PIXREAL

ENGINEERED FOR LONGEVITY

HIRO

PRODUCT BROCHURE



HIRO Series

LED Solutions for VP Studios, Film & Live Events

Indoor | Fine pitch LED | Flat, Curved & Cube

HIRO: Built for what cameras demand

HIRO is built for productions where image performance is non-negotiable. From virtual production stages to broadcast studios and live events, it delivers the cinematic precision that demanding workflows require.

The Pixreal HIRO is engineered around that reality. Combining up to 15,360 Hz refresh rate, 16-bit grayscale, and 99.9% DCI-P3 color coverage with a modular cabinet platform built for demanding production environments.

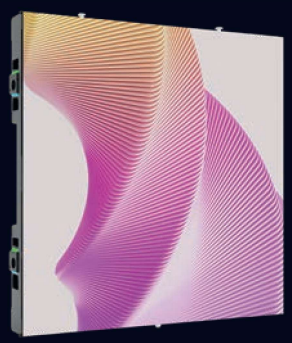
Whether the image calls for a precise flat wall, an immersive curved volume, or a three-dimensional configuration, HIRO adapts to the set. HIRO delivers the foundation for flat LED walls. HIRO-C adds adjustable curvature up to 45° concave or convex, allowing flat and curved sections to work together within one installation. HIRO-CUBE takes the same platform into three-dimensional configurations, turning LED from a surface into a space.

Different shapes. Different demands. One visual foundation.

#EngineeredForLongevity

Three cabinet architectures
One HIRO ecosystem.

HIRO
Flat



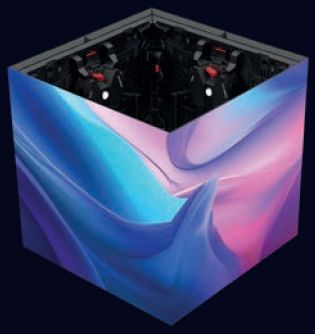
- Seamless flat-wall configurations
- Fine-pitch image performance
- Fast front & rear service
- Protected LED edges
- Built for professional production

HIRO-C
Curved



- Up to 45° concave/convex
- Adjustable curvature per cabinet
- Flat & curved configurations combined
- Built for immersive environments

HIRO-CUBE
3D



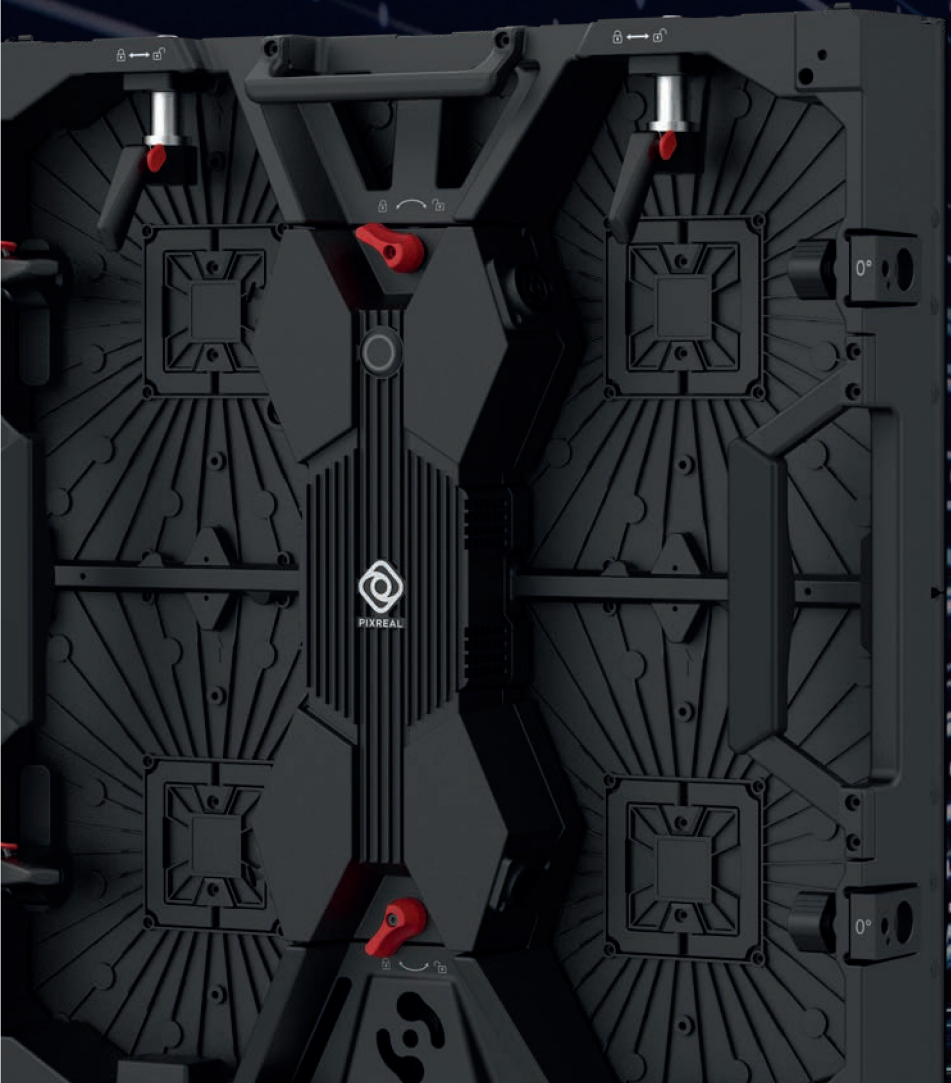
- Three-dimensional configurations
- Immersive LED environments
- Cube-based installations
- Designed for creative set design
- Built around the HIRO ecosystem

