



# VANGUARD

## LED DISPLAYS



Axion Pro

# 16x9 Panels

# VANGUARD

## LED DISPLAYS



## 16:9 PANELS

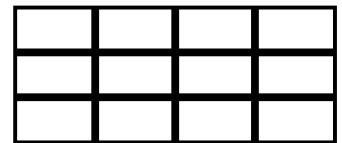
Indoor, fixed installation

16:9

16:9 and 32:9  
native aspect  
ratio



Satellite, cable,  
personal  
computer for  
content

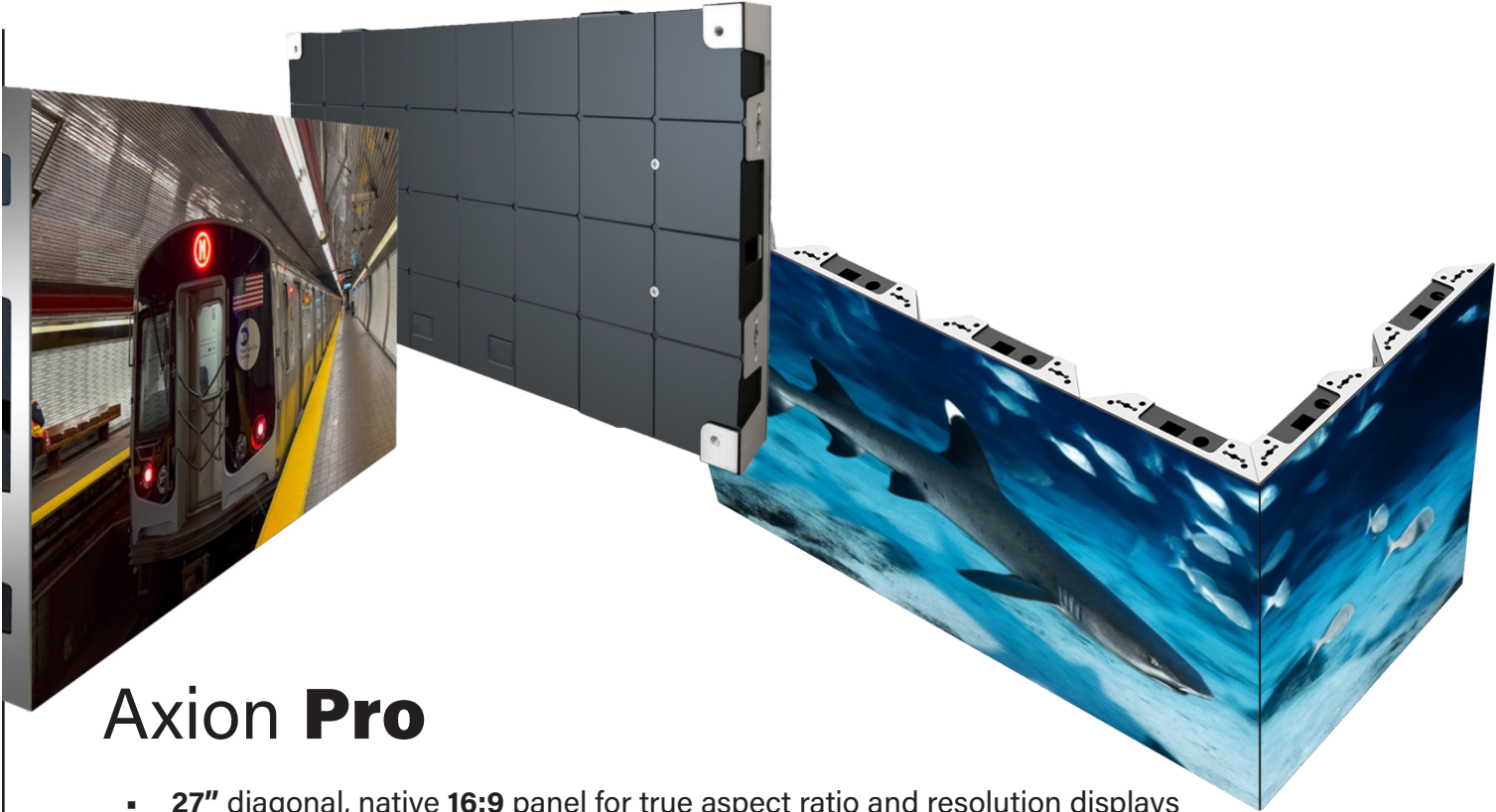


Replacing  
existing LCD  
and OLED  
videowall



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# 16:9 PANELS Indoor, fixed installation



## Axion Pro

- 27" diagonal, native 16:9 panel for true aspect ratio and resolution displays
- Compliant with Trade Agreement Act (TAA, - USA)
- Dual/redundant power and remote power options
- Dual/redundant receiving card support



## Axion COB

- 27" diagonal
- COB pixels
- Flip-chip cool LED technology



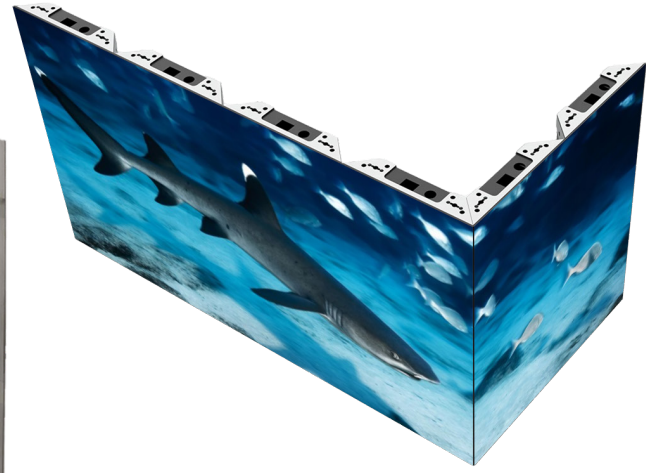
## Axion Pro XL

- 54" diagonal
- SMD/IMD pixels
- GOB optional



## Axion LCD Replacement

- VESA mounting
- 43", 55", and 65" panel sizes.



# Axion Pro

pitch	0.9	1.2	1.5	1.8	2.5	3.7
pixel tech	SMD	SMD	SMD	SMD	SMD	SMD



