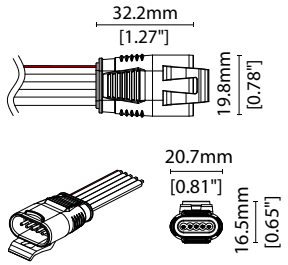
Accessories

Clip Bracket

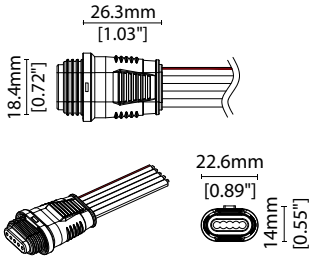


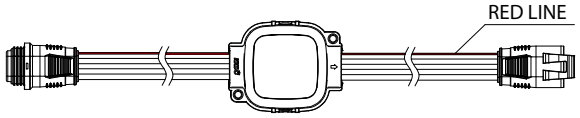
Male female connectors

Male

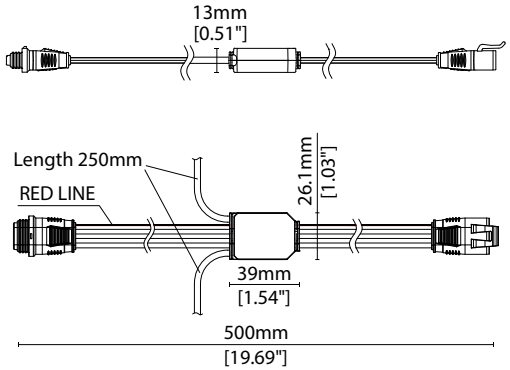


Female

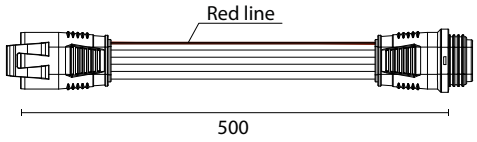




Power input wire



Male female extension lead



What to do Next:

Please contact your local KKDC representative or submit your enquiry via our website **kkdc.lighting** with details of your PIXEL Matrix project.

This initial information will help our engineers support you to finalise and quote your system accurately.

Videos:

Please see video links below.

PIXEL Matrix

Lotte Department Store, Dongtan, South Korea

The PARQ, Office and Retail Development, Bangkok, Thailand

KKDC

www.kkdc.lighting

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