HIRO Flat

A flat LED wall leaves nowhere for inconsistency to hide. Every cabinet, seam and pixel has to align as one continuous surface.

HIRO is engineered to create that foundation. Its precision cabinet architecture supports fast alignment, consistent image performance and reliable front or rear servicing. From compact broadcast studios to large virtual production stages, the result is a surface that stays visually uniform across the entire frame.

HIRO Flat offers three performance levels - PRO / STANDARD / RENTAL



The premium choice for VP

Solved: ghosting, scan lines, color, and more.

VP Challenge	Solution with HIRO
Frame Ghosting	• 251Hz frame rate reduces motion; • Genlock synchronization eliminates ghost frames
Visible Scan Lines	• Low scan ratios (1/6 and 1/8) • High refresh rate maintained down to 4 nits without Genlock (customized version)
Multi-Camera Output	• Frame remapping allows different content to be sent to multiple cameras simultaneously
Color Accuracy	• Wide color gamut (BT.709, BT2020, DCI-P3) • DCI-P3 coverage at 99.9%; compliant with film-grade imaging standards



Key Specs HIRO Flat	
Cabinet Width	500 mm
Cabinet Height	500 mm
Cabinet Depth	70 mm
Cabinet Weight	8.6 kg
Amount of panels in cabinet	4
Panel size	250X250 mm
Curving	Concave 10° ~ Convex 7.5°
Max. Stacking / Hanging	20 panels
Transparency	Solid
Serviceability	Front & Rear
Angle Locking Systems	Rotation Lock & Angle Block Lock
Frame Material	Magnesium alloy

What can you build with HIRO Flat

HIRO Flat gives you the freedom to build straight LED walls in both stacked and hanging configurations for virtual production, broadcast, live events and fixed installations. When the design calls for more shape, the same cabinet system can create subtle concave curves of up to 10° or convex curves of up to 7.5°. From a precise flat backdrop to a screen that wraps around the camera, audience or stage, HIRO Flat adapts to the production while maintaining a clean, continuous visual surface.

One surface. No visual interruptions.



The camera sees what the eye may miss. Small differences in alignment, brightness or colour can become obvious through the lens, interrupting the image and exposing the technology behind it.

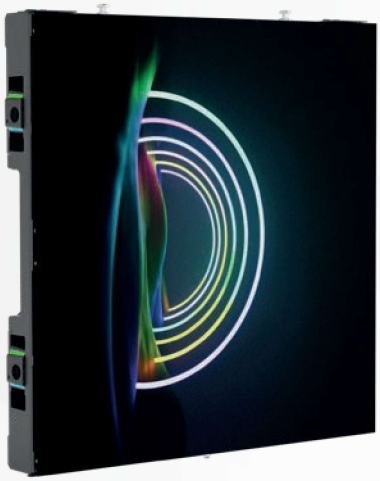
HIRO is designed to minimise these distractions. Its cabinet structure supports precise positioning and consistent panel-to-panel alignment, allowing individual cabinets to appear as one continuous surface. Clean seams and stable geometry keep the focus on the content, whether used for in-camera backgrounds, broadcast sets or high-resolution displays.