ideal for

## Indoor, fixed 16:9 displays

summary

Axion Pro is the best solution for indoor, fixed 16:9 displays. Covering the industry's most popular pitches for this application, Axion Pro utilizes SMD pixels as standard, and can have an optional epoxy masking or coating applied to provide enhanced durability. Gold bonding wire is also available.

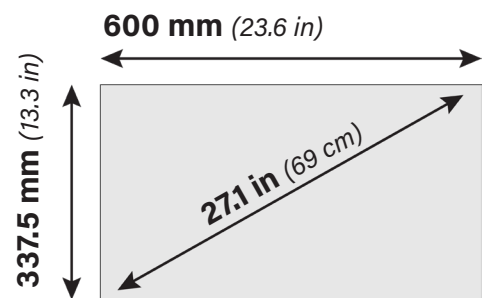
Axion Pro is available with standard 600x337.5 panels, and 300x337.5 half-width panels allowing for smaller design units, and narrower facets for curved displays.

special configurations



Visit our site to learn more!

dimensions



aspect ratio

16:9

weight

7.7 kg (17 lbs)

max brightness

1,200 nits

IP rating

IP41

optional

- Epoxy masking or coating
- IMD or MIP
- Protective edge trim
- 45-degree edges for corners
- Connecting plates
- Headers for hanging/flying
- Embedded controller
- Mobile cart, up to 5x5 array
- Flight cases
- Hydrophobic treatment
- Dual receiving cards
- Dual power supplies
- Remote AC>DC power conversion

