ARIEL SERIES

- LED RENTAL
- REAL-TIME MONITORING
- HIGH BRIGHTNESS
- FRONT & REAR MAINTENANCE
- SIGNAL HOT BACKUP
- MODULAR DESIGN

WIND THROUGH RENTAL

PLEDCO

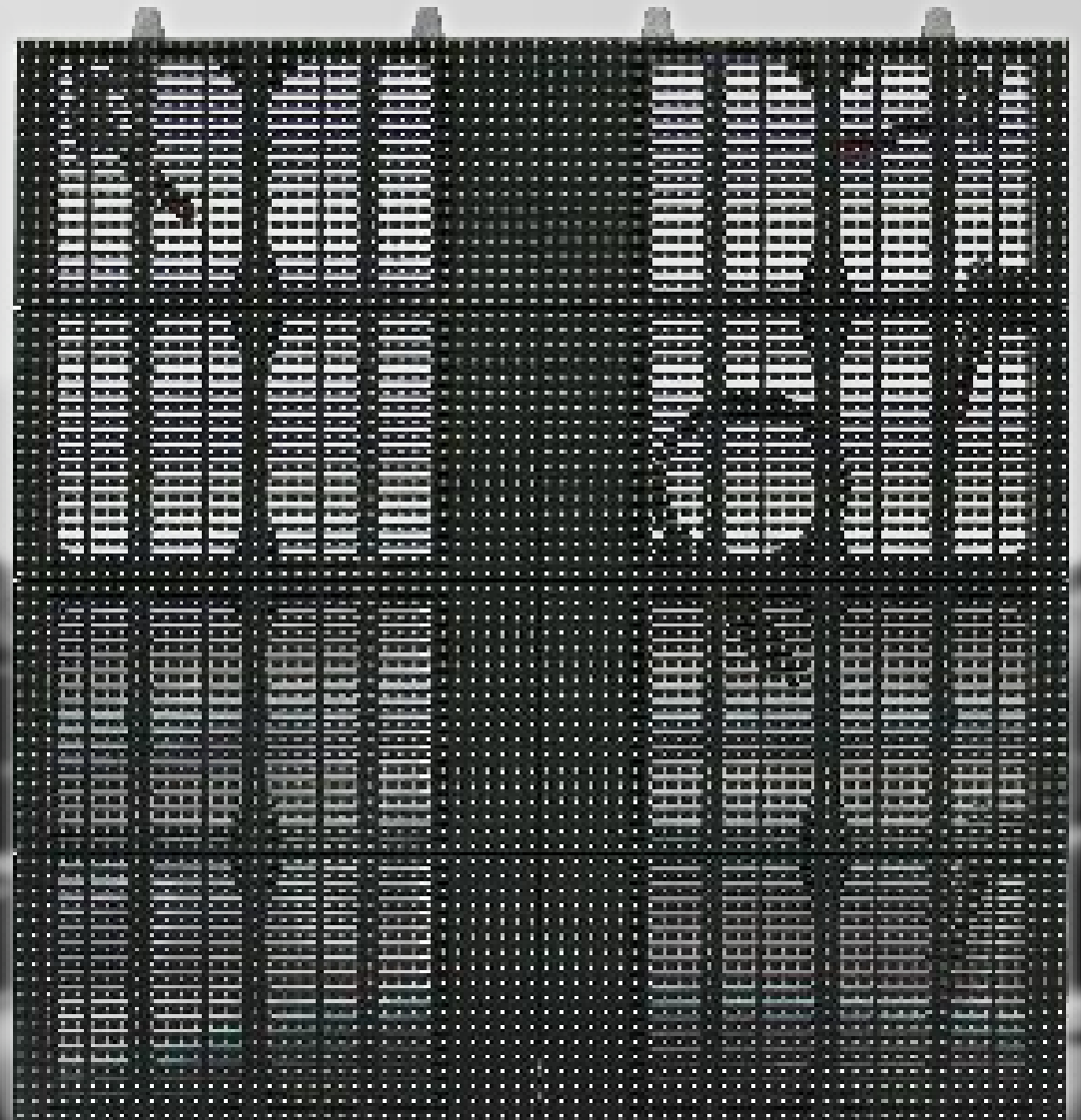PRISTINE IMAGERY

ARIEL

Manufactured specifically for touring & rental markets. Our ARIEL Series is network-ready, and our **Rig & Click** technology, allows **TOOL-FREE** installation this in turn has been designed to increase installation time and reduce operational costs.