The result is more than a wall of panels. It is one visual plane, built for the camera.

No Compromise on Screen

170° Viewing angle. 1,800 Nits.

The viewing angle is one of those specifications that sounds simple on a datasheet but is actually the sum of several engineering decisions working together.



For the HIRO series, **a viewing angle of up to 170 degrees** isn't the result of one clever trick. It's what happens when chip architecture, wiring design, and packaging are all optimized toward the same goal: consistent image quality, no matter where the viewer or camera is standing. That same engineering also drives HIRO's brightness range, from 1,000 up to **more than 1,800 nits**, so the panel stays clear and vivid whether it's viewed straight on or from the extreme edge of that 170-degree range.

Up to 1.800 NITS

Up to 170° viewing angle

HDR Supported

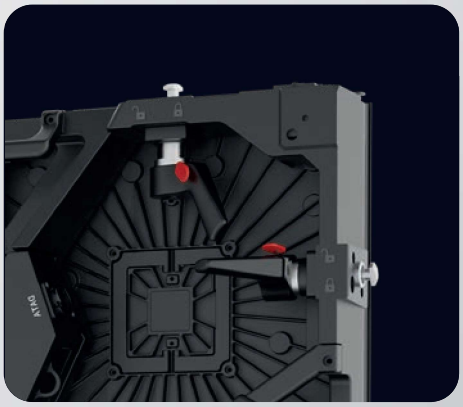
Locking Systems
Angle to the Design.

HIRO offers two toolless locking systems, each built for a different way of working. Rotation Lock has five preset angles built directly into the mechanism itself: 0˚, -2.5˚, 1.5˚, 2.5˚, and 5˚. No separate parts to source or misplace between shows, making it the natural choice for touring rigs, rental fleets, and fast-turnaround live events.

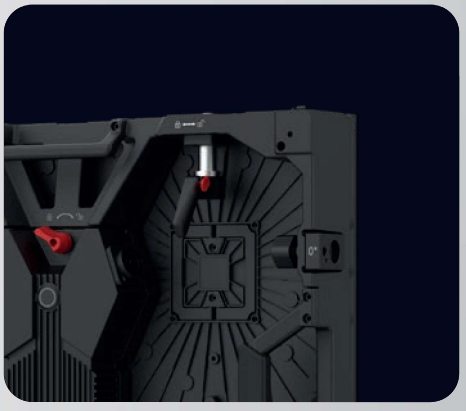
Angle Block takes a different approach, built for fixed and semi-fixed virtual production stages. Each block is manufactured for a specific angle and fully customized to the exact geometry a stage requires, whether that's a curved volume wall or a bespoke configuration that falls outside any standard preset.

7.5˚ CONVEX

10˚ CONCAVE



Rotation Lock



Angle Block Lock





Serviceable by Design
Protected by default.

Corners take the worst hits. Load-in, breakdown, the moment a cabinet meets concrete. That is where outer LEDs go.

HIRO shields the edges and corners when panels are moved, stacked, or floored. The mechanism absorbs the knock before it reaches the LEDs.

When service is needed, panels, modules, and power boxes come out on site. No dismantling the rig. No discarding a panel over one part. Less downtime. The show keeps moving.

Easy Maintenance

Edge Protection

HIRO Curve

A curved LED wall has to do more than follow a radius. Every cabinet, seam and pixel has to work together across changing angles while the image remains visually consistent.

HIRO-C is engineered to make that possible. Its adjustable cabinet architecture moves from flat to concave or convex configurations while maintaining precise alignment and consistent image performance. From broadcast sets and indoor events to immersive virtual production volumes, HIRO-C gives productions the freedom to shape the screen around the environment.

HIRO Curve offers three performance levels - PRO / STANDARD / RENTAL



Built for screens that go beyond flat

Solved: curves, limited flexibility, complex adjustment.

