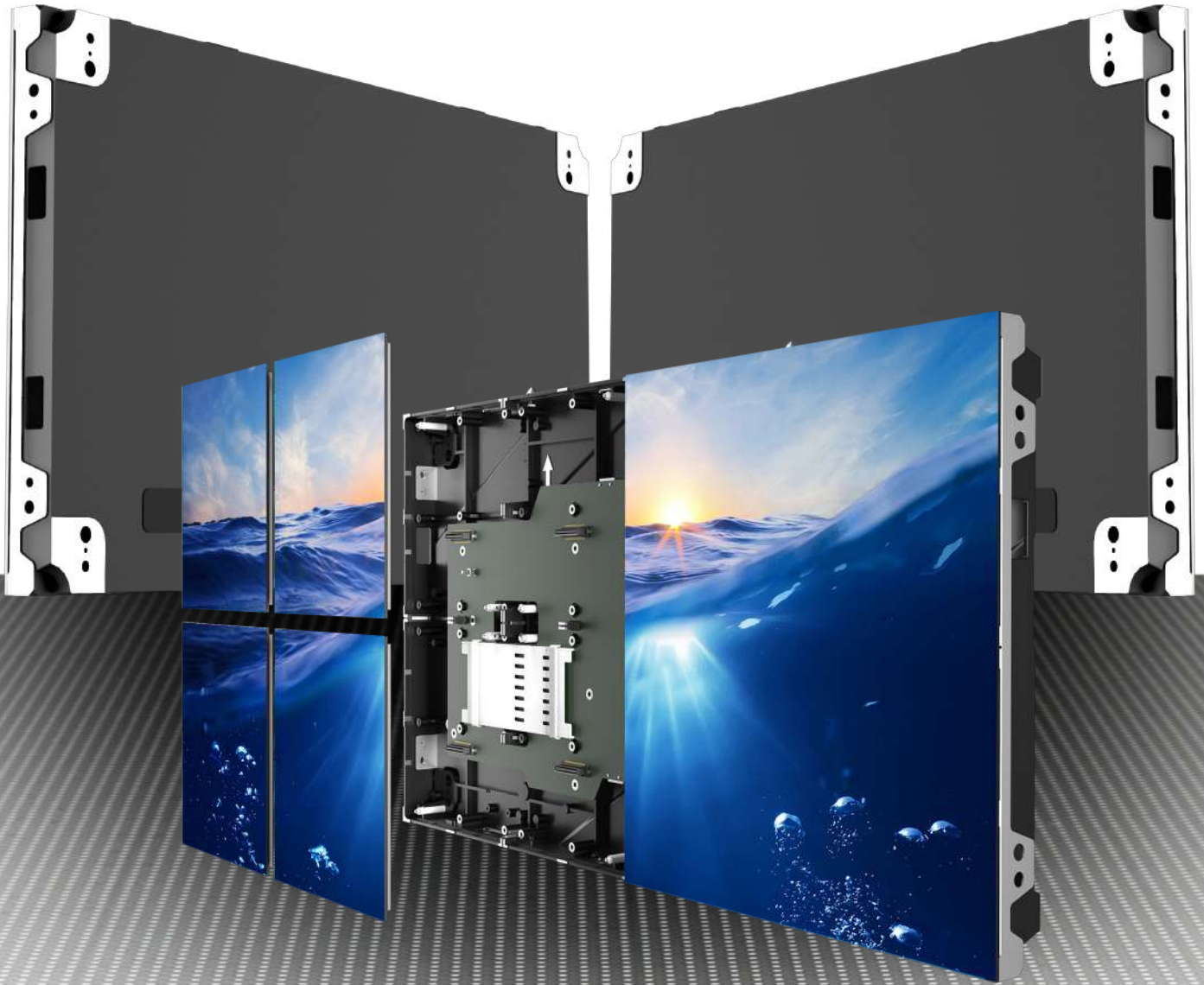


# digiTHIN NANO

SUPER THIN HD DIRECT TO WALL COB & SMD LED PANELS



## Direct to Wall Mounting

As with all the digiTHIN series of LED panels, digiTHIN NANO can easily be mounted to a wall with little more than 4 appropriate fixing screws and fully adjustable in the Z plane.