Mechanical
COMPATIBILITY

The ARIEL is able to integrate with any Pro Tour Series cabinets as well as our LDU 8000 and 2800 controllers.

Strong
AND RIGID

Max. hanging capacity is 20 cabinets high (TÜV certified)

Lightweight
MATERIALS

16kg. per cabinet

Heat
DISSIPATION

We use natural convection in our Heat Sink technology, thus creating no noise emissions and low maintenance costs.

Quick
SETUP

With our patented **Rig & Click** technology, you can install and stack cabinets without any tools. This function is crucial for the touring market.

Modular
DESIGN

Slim and compact sized cabinets; 768(H) x 768 (W)mm
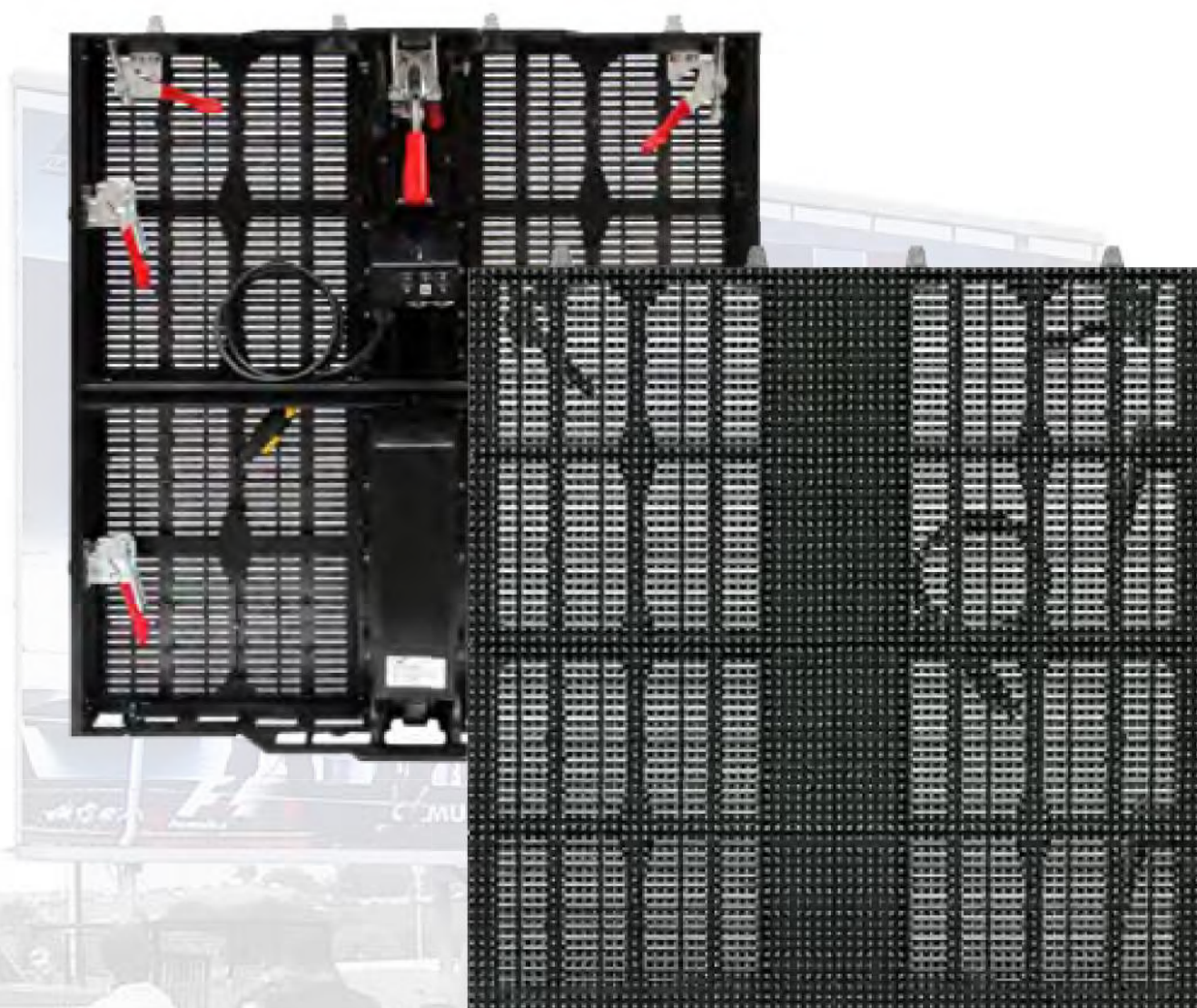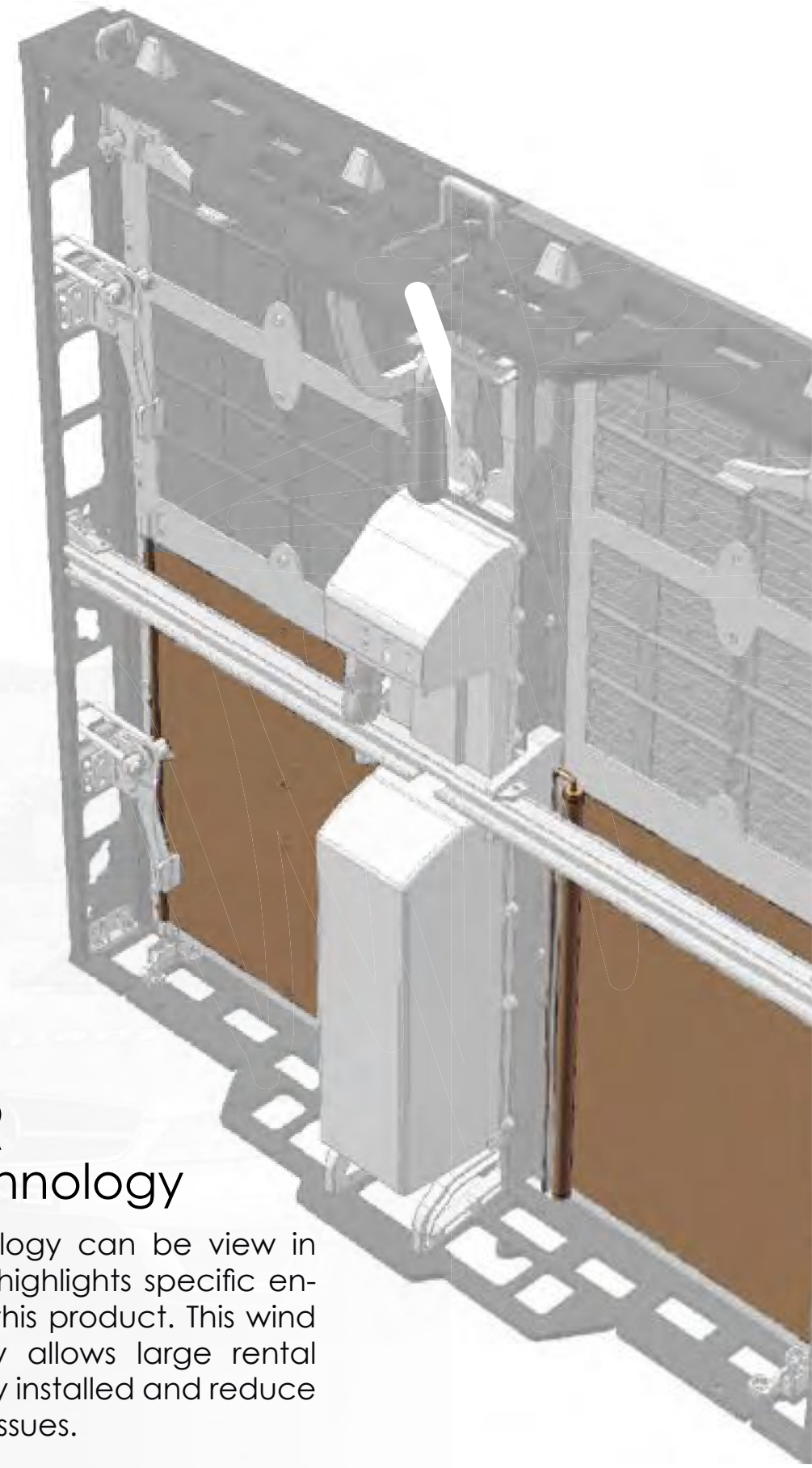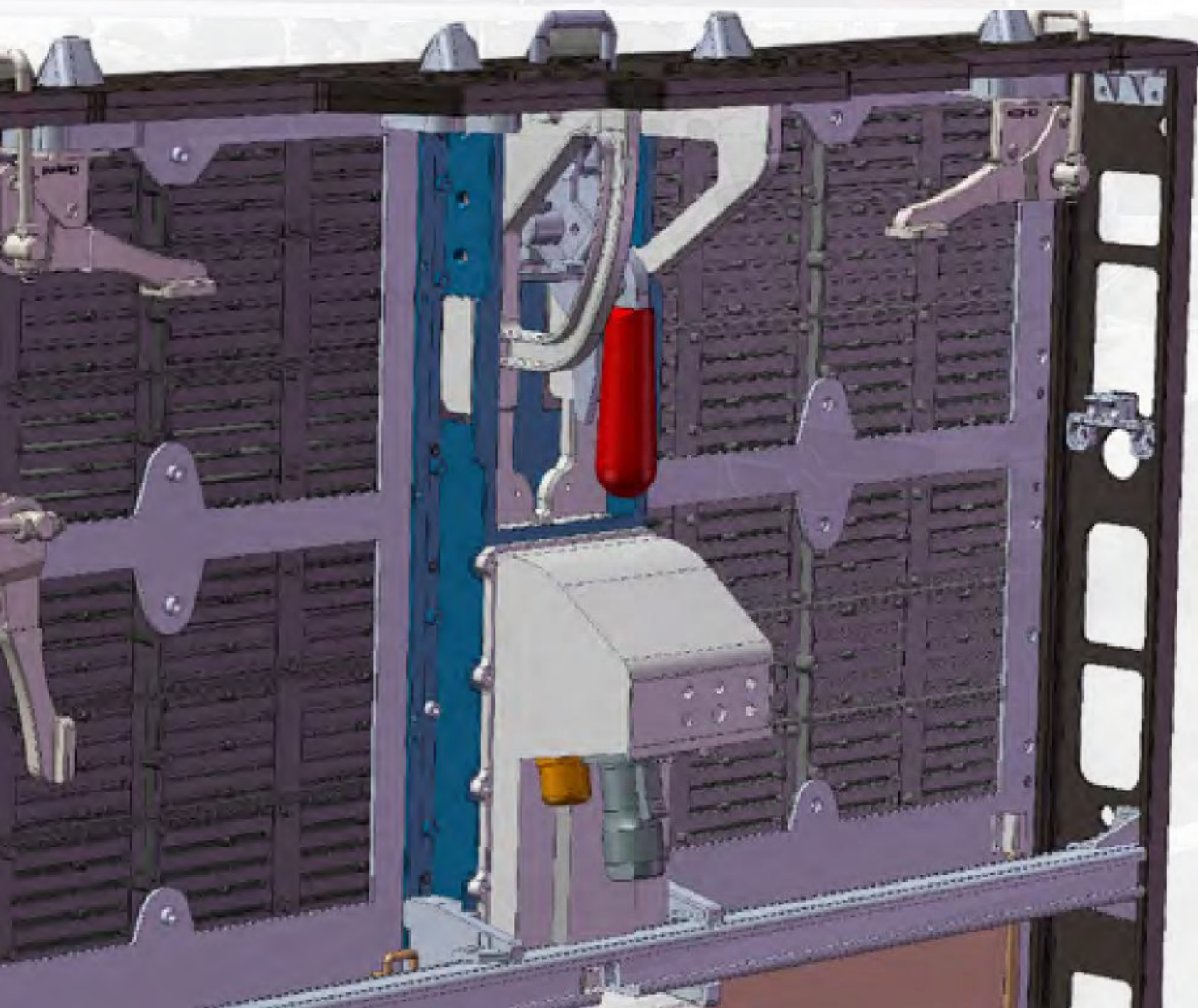
SHADER
Curtain Technology