Production Challenge	Solution with HIRO-C
Visible Segmentation	• Cabinet curves from its centre for a smoother, more continuous surface • Creates clean visual lines for virtual production, broadcast studios and indoor events
Limited Design Freedom	• Each cabinet half rotates up to 22.5˚ • Creates up to 45˚ of total curvature, both concave and convex
Complex Curve Adjustment	• Angle adjustment is integrated into the multifunctional handles • Set and secure the required curve quickly without additional hardware
Combining Shapes	• HIRO-C can be used in straight, concave and convex configurations • Connects directly to standard HIRO cabinets within one continuous LED environment



Key Specs HIRO Curve	
Cabinet Width	500 mm
Cabinet Height	500 mm
Cabinet Depth	110 mm
Cabinet Weight	7.7 kg
Amount of panels in cabinet	2
Panel size	500X250 mm
Curving	Concave 45˚ ~ Convex 45˚
Max. Stacking / Hanging	20 panels
Transparency	Solid
Serviceability	Front & Rear
Frame Material	Magnesium alloy

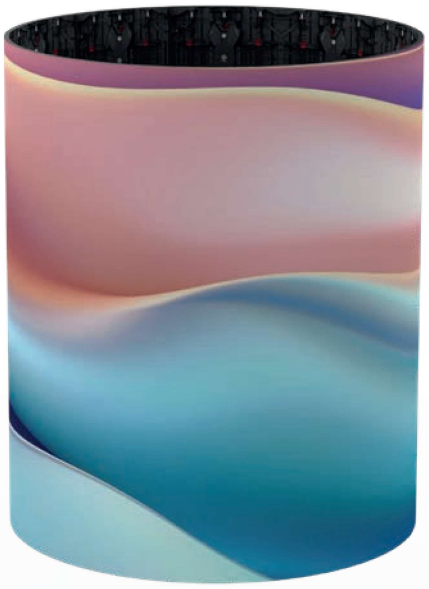
What can you build with HIRO Curve

HIRO-C gives you the freedom to shape LED walls around the production. Each cabinet can curve up to 45˚ concave or 45˚ convex, with each half rotating independently up to 22.5˚ to create smooth, controlled transitions across the display. From sweeping cycloramas and immersive broadcast sets to curved stages, columns and creative event environments, HIRO-C adapts the screen to the space while maintaining a clean, continuous visual surface. The multifunctional handles double as the rotation tool, making angle adjustment fast and intuitive during setup.

Curved up to 45°. Concave and convex.

A flat wall covers one kind of set. HIRO-C covers the rest.

HIRO-C curves from the center of the cabinet. Each half rotates up to 22.5 degrees, for 45 degrees across the panel, concave or convex.



Putting the pivot inside the cabinet means the curve is continuous rather than segmented. The surface follows the design instead of stepping around it, and tighter radii become possible without adding hardware or reducing cabinet count.

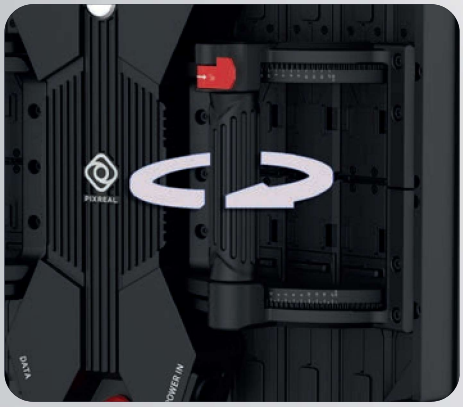
That approach carries into the rest of the specification.
A viewing angle of up to 170 degrees is what happens when chip architecture, wiring design, and packaging are all optimized toward consistent image quality, no matter where the viewer or camera is standing. Brightness runs from 1,000 up to more than 1,800 nits, so the panel stays clear and vivid whether it is viewed straight on or from the extreme edge of that 170-degree range.

Up to 1,800 NITS

Up to 170° viewing angle

45° CONVEX

45° CONCAVE



Multifunctional handles.

Easy curve adjustment.

Transport, handling, and angle adjustment in a single component. The rotation dial is integrated into the handle body. A red locking lever holds the setting. Flip it to adjust, turn to the required angle, flip it up to secure.