# Axion Pro

SERIES NAME

MAXIMUM BRIGHTNESS (NITS)	up to 1,200	
DIMENSIONS	WIDTH	up to 600 mm (23.6 in)
	HEIGHT	337.5 mm (13.3 in)
	DEPTH	58 mm (2.3 in)
PANEL ASPECT RATIO	16:9, 8:9	
PANEL WEIGHT	up to 7.7 kg (17 lbs)	
MODULES PER PANEL	up to 4 per panel	
VIEWING ANGLE	HORIZONTAL	160°
	VERTICAL	160°
LED LIFETIME* (HRS)	100,000	
CONTRAST	up to 6,000:1	
DRIVERS	ICN 1069, ICN 2153 (depending on pitch)	
SCAN RATE	1/15, 1/27, 1/30, 1/60 (depending on pitch)	
PROCESSING DEPTH (BITS)	14 default (8-16 range)	
REFRESH RATE (HZ)	3,840 default (3,840 range)	
FRAME RATE	60 default (50, 60 options)	
COLOR TEMPERATURE	7,500 default (2000-12000 range)	
COLOR GAMUT	2.8(1.0-4.0)	
BONDING WIRE	Copper	
POWER COMMON	Anode, Cathode (depending on pitch)	
WATTS PER PANEL	55-138W max (19-48W average)	
WATTS PER SQ M	540-680W max (189-238W average)	
MAX AMPS PER CASCADE	10	
OPERATING VOLTAGE	100-240V AC, 50/60 Hz	
OPERATING TEMPERATURE	-10°C - +40°C	
MAXIMUM HEAT	187-471 BTU/hr (depending on pitch and panel size)	
HUMIDITY	10% - 80%, non-condensing	
IP RATING	IP41	
FRAME MATERIAL	Die-cast Aluminium	
HANGING AND STACKING	15 hanging max   30 stacking max	
REAR BOLT THREADING	M8	
POWER CONNECTORS	C13/C14	
DATA CONNECTORS	RJ45	
SERVICE ACCESS	Front	
WARRANTY	3 year (up to 5 available)	
CERTIFICATIONS	EMC-A, CCC, FCC, ETL, LVD, CE, RoHS, CB, PSE	



# Axion COB

pitch	0.6	0.7	0.9	1.2	1.5	1.8
pixel tech	COB	COB	COB	COB	COB	COB



ideal for

## Cool touch and close audience

summary

Axion COB is durable by design, creating the strongest dvLED display available. Chip-on-board pixel technology allows for super-fine pixel pitch without the fragility associated with standard dvLED pixels at fine-pitch.

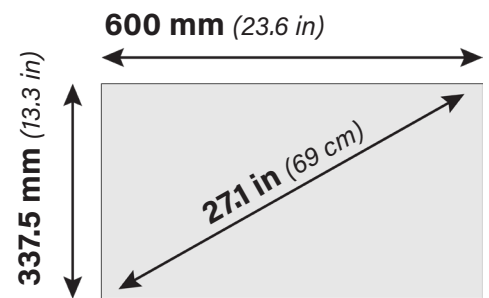
Axion COB is highly power efficient with flip-chip power handling and common cathode technology. Flip-chip technology eliminates the need for a gold or copper bonding wire, reducing both the power draw and heat generated through operation.

special configurations



Visit our site to learn more!

dimensions



aspect ratio

16:9

weight

4.7 kg (10.3 lbs)

max brightness

1,000 nits

IP rating

IP31

optional

- Protective edge trim
- 45-degree edges for corners
- Connecting plates
- Mobile cart, up to 6x6 array
- Flight cases
- Hydrophobic treatment
- Remote AC>DC power conversion



