

# PRO TOUR SERIES



MODULAR  
DESIGN



REAL-TIME  
MONITORING



SIGNAL HOT  
BACKUP



WIDE VIEWING  
ANGLE



RENTAL

OUTDOOR/INDOOR  
RENTAL & TOURING





# PRODUCT

## KEY FEATURES

Pledco's Pro Tour Series is an all-in-one turnkey solution for the Rental/Touring LED Display Industry. Designed and developed by an industry leading Canadian engineer, our Pro Tour Series is equipped has been fully equipped with the latest rental technology.

Your multi-purpose **All-in-one** LED solution

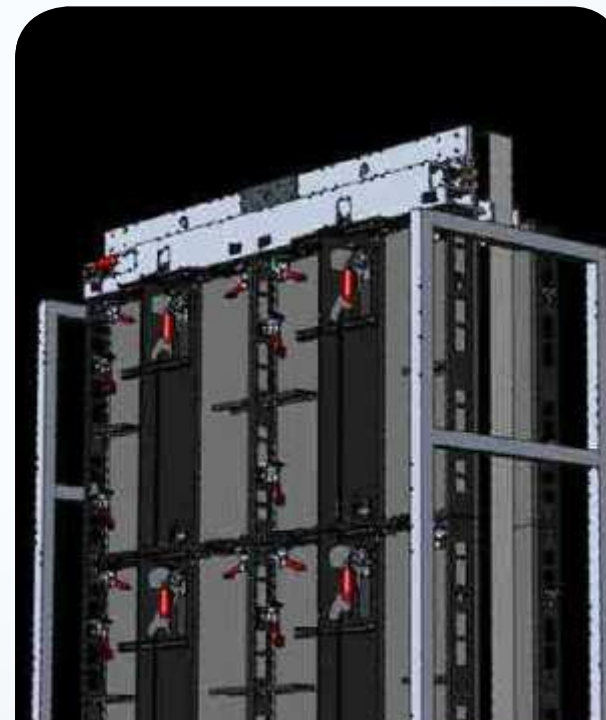
- Broadcast Standard Indoor/Outdoor Solution with dual Gamma Map
- Can be converted to a Video Floor
- Optional Stand-alone Magnetic Tiles Package
- High-precision Multi-point Sliding Rotation System (+/-15 degrees every 384mm)



Rugged, Reliable, Compact & Lightweight Design **Multi-sectional Rig-and-Click Touring** LED Display.



State-of-the-Art Control System with easy **Drag & Drop** User Interface.



Unique Time & Space-saving **Touring Transportation Rack** with **Dual Passive Suspension System** carrying Two Pre-Rigged Sections of 2-by-2 panels.



**Full redundancy Hot-swappable Control & Power Supply System.**



# PRODUCT DETAILS



Our product line includes:

- 5mm, 8mm & 10 mm
- Indoor or outdoor type
- Flat and curvable
- High-brightness & Medium-brightness
- Optional True-Black LEDs.



- New Diamond Array Scanning System by 1/2 Multiplexing to keep a complete and steady image.
- Drivers with 120 steps of current adjustments for Real-time Brightness Adjustments up to 15,000nits in DMX Lighting Mode.
- High-efficiency Thermal-dissipation Tiles.
- Real-time Dual-sensor Tile Temperature Monitoring.
- Real-time Monitoring: Voltage, Power, Temperature status, Pixel Check (optional), Data, many more...
- Power & Data Redundancy.

- Real-time Power Consumption Calculation of DMX lighting-Feature and Automatic Brightness Adjustment.
- Real-time PSU Fan Control insures No Noise in Indoor Mode (<3000nits).
- Up to 5000Hz Refresh Rate.
- Ready for HDMI1.4 and CMYK Color Space to control up to four million pixels.
- Hardware ready for 120Hz & 240Hz.
- Ready for Passive & Active 3D Video Images.

# CABINET FEATURES

**Cabinet Size:**  
768 x 768 x 120mm

**Tile Size:**  
192mm x 384mm

**No. of Tiles per Cabinet:**  
4 x 2 tiles

**Cabinet Weight:**  
22 Kg. per Panel

**Material Structure:**  
Laser-cut Black Anodized  
Series 6 Aviation

**Foot step Structure that  
can withstand climbing**

**Tile Rating:**  
IP 67 TILES

**Stainless steel  
locking Sytem**

**Max. number of Cabinet  
(horizontally):**  
No limits

**Max. number of Cabinet  
(vertically):**  
20 cabinets

**Hot-swappable  
PSU & recieving  
card**

**Waterproof  
Neutrik® Power  
Connectors**



CABINET  
**CURVABILITY**



# LOCKING SYSTEM FEATURES

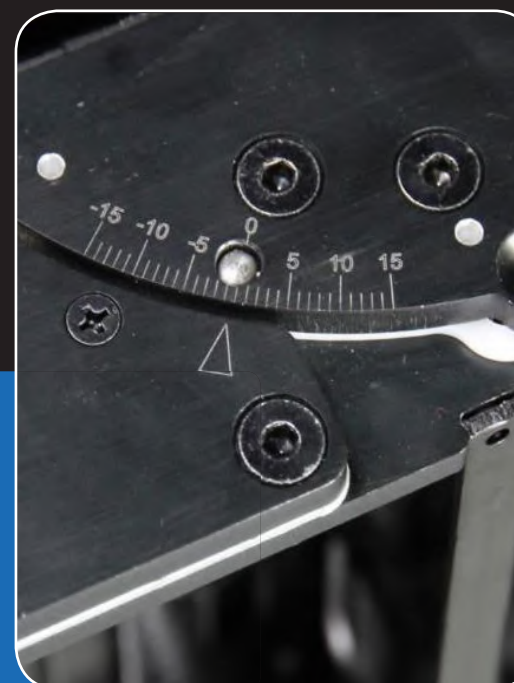


## **CENTRE LOCK (X-AXIS)**

ClampTek USA's technology allows our Pro Tour Series cabinet to easily align and lock in place without the need for any tools on the X-Axis.