HIRO-C Interconnects

Combine flat & curved

HIRO-C runs curved or straight, and it connects directly to standard HIRO-Cabinets. Flat and curved sections lock into one wall, sharing the same frame, the same rigging and the same processing.



Serviceable by Design

Protected by default.

Corners take the worst hits. Load-in, breakdown, the moment a cabinet meets concrete. That is where outer LEDs go.

The automatic protection corner on HIRO series products uses built-in precision mechanics to buffer impacts during installation and disassembly. This shields the LEDs from collision damage, significantly extending the display's lifespan and ensuring long-term stability.

When service is needed, panels, modules, and power boxes come out on site. No dismantling the rig. No discarding a panel over one part. Less downtime. The show keeps moving.

Easy Maintenance

HIRO Cube

A three-dimensional LED structure brings a different challenge. Every corner, connection and pixel has to work together as the display moves beyond a single surface and into the space.

HIRO Cube is engineered to create that freedom. Its dedicated building elements support precise 90° corners, multi-sided columns and cube configurations while integrating with regular HIRO modules. From dimensional broadcast sets and virtual production environments to creative stages and indoor events, the result is an LED structure that becomes part of the design rather than simply the backdrop.

HIRO Cube offers three performance levels - PRO / STANDARD / RENTAL



Built for LED that takes shape

Solved: complex corners, special configurations, and more.

Production Challenge	Solution with HIRO Cube
Building Seamless Corners	• Dedicated elements make it easy to construct precise 90° corners • Content flows cleanly from one LED face to the next
Limited Spatial Possibilities	• Create corner displays, four-sided columns and complete six-sided cubes • Build eye-catching structures for broadcast studios, indoor events and creative installations
Combining 2D and 3D Shapes	• Cube elements connect directly to regular HIRO modules • Combine flat walls, corners and spatial objects within one continuous LED environment
Different Viewing Directions	• Present content across multiple visible faces • Create displays that attract attention from several positions within a venue or studio



Key Specs HIRO Cube	
Cabinet Width	500 mm
Cabinet Height	500 mm
Cabinet Depth	70 mm
Cabinet Weight	7.7 kg
Amount of panels in cabinet	4
Panel size	250X250 mm
Curving	Corner angle: 90°.
Max. Stacking / Hanging	20 panels
Transparency	Solid
Serviceability	Front & Rear
Frame Material	Magnesium alloy

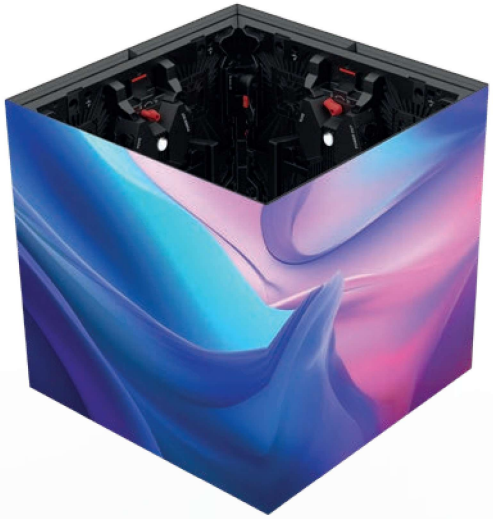
What can you build with HIRO Cube

HIRO Cube gives you the freedom to build LED in three dimensions. Dedicated elements create precise 90° corners, multi-sided columns and fully enclosed cube configurations, and can be combined with flat HIRO modules for even greater design flexibility. From dimensional broadcast sets and stage features to immersive event environments and creative installations, HIRO Cube takes the screen beyond the wall and into the space.

Built around every corner.

From a flat wall to a three-dimensional canvas.

HIRO Cube uses dedicated building elements to create precise 90-degree connections. Content continues around the corner without the visible gap or bulky adapter that can interrupt a conventional LED structure.



Combine the elements to build sharp corners, four-sided columns or complete six-sided cubes. The result can stand within a broadcast set, become part of an indoor stage design or create a digital object that attracts attention from multiple directions.

Because HIRO Cube remains part of the wider HIRO ecosystem, the same image performance and processing continue across every face. Each side reads as part of one structure, whether viewed by the audience, through the camera or from across the room.



Integrated angle locks.

Built to hold the shape.