Custom power cascade connection

# Axion COB

SERIES NAME

MAXIMUM BRIGHTNESS (NITS)	up to 1,000	
DIMENSIONS	WIDTH	600 mm (23.6 in)
	HEIGHT	337.5 mm (13.3 in)
	DEPTH	28 mm (1.1 in)
PANEL ASPECT RATIO	16:9	
PANEL WEIGHT	4.69 kg (10.3 lbs)	
MODULES PER PANEL	up to 8 per panel	
VIEWING ANGLE	HORIZONTAL	170°
	VERTICAL	170°
LED LIFETIME* (HRS)	100,000	
CONTRAST	20,000:1	
DRIVERS	ICN1069, XM11203 (depending on pitch)	
SCAN RATE	1/30, 1/32, 1/40 (depending on pitch)	
PROCESSING DEPTH (BITS)	14 default (8-16 range)	
REFRESH RATE (HZ)	3,840 default (3840-7680 range)	
FRAME RATE	60 default (50, 60 options)	
COLOR TEMPERATURE	7,500 default (2000-12000 range)	
COLOR GAMUT	95%-97%	
BONDING WIRE	Flip-chip	
POWER COMMON	Cathode	
WATTS PER PANEL	91-91W max (32-32W average)	
WATTS PER SQ M	450-450W max (158-158W average)	
MAX AMPS PER CASCADE	15	
OPERATING VOLTAGE	100-240V AC, 50/60 Hz	
OPERATING TEMPERATURE	-10°C - +40°C	
MAXIMUM HEAT	311-311 BTU/hr (depending on pitch and panel size)	
HUMIDITY	10% - 80%, non-condensing	
IP RATING	IP41	
FRAME MATERIAL	Die-cast Aluminium	
HANGING AND STACKING	no hanging   30 stacking max	
REAR BOLT THREADING	M8	
POWER CONNECTORS	V3D	
DATA CONNECTORS	RJ45	
SERVICE ACCESS	Front	
WARRANTY	5 year (up to 7 available)	
CERTIFICATIONS	EMC-A, CCC, FCC, ETL, LVD, CE, RoHS, CB	



# Axion Pro XL



pitch	0.9	1.2	1.5	1.8	2.5
pixel tech	SMD	SMD	SMD	SMD	SMD

ideal for

Large, indoor 16:9 and 32:9 displays

summary

Axion Pro XL features a 54 inch diagonal panel, exactly double the width and height of the popular 600 x 337.5mm panel size present on Axion Pro and Axion COB panels. Paired with the most applicable pitches, Axion Pro XL can create the same displays as average 27-inch panels, but with a quarter of the panels.

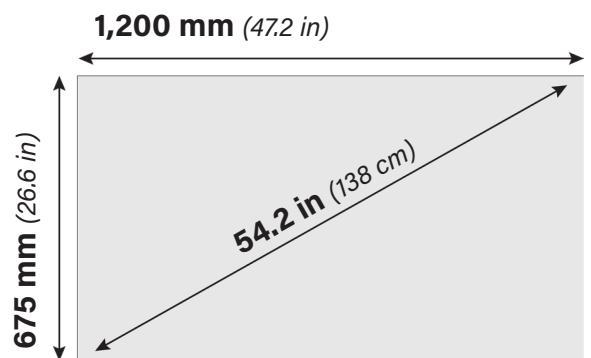
The Axion Pro XL frame includes VESA mounting points to enable a broad set of compatible mounting solutions.

special configurations



Visit our site to learn more!

dimensions



aspect ratio

16:9

weight

17.5 kg (38.6 lbs)

max brightness

1,000 nits

IP rating

IP41

optional

- Epoxy masking or coating
- Protective edge trim
- 45-degree edges for corners
- Connecting plates
- Mobile cart, up to 6x6 array
- Flight cases
- Hydrophobic treatment
- Remote AC>DC power conversion