Our revolutionary shade curtain has been specially designed to block light beams from the rear of the cabinet resulting in a 100% clear view of the LED display.

ARIEL

From sports stadiums to concerts and beyond, PLEDCO has over 25 years' experience in meeting customers' unique needs. Backed by a talented team of engineers and designers, plus a robust product line, PLEDCO can turn your display dream into a reality.
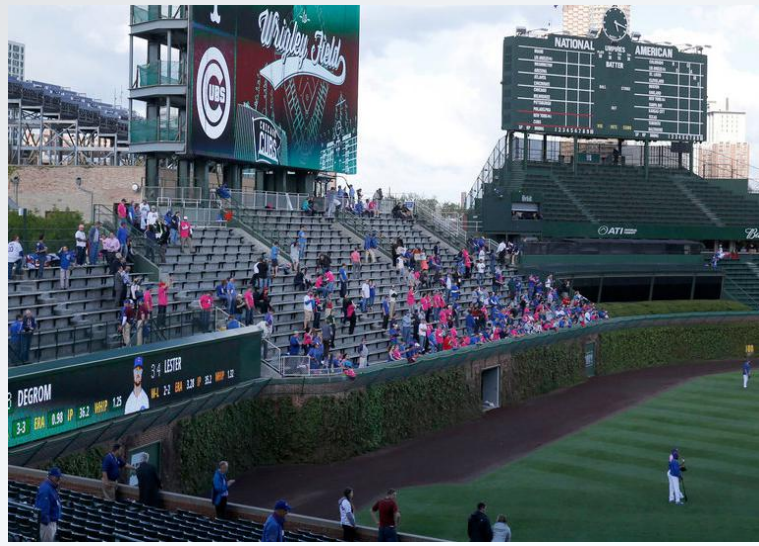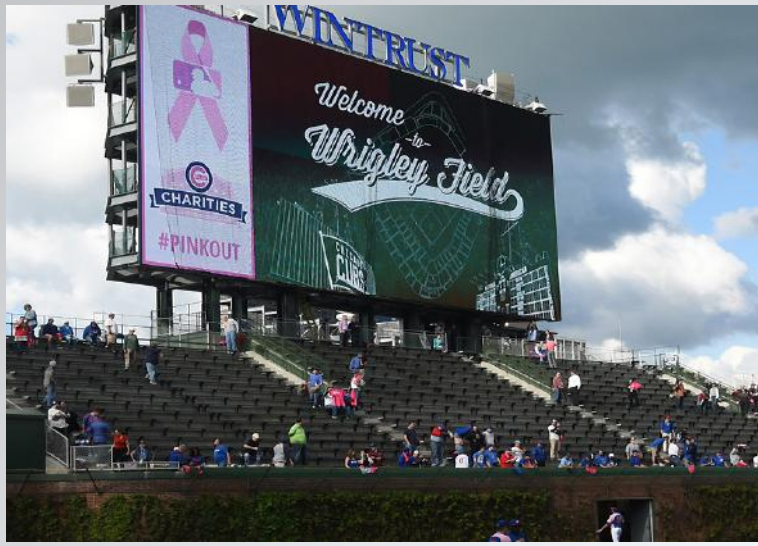
SHADER
Curtain Technology

Our Shader technology can be view in a 3D image which highlights specific engineering points of this product. This wind through technology allows large rental screens to be quickly installed and reduce the risk of structural issues.

PLEDCO HD DISPLAY

Our calibration technology reaches all possible X & Y coordinates ensuring you HD broadcasting experience is crystal clear.

SYSTEM
CALIBRATION

All X & Y coordinates are kept in our client project database. When you order new tiles for an existing project we retrieve the original X & Y coordinates. This ensures during calibration all colors are matched properly. Typically, in video mode, no color differences are visible, however, if white has been set at 50% brightness, the user may see a slight difference in color.