## Amazing Brightness

With up to 1,000 nits, NANO COB delivers unprecedented brightness levels at these pixel pitches.

## Ultra Fine Pixel Pitch

Pixel pitches down to 0.9mm, allowing you to create high resolution, 4K screens starting from much smaller screen dimensions.



## Chip On Board (COB)

A more robust LED technology than SMD, regardless of the pixel pitch. This is the perfect product for customer facing applications demanding a tougher screen surface, as the encapsulated LEDs are hard to damage.



## MiniLED Design (SMD)

digiLED's digiTHIN NANO SMD uses MiniLED technology (pixel pitch 0.9mm only), meaning there are four pixels encapsulated within a cover, making your screen more robust and giving you a better contrast ratio.

## Super Low Power Consumption

Our COB technology brings significant power savings to LED displays, with 30% less power needed on average compared to SMD technology at a given brightness level. digiTHIN NANO (SMD version) can run as low as 30% the power use of a comparable LED screen at 400watts per sqm (peak). Typically 120W/sqm.



NANO COB Panel Diagonal Dimensions

## Optional Frame for Wall Mounting

Should your display need to be wall mounted, digiLED can supply a compatible frame for your digiTHIN NANO screen.

## ZEUS<sup>®</sup> Energy Saving Feature

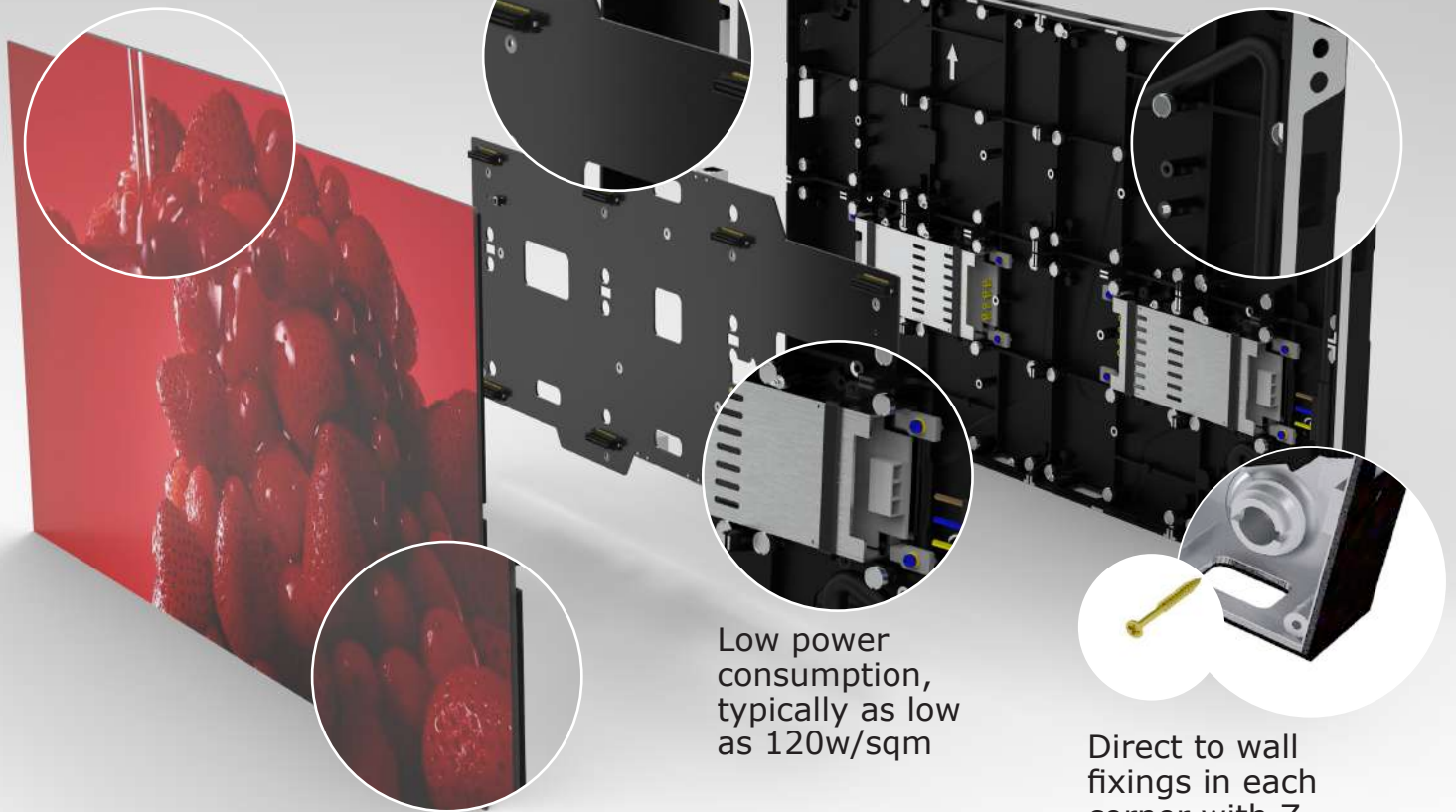
digiLED ZEUS<sup>®</sup> is a revolutionary new way to manage the energy savings for your screen. Z in ZEUS stands for ZERO – and that's exactly how much energy your screen will consume when digiLED ZEUS<sup>®</sup> is activated.