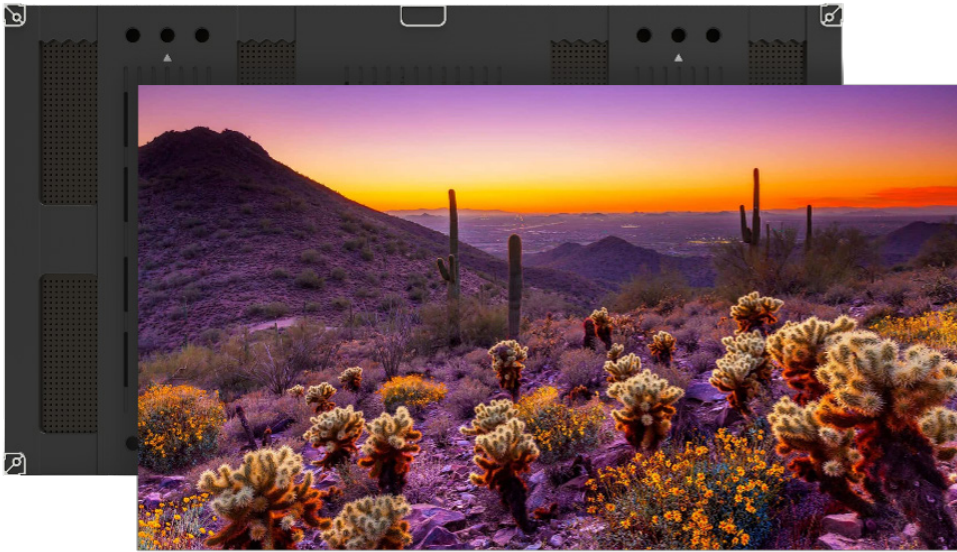
# Axion Pro XL

SERIES NAME

MAXIMUM BRIGHTNESS (NITS)	up to 1,000	
DIMENSIONS	WIDTH	1200 mm (47.2 in)
	HEIGHT	675 mm (26.6 in)
	DEPTH	28 mm (1.1 in)
PANEL ASPECT RATIO	16:9	
PANEL WEIGHT	17.5 kg (38.6 lbs)	
MODULES PER PANEL	up to 16 per panel	
VIEWING ANGLE	HORIZONTAL	160°
	VERTICAL	160°
LED LIFETIME* (HRS)	100,000	
CONTRAST	up to 6,000:1	
DRIVERS	ICN 2153, ICN1069 (depending on pitch)	
SCAN RATE	1/27, 1/30, 1/60 (depending on pitch)	
PROCESSING DEPTH (BITS)	14 default (8-16 range)	
REFRESH RATE (HZ)	3,840 default (3,840 range)	
FRAME RATE	60 default (50/ 60 options)	
COLOR TEMPERATURE	7,500 default (2000-12000 range)	
COLOR GAMUT	2.8 (1.0 - 4.0)	
BONDING WIRE	Copper	
POWER COMMON	Anode, Cathode (depending on pitch)	
WATTS PER PANEL	446-551W max (156-193W average)	
WATTS PER SQ M	550-680W max (193-238W average)	
MAX AMPS PER CASCADE	20	
OPERATING VOLTAGE	100-240V AC, 50/60 Hz	
OPERATING TEMPERATURE	-10°C - +40°C	
MAXIMUM HEAT	1,522-1,882 BTU/hr (depending on pitch and panel size)	
HUMIDITY	10% - 80%, non-condensing	
IP RATING	IP41	
FRAME MATERIAL	Die-cast Aluminium	
HANGING AND STACKING	no hanging   30 stacking max	
REAR BOLT THREADING	M8	
POWER CONNECTORS	XT60	
DATA CONNECTORS	RJ45	
SERVICE ACCESS	Front	
WARRANTY	3 year (up to 5 available)	
CERTIFICATIONS	EMC-A, CCC, FCC, ETL, LVD, CE, RoHS, CB	



Visit our site to learn more!