The right-angle locking system is integrated directly into the cabinet frame. It positions adjoining elements at a precise 90-degree angle and keeps the connection secure throughout the production.

No separate corner adapters. No complicated external hardware. Just a fast, repeatable connection for both stacked and flown structures.



HIRO Cube interconnects

Combine flat & three-dimensional.

HIRO Cube elements connect directly to regular HIRO cabinets. Flat walls can transition into corners, columns and enclosed structures while sharing the same mechanical platform, rigging approach and processing.

This makes it possible to extend an existing HIRO setup with three-dimensional elements without introducing a separate cabinet system.



More faces. More possibilities.

Content from every direction.

HIRO Cube turns the display into part of the physical environment. Build around architectural corners, create freestanding columns or construct complete cubes for broadcast studios, indoor events, exhibitions and immersive set designs.

With multiple visible faces, content can meet audiences and cameras from more than one direction.



Key features

Every specification in the HIRO series exists for a reason. Each feature is engineered to keep the image accurate, the hardware reliable, and the creative vision intact from setup to final frame.

Because on set, the technology has one job: to disappear into the work and let the image speak for itself.

HDR Supported

Richer contrast, accurate color, and lifelike detail reproduction. HIRO meets the visual demands that broadcast and film-grade imaging require.

Up to 15,360Hz Refresh Rate

Eliminates motion artifacts and scan line visibility at any camera shutter speed. What the lens captures is exactly what was displayed.

16-Bit Grayscale

Finer point-by-point correction, improved low-brightness performance, and precise HDR electro-optical matching. Shadow detail stays clean even at 4 nits.

170° Viewing Angle

Full image consistency across extreme off-axis positions. No restrictions on camera placement or rig movement. (rental version has 160°)

Automatic Edge Protection

LED edges are shielded during assembly and disassembly. Fewer damaged pixels, lower repair costs, longer service life.

Front and Rear Serviceability

Modules swap out from both sides without dismantling the wall. Downtime on set stays minimal.



Built for the demand
Three Levels of Performance.

From high-end virtual production to professional rental, HIRO covers the full range without stepping down on mechanical precision or build quality. Each variant is engineered for a specific application and performance requirement, so the right tool is always within reach.



HIRO *PRO*

- Reference choice for high-end virtual production
- Premium MIP/SMD LED configuration
- Scan ratio of 1:10 or better
- Up to 15,360Hz refresh rate
- Extreme high frame rate
- Wide viewing angles 170°



HIRO *STANDARD*

- Workhorse for mid-range virtual production and high-end rental
- Premium LED configuration
- High-end image performance at a broader price point
- No compromise on mechanical precision



HIRO *RENTAL*

- Engineered for professional rental and staging
- Classic MIP/SMD configuration
- Fast assembly
- Chassis built for repeated transport and setup
- Edge protection
- Right choice when turnaround speed and durability drive the decision



HIRO PRO

The HIRO Pro is Pixreal's flagship in-camera performance level, engineered for the most demanding virtual production and broadcast environments.

Built on a full magnesium alloy frame with Premium MIP/SMD configuration, it delivers film-grade image accuracy that holds up under the scrutiny of modern cinema cameras.

A refresh rate of up to 15,360Hz eliminates flicker at any frame rate. 16-bit grayscale and 99.9% DCI-P3 color coverage meet the precise standards set by high-end film imaging. Frame remapping enables simultaneous multi-camera output, removing the need for compromise when your production runs more than one camera angle. Genlock synchronisation eliminates ghost frames entirely.