FEATURES

digiTHIN NANO COB  
- Chip on board LED  
technology

Easy swap  
components

Super slim  
chassis at  
35mm



Ultra fine pixel  
pitch - less  
than 1mm

Low power  
consumption,  
typically as low  
as 120w/sqm

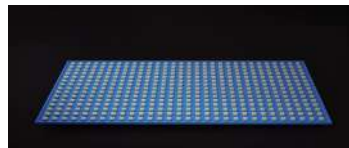
Direct to wall  
fixings in each  
corner with Z  
adjustment for  
super accurate  
levelling

## COB LEDs versus SMD LEDs

### COB PCB Construction

The manufacture of COB PCBs has many differences over regular SMD construction, as follows:

- The COB LED chips are bonded, not soldered to the PCB.
- The COB LED chips can withstand knocks and aggressive cleaning.
- The COB LED chips can be placed nearer to neighbouring chips without risk of short circuiting.
- The COB LED chips have improved contrast ratios, viewing angles and blacks.
- The COB LED chips have an improved failure rate



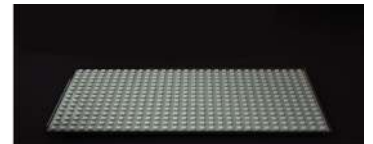
Bonded LED COB chips to PCB



Mask is bonded to PCB revealing the COB chips through apertures in the mask



Mask overlays the precision bonded COB chips



Finished LED COB bonded PCB



**SMD**

Exterior appearance

**COB**

Exterior appearance



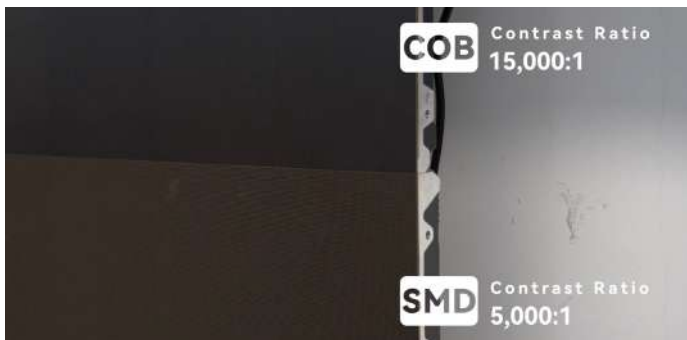
**SMD**

A knock or bump  
No scratch or impact protection



**COB**

A knock or bump  
Anti-scratch and anti-impact



**COB**

Contrast Ratio  
15,000:1

**SMD**

Contrast Ratio  
5,000:1



**COB**

30%  
less power consumption  
than SMD on full  
white (calibrated)