# Axion

# LCD Replacement

pitch	1.2	1.5	1.8	2.5
pixel tech	SMD	SMD	SMD	SMD
ideal for				

## LCD videowall replacement

### summary

The Axion LCD Replacement by Vanguard is a purpose-built replacement for existing LCD videowalls.

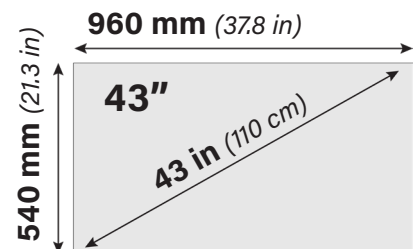
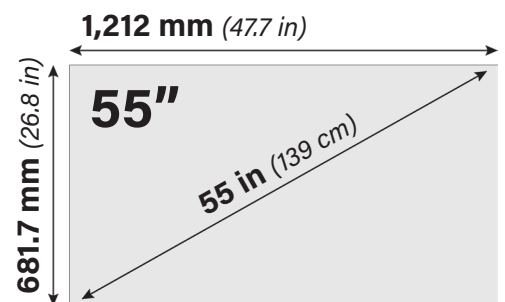
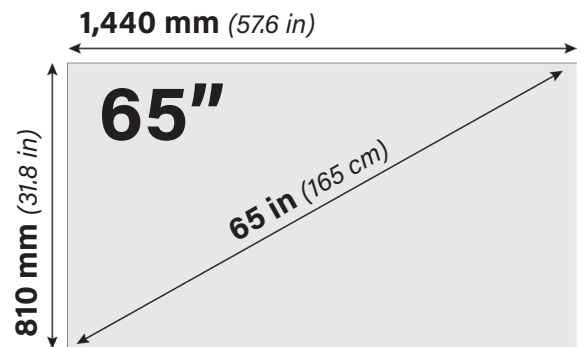
Featuring three panel sizes at 43", 55", and 65" diagonal, Axion's LCD Replacement series is likely to be a perfect swap-out solution to get rid of the heavy grid and drifting uniformity which plague LCD technology.

Axion LCD Replacement panels support VESA mounting so the new technology can directly replace LCD monitors on the same VESA mounts. Integrate the controller to one of the panels to use existing video cabling too!

### special configurations



### dimensions



max brightness

600 nits

IP rating

IP41

### optional

- Epoxy masking or coating
- Protective edge trim
- 45-degree edges for corners
- MIP-High Bright pixels
- Connecting plates
- Footers for stacking
- Embeddable controller
- Mobile cart
- Flight cases
- Hydrophobic treatment

16:9 PANELS indoor, fixed installation

# SERIES NAME Axion LCD Replacement (55in)

MAXIMUM BRIGHTNESS (NITS)	up to 600	
DIMENSIONS	WIDTH	1212 mm (47.7 in)
	HEIGHT	681.75 mm (26.8 in)
	DEPTH	40 mm (1.6 in)
PANEL ASPECT RATIO	16:9	
PANEL WEIGHT	15 kg (33.1 lbs)	
MODULES PER PANEL	8 per panel	
VIEWING ANGLE	HORIZONTAL	160°
	VERTICAL	160°
LED LIFETIME* (HRS)	100,000	
CONTRAST	6,000:1	
DRIVERS	ICN 2153	
SCAN RATE	1/45, 1/54, 1/60 (depending on pitch)	
PROCESSING DEPTH (BITS)	14 default (8-16 range)	
REFRESH RATE (HZ)	3,840 default (3,840 range)	
FRAME RATE	60 default (50, 60 options)	
COLOR TEMPERATURE	7,500 default (2000-12000 range)	
COLOR GAMUT	2.8 (1.0 - 4.0 )	
BONDING WIRE	Copper	
POWER COMMON	Anode	
WATTS PER PANEL	331-496W max (116-174W average)	
WATTS PER SQ M	400-600W max (140-210W average)	
MAX AMPS PER CASCADE	10	
OPERATING VOLTAGE	100-240V AC, 50/60 Hz	
OPERATING TEMPERATURE	-10°C - +40°C	
MAXIMUM HEAT	1,129-1,694 BTU/hr (depending on pitch and panel size)	
HUMIDITY	10% - 80%, non-condensing	
IP RATING	IP41	
FRAME MATERIAL	Die-cast Aluminium	
HANGING AND STACKING	no hanging   30 stacking max	
REAR BOLT THREADING	M8	
POWER CONNECTORS	C13/C14	
DATA CONNECTORS	RJ45	
SERVICE ACCESS	Front	
WARRANTY	3 year (up to 5 available)	
CERTIFICATIONS	EMC-A, CCC, FCC, ETL, LVD, CE, RoHS, CB	