1 COLOR
ENHANCING

After calibrating with our Radiant PM-1400F Calibration System in a dark room, the wave length difference for each color will only be less than 0.01nm. Our patented control system allows users to select several different color spaces such as; 2k (REC709), 4K (REC2020) or create your own color space by using our user-friendly software.
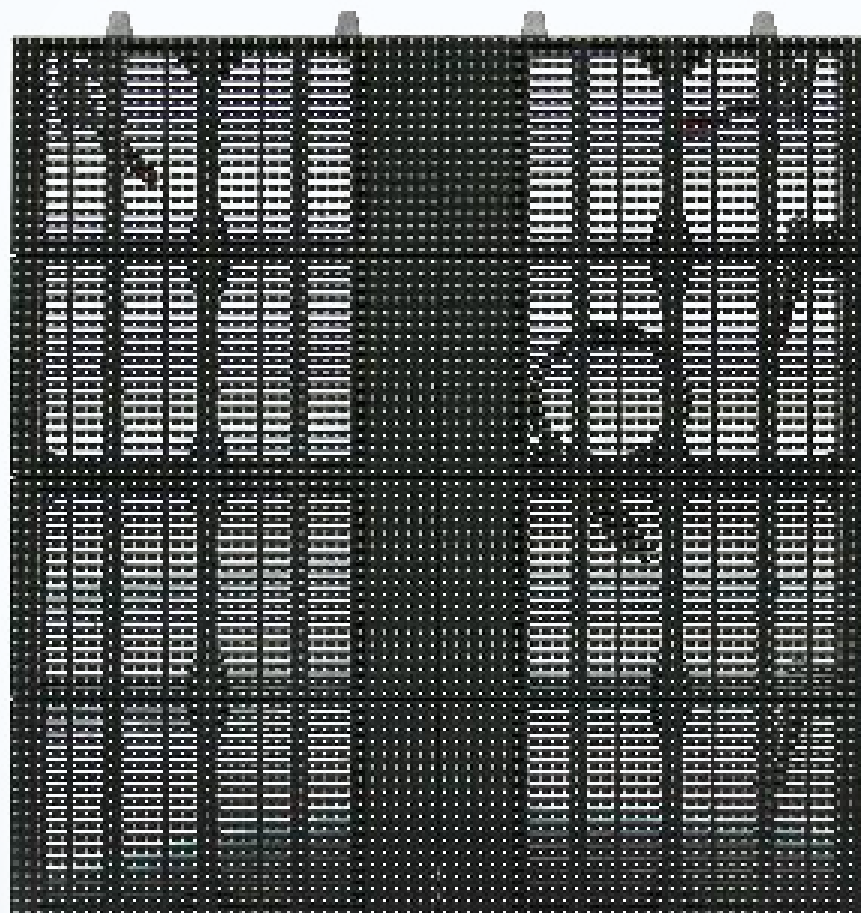
2 COLOR COORDINATION
PROCESS

The same batch of LED's with discrete distribution are all moved to PAL Mode Chroma Area through color coordinate calibration Technology.

Since each LED batch produced has different coordinates this requires precise color calibration, which in turn allows:

► Allows the LED display to show natural and vivid colors.

► Ensures that all LEDs have been color rendered consistently.

3 DIGITAL DATA
REVISION

If a single pixel fails, the data will be read-out from the EEPROM and then re-wrote to the replacement chip. After this process, the brightness value is calibrated again to ensure the uniformity of the entire system, thus providing easy and fast maintainability.

At the same time, the system records every displays' initial calibration data to avoid unevenly brightness caused by led attenuation. The updated screen brightness calibration data and recorded data, both ensure the uniformity of the display's brightness over a period of time.

MPU9000 SPECIFICATIONS

**KEY FEATURES**

Input

Type	Channel	Connector	Details
DisplayPort	1	DisplayPort Standard	Supports DisplayPort 1.2. Max.3840×2160@30Hz
HDMI	3	HDMI Standard	Supports HDMI 1.4 Max.3840×2160@30Hz
DVI	2	DVI-I	Analog inputs not supported. DVI1 Supports dual-link Max.2560×1600@60Hz
SDI	1	BNC	Supports SMPTE 425M-Level A(3G-SDI), SMPTE 292M(HD-SDI), SMPTE 259M-C(SDI)
VGA	1	HD-15	Max.1080P@60Hz
YPrPb	1	3.5mm jack	Max.1080P@60Hz
Genlock	1	BNC	SD bi-level and HD tri-level sync, PAL, NTSC, 720p, 1080i/p, 576i/p, 480i/p