**SMD**

30%  
more power consumption  
than COB on same full  
white (calibrated)

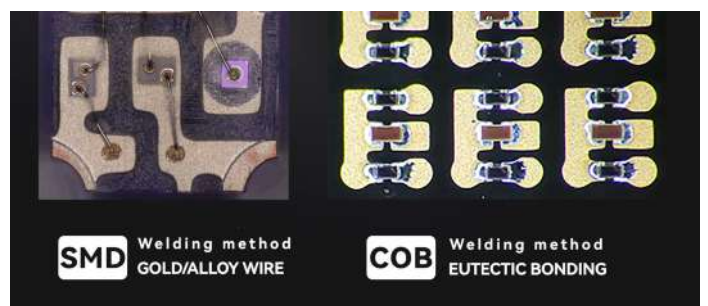


**SMD**

Failure rate(PPM)  
15PPM

**COB**

Failure rate(PPM)  
0PPM

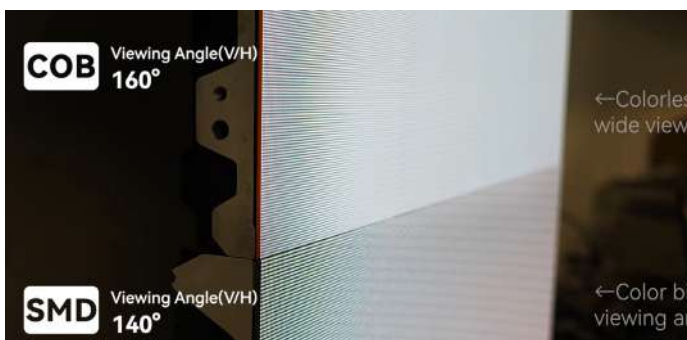


**SMD**

Welding method  
GOLD/ALLOY WIRE

**COB**

Welding method  
EUTECTIC BONDING



**COB**

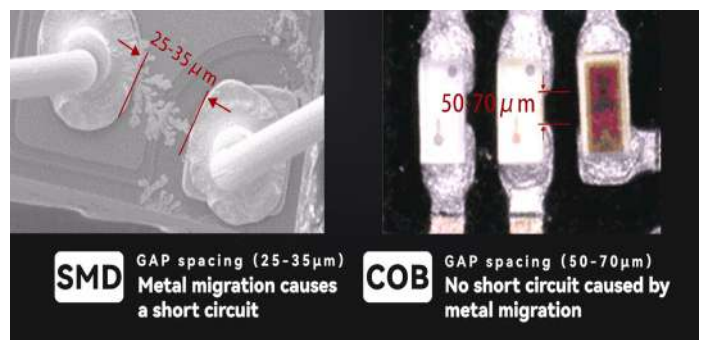
Viewing Angle(V/H)  
160°

←Colorless  
wide view

**SMD**

Viewing Angle(V/H)  
140°

←Color bias  
viewing angle



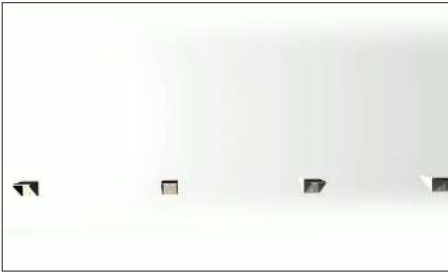
**SMD**

GAP spacing (25-35µm)  
Metal migration causes  
a short circuit

**COB**

GAP spacing (50-70µm)  
No short circuit caused by  
metal migration

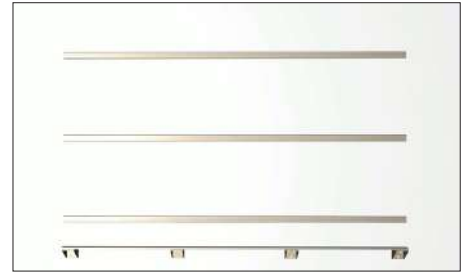
Optional Installation Frame for NANO SMD