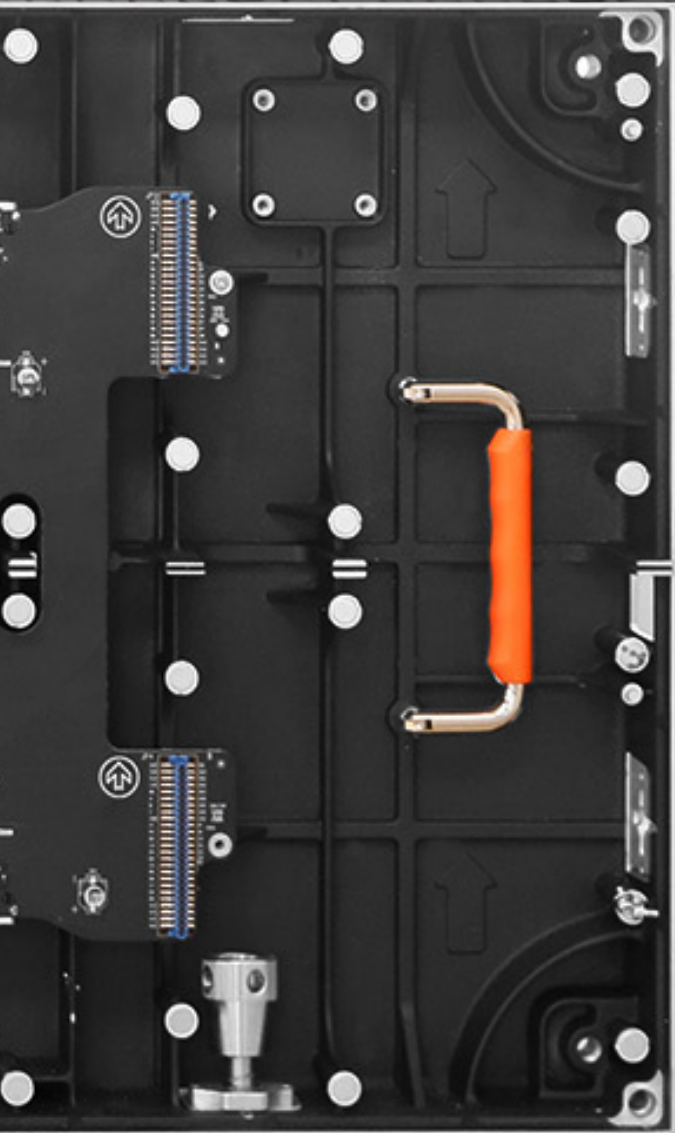
# Vanguard LED Displays

## summation

A leader in innovative digital LED display solutions, Vanguard offers an unrivaled range of products, technologies, and support.

Vanguard is an American-owned company, headquartered in Lakeland, Florida. Our mission statement - Complete customer satisfaction, defined by our core values of expertise, integrity, responsiveness, service, and value.

Our core values take many practical forms including Industry leading new technology, expert design advice at the outset of a project, timely quotes, the quickest lead times in the industry, helpful CADs and electrical drawings, professional commissioning, proficient on-site training, and stellar after-sales services.



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