15.360 HZ REFRESH RATE	**250** FPS	**up to 16 bit** GRAYSCALE DEPTH	**≥1.800*** NITS P1.5 PRO

Available Pixel Pitches

1.56 mm | 1.95 mm | 2.31 mm | 2.60 mm

Applications

HIGH-END VP | BROADCAST STUDIO | XR STAGE | FLIGHT SIMULATION | DRIVING SIMULATION

**Max brightness Calibrated*

Specifications	HIRO 1.5 PRO	HIRO 1.9 PRO	HIRO 2.3 PRO	HIRO 2.6 PRO
DIFFERS PER MODEL				
Pixel pitch	1.56 mm	1.95 mm	2.31 mm	2.60 mm
Scan ratio	1/10	1/8	1/6	1/8
LED configuration	Flip Chip IMD, Common Cathode	SMD1212 Black	SMD1515 Black	SMD1515 Black
Max brightness (calibrated)	≥1,800 nits	≥1,500 nits	≥1,500 nits	≥1,500 nits
Panel resolution (H x V)	320 x 320	256 x 256	216 x 216	192 x 192
Power consumption max / avg	120W / 40W	160W / 55W	160W / 55W	160W / 55W
IDENTICAL ACROSS ALL MODELS				
Contrast ratio	≥10,000:1			
Viewing angle (H/V)	170° / 170°			
Refresh rate	Up to 15,360 Hz			
Gray scale	≥16-bit			
Processing platform	Brompton / NovaStar 5G			
Operating environment	-20°C ~ +40°C / 10% ~ 90% RH			
Certifications	CE, ETL, FCC, RoHS, WEEE			



HIRO STANDARD

The HIRO Standard brings proven Premium MIP/SMD image performance to productions that demand reliability without requiring the absolute ceiling of the Pro tier.

It delivers consistent in-camera results across a broad range of applications. A 7,680Hz refresh rate and 15-bit grayscale processing ensure clean, artefact-free output on camera.

The HIRO 1.5 and 1.9 use Flip Chip IMD configurations for precise low-brightness performance. A strong price-to-quality position makes the Standard the natural choice for rental houses and production companies building scalable LED inventory.

7.680	250	up to 16 bit	≥1.500*
HZ REFRESH RATE	FPS	GRAYSCALE DEPTH	NITS

Available Pixel Pitches

1.56 mm | 1.95 mm | 2.31 mm | 2.60 mm

Applications

HIGH-END VP | HIGH-END RENTAL | LIVE TV | STUDIO PRODUCTION | CORPORATE EVENTS

Max brightness Calibrated

Specifications	HIRO 1.5	HIRO 1.9	HIRO 2.3	HIRO 2.6
DIFFERS PER MODEL				
Pixel pitch	1.56 mm	1.95 mm	2.31 mm	2.60 mm
Scan ratio	1/16	1/16	1/12	1/16
LED configuration	Flip Chip IMD, Common Cathode	SMD1212 Black	SMD1515 Black	SMD1515 Black
Contrast ratio	≥10,000:1	≥7,500:1	≥10,000:1	≥10,000:1
Panel resolution (H x V)	320 x 320	256 x 256	216 x 216	192 x 192
Power consumption max / avg	120W / 40W	160W / 55W	160W / 55W	160W / 55W

IDENTICAL ACROSS ALL MODELS	
Max brightness (calibrated)	≥1,500 nits
Viewing angle (H/V)	170˚ / 170˚
Refresh rate	7,680 Hz
Gray scale	≥16-bit
Processing platform	Brompton / NovaStar 5G
Operating environment	-20˚C ~ +40˚C / 10% ~ 90% RH
Certifications	CE, ETL, FCC, RoHS, WEEE



HIRO RENTAL

The HIRO Rental series is built around one premise: a system that cannot survive the road is a system that fails the people relying on it.

The HIRO (R)ental adds specific durability engineering for high-frequency assembly and disassembly cycles. Under-Glue technology protects LEDs through every loading cycle. Automatic edge protection reduces pixel damage during transport. An integrated power box with fast module swap-out keeps unplanned downtime to a minimum. At 3.840Hz refresh and 14-bit grayscale, image quality remains professional-grade across every show, night after night.