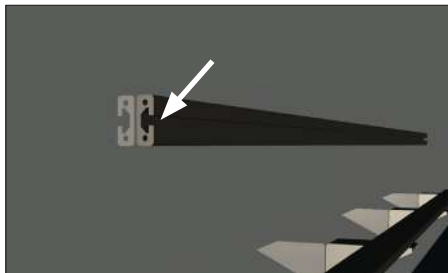
Fix angle brackets to wall surface using a levelling device.



Lay horizontal bar across brackets making sure it is level and straight.



Fix wall plates horizontally up the wall.



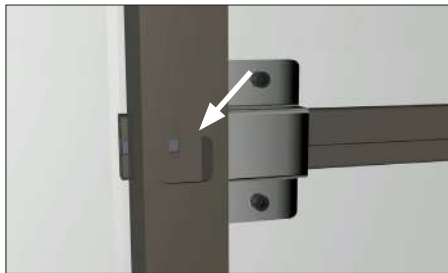
Note the profile of the horizontals. This provides easy slotted assembly.



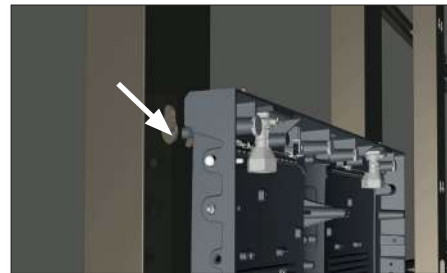
Use clamp plates to fix to the wall.



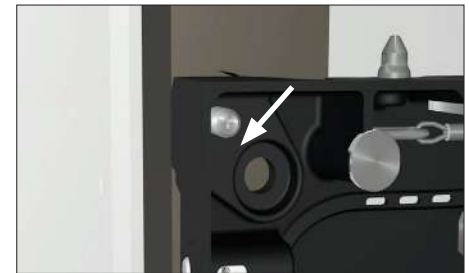
Attach vertical fixing plates to the horizontals.



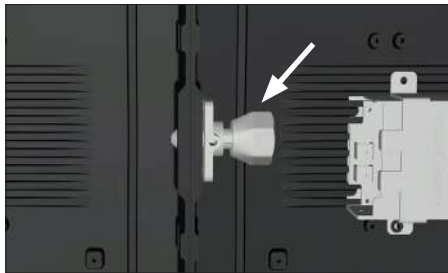
Note the profile of the verticals. This provides easy slotted assembly.



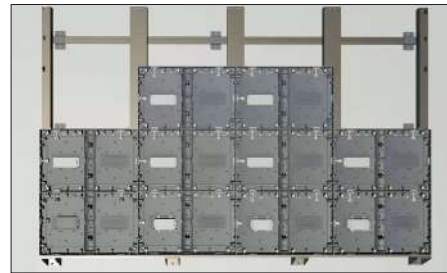
Align the fixing screw on the rear of the LED panel chassis which keyslots into the vertical beams.



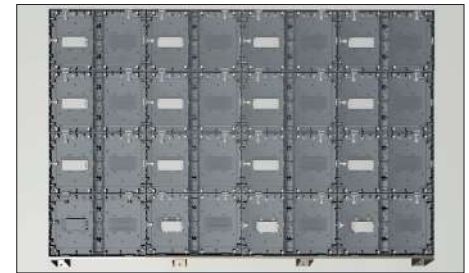
Turn the adjustment screw in or out to make sure the LED panel chassis is level with its neighbour.



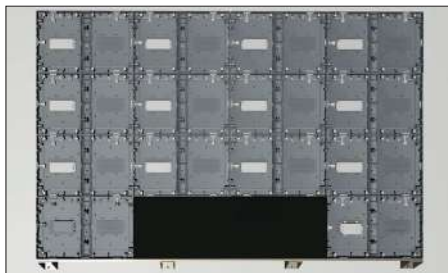
Fix and tighten the joining bolts to each neighbouring chassis.