Output

Type	Channel	Connector	Details
DisplayPort	1	DisplayPort Standard	Supports DisplayPort 1.2. Max.3840×2160@30Hz
HDMI	1	HDMI Standard	HDMI1.4.Suports 12bit deep color
DVI	1	DVI-I	Loop out from DVI2 input
SDI	1	BNC	Loop out from SDI input
Genlock	1	BNC	Loop out from Genlock Input
SPDIF	1	RCA	Supports standard S/PDIF for stereo LPCM or compressed audio up to 192 kHz
Headphone	1	6.5mm audio jack	Stereo Audio Output
LED Datalink	6	Neutrik etherCON	1Gbps/port

Others

Control Methods	USB, Gigabit Ethernet, IR, HMI on the Font Panel
Power	Neutrik powerCON connector, 100-240 VAC, 50-60 Hz, Max.25W
Temperature	-10 ~ +50 °C
Mechanical	472×375×90 mm

Optional

	Fiber optical direct output, single mode or multi mode MPU9000 (FM or FS)

- Integrated with SWITCH Monitor(2x2), Video Processor, Full-HD Media Payer and LED Display Controller

- Supports SD Card and mSATA SSD Mass Storage devices (up to 256GB for SSD and 200GB for SD)

- Available in fiber version with single mode or multi mode direct fiber output

- Supports DisplayPort 1.2, HDMI 1.4, dual-link DVI and 3G SDI Inputs

- Advanced Faroudja® video processing: MADi and DCDi

- Supports daisy chaining of monitors of up to four streams

- 6GB LED Display Data Link(optional fiber output)

- 6-axis color control independent of ACC

- 4K×2K screen resolution support

- Supports Gigabit Ethernet

- Built-in 6.5mm audio jack

- SPDIF Output by coaxial

- Supports Genlock

- Built-in Monitor

- 16bits Process

PRODUCT
FEATURES
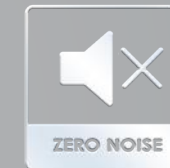
Custom designed by an industry leading Canadian engineer, our ARIEL SERIES is equipped with automatic brightness technology to overcome any lighting conditions while delivering HD imagery.

Industry Canada Industrie Canada
ICES-003 INFORMATION TECHNOLOGY EQUIPMENT (ITE)

European Commission LOW VOLTAGE DIRECTIVE

SPECIFICATION

OVERVIEW	FEATURES	MODELS	
MECHANICAL	Pixel Pitch	10.6mm	12.8mm
	Cabinet Material	Black anodized alluminium series 6 laser cuted	
	Application	Indoor and Outdoor	
	Curvability	Flat	
	Cabinet Surface (SQM)	0.589	
	Cabinet Size (W x H x D - mm)	768 x 768 x 140	
	Cabinet Resolution (W x H - pixels)	72 x 72	64 x 64
	Cabinet Weight (KG)	24	
	Cabinet Flatness (W x H x D - mm)	<= 0.2	
	Pixel Density (SQM)	8900	6104
	Tile Size (W x H x D - mm)	384 x 192 (4x2 per panel)	
	Tile Resolution (W x H - pixels)	36 x 18	32 x 16
	Pitch Tolerence	0.05mm	
	IP Grade	IP66 (PSU IP54)	
TECHNICAL	Operating Power	AC110/220V, 50-60HZ	
	Pixel configuration	3535 Black body	
	Power supply Units per Panel	x2 - 300W TDK Lambda with backup redundancy (x2 - 500W for P6.4 True Black 5500 nits)	
	AV-input	Dual link DVI 1:1 with uplink	
	Gamma	Dynamic Dual map for indoor and outdoor mode with black level adjustment	
	Operating Humidity Range	0-90%	
	Digital Processing	26bit	
	Color Processing	16 bit per color (2.81 Trillion Colors)	
	Greyscale Processing	16 bit	
	CIE1931 Gamut Calibration	ITU-R BT.709, ITU-R BT.2020, pledco gamut (selectable by user)	
	Calibration	Multi-mode & Auto-detect stored in the CPU of Tiles	
	Refresh Frequency (Hz)	>1000 up to 4000 on Highest bit refresh rate	
	Brightness Control	100 levels	
	White Balance Brightness nits at 6500K after Calibration	7000 nits	
	Operating Temp. Range	-10 to 65°C	
	Scanning Mode	Static	
	Color Temperature	3200K to 9500K adjustable on 3 fix preset and 1 custom	
	Dot Brightness Calibration	Yes with Radian Camea (Calibration stored in tiles flash memory	
	Brightness Uniformity	>=98%	
	Color Brightness Calibration	HD NTSC calibration with Radian PM400F Camera stored in tiles	
	Chroma Uniformity	+- 0.002 (Cx, Cy)	
	Frame Rate Hz	Standard 60Hz (optional 120Hz and 240Hz)	
	Typical lifetime	>= 50 000 hrs MTBF 25 000 hrs	
	Maintainance Acces	Rear acces (Front optional)	
	Viewing Angle	160° x 160°	
	Directivity Angle (viewing angle at 50% brightness)	140° x 120°	
	LED Binning Color	+/- 3Nm up to 20 millions led on same Bin	
	LED Binning Brightness	+/- 3%	
	Maximum BTU (per cabinet)	1750 BTU	
	Average BTU (per cabinet)	600 BTU	
CONTROL SYSTEM	LDU 8000 (Logic digital unit)	4 Gigabyte output with full redundancy	
	Receiving Card	Customed designed hot swapable with DDR3 32bit memory bus	
POWER CONSUMPTION	Average (per cabinet)	133 W	
	Maximum (per cabinet)	400 W	
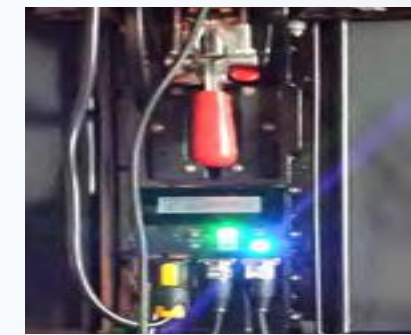
THE FUTURE
of LED technology