3.840 HZ REFRESH RATE	**20 panels** STACK / HANG	**14 bit** GRAYSCALE DEPTH	**≥1.000*** NITS

Available Pixel Pitches

1.56 mm | 1.95 mm | 2.31 mm | 2.60 mm

Applications

PROFESSIONAL RENTAL | LIVE EVENTS | TOURING | FESTIVAL STAGING | BROADCAST

**Max brightness Calibrated*

Specifications	HIRO 1.5 R	HIRO 1.9 R	HIRO 2.3 R	HIRO 2.6 R
DIFFERS PER MODEL				
Pixel pitch	1.56 mm	1.95 mm	2.31 mm	2.60 mm
Scan ratio	1/40	1/32	1/27	1/32
LED configuration	IMD 2 in 1	IMD 2 in 1	SMD1515	SMD1515
Panel resolution (H x V)	320 x 320	256 x 256	216 x 216	192 x 192
Power consumption max / avg	160W / 55W	160W / 55W	160W / 55W	160W / 55W
IDENTICAL ACROSS ALL MODELS				
Max brightness (calibrated)	≥1,000 nits			
Contrast ratio	≥5,000:1			
Viewing angle (H/V)	160° / 160°			
Refresh rate	3,840 Hz			
Gray scale	14-bit			
Processing platform	Brompton / NovaStar 5G			
Operating environment	-20°C ~ +40°C / 10% ~ 90% RH			
Certifications	CE, ETL, FCC, RoHS, WEEE			

Ready for the Road

Protecting HIRO in transit is part of the engineering. The dedicated HIRO flight case holds the cabinets, secured for transport between venues, load-ins, and storage.





Product code: PHA-FLY

Flightcase for HIRO

Designed for seamless event production, the HIRO flight case line offers two efficient transport configurations. Choose between the standard flight case, which carries 8 cabinets (50 x 50 cm) stored vertically, or the double flight case, which holds 16 cabinets lying flat and split 8 to a side. The double case opens down the middle for instant access to both stacks, saving valuable time on site.

Whichever option you choose, your LED panels remain fully protected and ready for quick deployment at every venue.



Hanging

HIRO hangs from truss or any suitable rigging host. Rigging bars connect directly to the cabinet frame and carry the load up to the structure above.

The bars come in several widths, so the hang follows the layout you designed. One hang carries up to twenty cabinets. Bar choice follows the panel arrangement.

Every truss position sets its own limits. Our support team reviews bar selection, hang points, and load distribution with you before the build starts, so the structure is worked out on paper before the first cabinet leaves the flight case.

Stacking

HIRO builds from the floor on a base stacking frame system. The frame sets the footprint and the angle, then extends upward with the rigging the wall requires. Ballast anchors the structure. Every element is specified per project, because the floor, the height, and the room decide what the build needs.

Ground support stacking carries up to twenty cabinets. Ballast follows the height.

No two venues load the same way. Our support team works through frame extension, ballast weight, and load paths with you well before the build starts, so the structure is worked out on paper before the first cabinet goes up.





HIRO-Accessories

Rigging Accessories for the HIRO and HIRO-C Series

HIRO Stacking Accessories

HIRO Stacking Beam Large



Product code: PHA-LBASE-RL

Fits two cabinets

HIRO Stacking Beam Small



Product code: PHA-SBASE-RL

Fits one cabinet

HIRO Stacking Base Truss



Product code: PHA-SBT

HIRO Stacking Base Ladder



Product code: PHA-SBL

HIRO-Cabinet Rigging Coupler



Product code: PHA-COUPLER

HIRO Stacking Stabilizer Small



Product code: PHA-SBSTABS

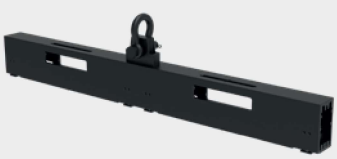
HIRO Stacking Stabilizer Large



Product code: PHA-SBSTABL

HIRO Hanging Accessories

HIRO Rigging Bar Large



Product code: PHA-RBARL

HIRO Rigging Bar Small



Product code: PHA-RBARS



THANK YOU

Pixreal HQ

Beijing, China
Email: led@pixrealled.com

Pixreal EMEA

Amsterdam, Netherlands

Document: Pixreal HIRO Brochure
Version: 1.0
Revision date: September 2026
Supersedes: all previous editions

Specifications, product codes, and availability are subject to change without notice. Pixreal pursues a policy of continuous product development, and the information in this document reflects the state of the range at the revision date above. Dimensions, weights, and performance figures are nominal and may vary within stated manufacturing tolerances. Images are indicative and may show optional accessories or configurations not included as standard.

This document is provided for general information and does not constitute a contractual specification or an offer. Before specifying, quoting, or ordering, confirm current technical data with your Pixreal representative or at pixreal.eu. Compliance marks and certifications listed apply to the products and configurations stated in the relevant specification tables at the date of publication.
All content is copyright Pixreal. Product names and trademarks are the property of their respective owners.