Continue fitting all the screen panels.



Make any final adjustments and lay inter-connecting cables.



Populate the screen with LED tiles gently clicking into place.



Completed screen.



Connect content feed and enjoy truly pin sharp vivid imagery.

## SPECIFICATIONS

<b>digiTHIN NANO COB - INDOOR</b>		NANO COB 0940	NANO COB 1250	NANO COB 1560	NANO COB 1880
Physical Pixel Pitch (HxV) mm		0.9375	1.25	1.5625	1.875
LED Type	SMD or COB	COB	COB	COB	COB
Pixel Resolution (Width/Height)	pixels/panel	640 x 360	480 x 270	384 x 216	320 x 180
LED Tile Dimensions	(W x H x D) mm	150 x 168.75 x 2.28	150 x 168.75 x 2.2	150 x 168.75 x 2.18	150 x 168.75 x 2.15
Panel Dimensions	(W x H x D) mm	600 x 337.5 x 35	600 x 337.5 x 35	600 x 337.5 x 35	600 x 337.5 x 33
Standard Panel Area	m <sup>2</sup>	0.2025			
Standard Weight	kg/m <sup>2</sup>	22.72			
Ingress Protection	(Front/Rear)	IP65/IP30			
Maintenance Access		Front			
Standard Refresh Rate	Hz	≥3840			
Frame Rate	Hz	60			
Uncalibrated Brightness*	nits	≥1250	≥1000	≥750	≥750
Calibrated Brightness*	nits	≥1000	≥800	≥600	≥600
Input Voltage	VAC/Hz	100~250 50/60			
Max Power Consumption**	W/sqm	520	390	340	290
Typical Working Power Consumption**	W/sqm	156	117	102	87
Operating Temperature (min/max)	degC	-10/+40]			
Certification***		UK CA (NI), CE, FCC, ETL, LVD, EMC, RoHS, UL			
HDR****		(see foot note)			

<b>digiTHIN NANO SMD - INDOOR</b>		NANO SMD 0940	NANO SMD 1250	NANO SMD 1560	NANO SMD 1880
Physical Pixel Pitch (HxV) mm		0.938	1.250	1.563	1.875
LED Type	SMD or COB	SMD	SMD	SMD	SMD
Pixel Resolution (Width/Height)	pixels/panel	640 x 360	480 x 270	384 x 216	320 x 180
LED Tile Dimensions	(W x H x D) mm	150 x 168.75 x 2.28	150 x 168.75 x 2.2	150 x 168.75 x 2.18	150 x 168.75 x 2.15
Panel Dimensions	(W x H x D) mm	600 x 337.5 x 35	600 x 337.5 x 35	600 x 337.5 x 35	600 x 337.5 x 33
Standard Panel Area	m <sup>2</sup>	0.2025			
Standard Weight	kg/m <sup>2</sup>	22.17			
Ingress Protection	(Front/Rear)	IP30/IP30			
Maintenance Access		Front			
Standard Refresh Rate	Hz	≥3840			
Frame Rate	Hz	60			
Uncalibrated Brightness*	nits	≥500	≥600	≥600	≥600
Calibrated Brightness*	nits	≥400	≥500	≥500	≥500
Input Voltage	VAC/Hz	100~250 50/60			
Max Power Consumption**	W/sqm	400	459	346	380
Typical Working Power Consumption**	W/sqm	120	138	104	114
Operating Temperature (min/max)	degC	-20/+40			
Certification***		(CE (IEC62386-1 TBC), FCC, ETL): TBC			
HDR****		(see foot note)			

All specifications are subject to change without prior notification. E&OE.

Specifications are for standard system configuration. Contact your digiLED expert for detailed specification.

\*The figures shown for brightness are standard guideline figures only and based on average test laboratory conditions.