Rental and touring LED cabinets require an extensive amount of engineering. Especially for high wind prone regions, a wind through rental product is a must. Our ARIEL has been specially designed to put the end-users mind at ease.

CUSTOMER SERVICE

At PLEDCO, we strongly emphasize the importance of customer relationships, and their trust in our products. Our key to lasting relationships focuses on delivering world-class LED products, while promising exceptional customer service and reliability, ensuring our clients a relaxing experience. PLEDCO is recognized as an industry leading LED total solution provider, from initial inquiry to after sales, our heavily trained team will guide you step-by-step through the entire process of your LED project.

Installation Support

Our skilled technicians can professionally install your LED Displays without disturbing your projects schedule. Mitigation and problem-solving are inevitable during the installation process, and PLEDCO's installation "Gurus" have the experience, know-how, and technical expertise to handle nearly any situation. We are able to provide you with all the required documents including; specification sheets, system diagrams, complete display and structure elevation drawings, and 3D rendering if required. As your dedicated total solution provider, we promise to be there step- by-step guiding you through your project, from initiation to closing.

24/7 Technical support via online or phone

Our phone and online live support systems enable us to provide 24/7 technical assistance. If you require urgent assistance our skilled technicians are always ready to help, regardless of difficulty. Technicians are required to pass intensive training and testing to ensure issues are dealt-with professionally and accurately, while emphasizing the importance of your project's

Warranty & Maintenance

With over 20 years of combined professional experience, our internationally exposed engineers have specially designed and developed LED Display solutions to cope with harsh environments and withstand extreme temperatures. However, in the event of a problem, our highly experienced technical support team promises minimal display downtime by utilizing our bulletproof troubleshooting expertise. Nearly all of Pledco's products include a 5-year warranty, with optional extensions available upon request.

Parts Availability for the Next 15 Years

Our manufacturing facility produces all the parts used assemble our LED displays. More importantly, we own all the technology, molds and PCB layout designs that are used to develop these parts. This provides us with the reliability knowing exactly what materials are being used and ensures the quality of our products can easily be managed directly from the production level. One of the biggest after-sales issues a client could have is being able to receive replacement LEDs that have been recalibrated exactly the same as the display when first produced. PLEDCO is one of the few companies in the world who utilizes the international HD NTSC REC-709 calibration in LED display, thus making it possible for us to provide our clients the exact same LEDs to match their display by using Radiant's camera technology.

PLEDCO

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