\*\* The figures shown for power consumption are standard guideline figures only and based on average test laboratory conditions at calibrated brightness.

\*\*\* CE comes with IEC (EN) 62368-1.

\*\*\*\*HDR: Subject to system configuration and processing.

INDOOR APPLICATION EXAMPLES

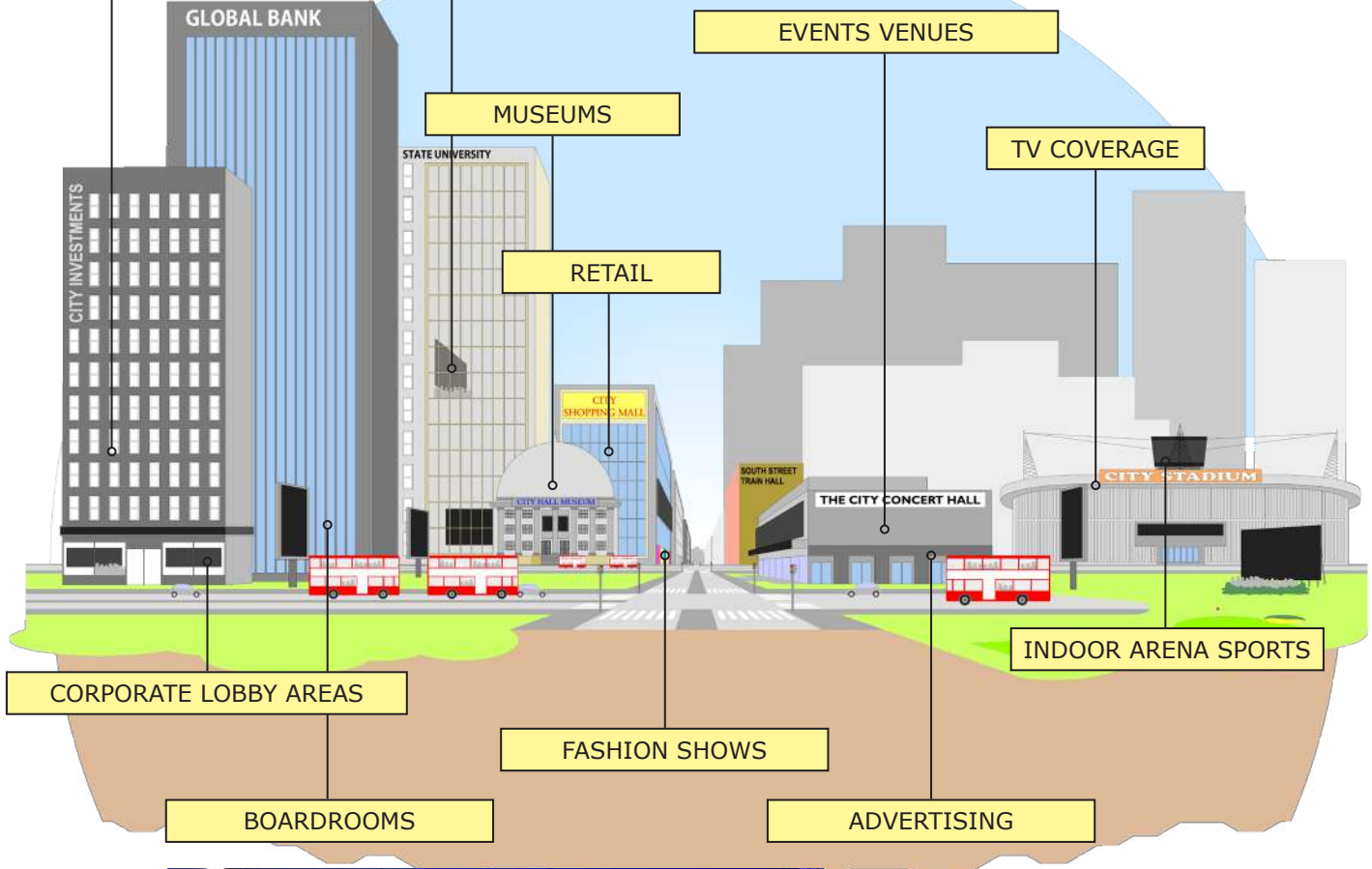


EDUCATION  
LECTURE THEATRE



EVENTS VENUES

EXPOS



BOARDROOMS

### ZEUS®

LED Screens used in commercial installations rarely operate 24/7. Venues and auditoriums don't have a permanent audience. A dirty secret of our industry is that often, when a screen is not in use, it is simply displaying a black image or video. The power is still live, using 7% to 17% of the maximum energy consumption or, looked at another way, up to 50% of the average energy usage!

Designed in the UK, digiLED's patent pending ZEUS® stands for "Zero Energy Use System". A screen set to black with digiLED ZEUS will use ZERO power. Additionally, ZEUS cards are manufactured in Liverpool and Dorking (UK). More details on ZEUS® in the dedicated ZEUS brochure.

### Recyclable Material

Aluminium is used extensively in digiLED's LED tiles and the frames/chassis. As one of the most widely recycled materials on earth, this gives excellent options when considering how to dispose of an end-of-life digiLED screen.

LED tiles that are constructed out of aluminum retain a high materials value at the end of their life. These are much more likely to be shredded and metal-extracted before waste processing is considered complete.



Copper also makes up a large percentage of the product by weight - again, easily recyclable.

RoHS standards are closely monitored during production (and other international standards appropriate to the region). An example of this is the environment, chemical and processes audit of one of our production lines by Sony before they approved the use of digiLED.



**Direct-to-wall Mounting:**

Fixing an LED screen directly to the wall, without a frame, eliminates the need for the manufacture of a metal structure, saving time, money and travel/transport costs. No additional materials or bracketry need be used, the LED panels are mounted to an approved building material, typically plywood, MDF or plasterboard such as Gyproc Habito.

**228-Step Production Plan**

The digiLED 228-step Production Plan helps us manage processes so we can hit schedules and plan logistics efficiently, therefore avoiding the need to revert to air freight which uses 44 times more CO<sub>2</sub> than a ship. The 228-Step Production Plan also ensures that digiLED makes high quality products, meaning that it will give years of reliable, trouble-free service; the best decision for the environment is not to buy on price but to buy a product that will last for years.

**Shipping**

Sea freight is prioritised as the shipping method from China as it uses 44 times less CO<sub>2</sub> than air transport delivery.

**Serviceable**

digiLED always briefs clients that a well-maintained screen will have a life expectancy of 10 years plus. As a company, we stand by this by offering tech support and parts for all legacy products. Currently, the oldest clients screen supported by digiLED is 14 years old and requires windows XP to operate it - but it still operates.

### Our Ethos

Our goal is to do business with suppliers and customers whose company we enjoy and whose principles and values we respect.

We endeavour to be politely firm in our beliefs and steadfastly uphold our standards by doing the job correctly to produce quality products, supplied with loving care, to customers who cherish our systems and the enthusiastic, friendly expertise we strive to provide.

We love our work and are proud of our experience and our expertise. We want to do business with people who see the benefits of what we do and appreciate our input.

digiLEDers are keen to offer advice and an insight into our specialist knowledge without demanding a commercial return, if we can't convince customers of our value, we don't deserve their patronage.

### Our Products

Huge, bright, vibrant, bespoke, digiLED screens are designed by seasoned LED experts, then crafted and assembled in selected, specialist factories.

Assembly, production and testing is monitored by the industry's leading QC team, using a proven 228-step manufacturing QC process paying meticulous attention to fine detail.

The resulting digiLED screens exhibit superior images, provide reliable performance and extended life. Supported locally by experienced, qualified, field and bench engineers. **digiLED quality just lasts.**

## CONTACT US

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### SALES OFFICES IN MILAN, THE HAGUE, NANTES AND TOKYO

### TALK TO US AND BE SOCIAL

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