## **FOUR PIN LOCKING SYSTEM**

Designed specifically for precise alignment our ZREOP degree Locking System and 6.5mm pin ensure extreme high-precision tolerance.



## **SIDE LOCKS (Y-AXIS)**

Simply align, rig and click the Pro Tour Series panels with an easy locking system made for quick install. No tools are required which makes installation a breeze for any installation team.

## **DUAL AXIS ALIGNMENT PINS**

The high tolerance touring dual-axis alignment system was designed for quick/easy installation by having a two step alignment process. First the pin is aligned on the X-axis and then finally locked into place on the Y-axis for perfect alignment and ZERO lines shown.





# HOT SWAP POWER SUPPLY & RECEIVING CARD



Unique design allows for simple and quick swap of any defective PSU.

- ▶ FPGA Power
- ▶ Real-time calculation of number of pixels displayed to automatically adjust the current of each LED in Lighting Mode
- ▶ PSU Fan Control by PWM (Power With Modulation).
- ▶ Real-time Temperature Monitoring of two (2) PSU per panel.
- ▶ Real-time Temperature Monitoring of eight (8) Tiles per panel
- ▶ Automatic Calibration (Brightness & Color)



Receiving Card (1)



Receiving Card (2)



Receiving Card (3)





Britney Spears Tour



Celion Dion Tour



Lady Gaga Tour





## 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.





# CONTROL SYSTEM 4K PROCESSING



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

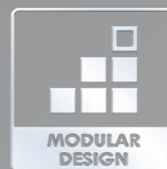




# PRO TOUR SERIES SPECIFICATIONS



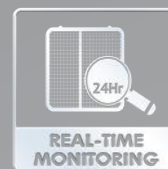
RENTAL



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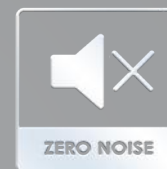
SIGNAL HOT  
BACKUP



WIDE VIEWING  
ANGLE



QUICK  
INSTALL



ZERO NOISE



NEUTRIK  
CONNECTORS



DYNAMIC  
GAMMA

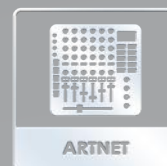


GENLOCK

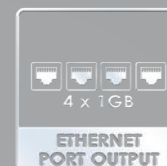


DVI

DVI LOOP



ARNET



ETHERNET  
PORT OUTPUT



HIGH  
BRIGHTNESS



LADDER

Overview	Features						
Mechanical	Pixel Pitch	5.33mm	6.4mm	8mm	10.6mm	12.8mm	16mm
	Cabinet Material	Black anodized alluminium series 6 laser cuted					
	Application	Indoor (optional)	Indoor and Outdoor				
	Curvability	< 0.2mm tolerance +-15deg every 384mm			Flat		
	Cabinet Surface (SQM)	0.589					
	Cabinet Size (W x H x D - mm)	768 x 768 x 92					
	Cabinet Resolution (W x H - pixels)	144 x 144	128 x 128	96 x 96	72 x 72	64 x 64	48 x 48
	Cabinet Weight (KG)	22	24				
	Cabinet Flatness (W x H x D - mm)	<= 0.2					
	Pixel Density (SQM)	35200	24414	15625	8900	6104	3906
	Tile Size (W x H x D - mm)	384 x 192 (4x2 per panel)					
	Tile Resolution (W x H - pixels)	72 x 36	64 x 32	48 x 24	36 x 18	32 x 16	24 x 12
	Pitch Tolerance	0.05mm					
	IP Grade	IP 43 or IP62	IP66 (PSU IP54)				
Technical	Operating Power	AC110/220V, 50-60HZ					
	Pixel configuration	3528 True black	3535 True	3535 Black body			
	Power supply Units per Panel	x2 - 300W TDK Lambda with backup redundancy			x3 - 200 W Meanwell w/ backup redundancy		
	AV-input	Dual link DVI 1:1 with uplink					
	Gamma	Dual map for indoor and outdoor mode with black level adjustment					
	Operating Humidity Range	0-90%					
	Greyscale	16bit					
	Refresh Frequency (Hz)	>1000 up to 4000 on Highest bit refresh rate					
	Brightness Control	100 levels					
	White Balance Brightness nits at 6500K after Calibration	2500 Nits	6500 Nits				
	Operating Temp. Range	-10 to 65°C					
	Scanning Mode	1/6 Scanning	1/2 Diamond patented scanning		Static		
	Color Temperature	3200K to 9500K ajustable on 3 fix preset and 1 custom					
	Dot Brightness Calibration	Yes with Radian Camera (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%					
Control Sytem	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)	150 W	217 W				
	Maximum (per cabinet)	450 W	650 W				



A large industrial LED display assembly line in a factory setting. The image shows a long, curved assembly line with multiple levels of scaffolding and workers. The ceiling is high with industrial lighting. The overall scene is a busy manufacturing environment.

## 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 bullet-proof 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 LTD.  
2/F Flat Roof 167 Lockhart Road  
Hong Kong

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[pledco.com](http://pledco.com)  
[info@pledco.com](mailto:info@pledco.com)  
worldwide: 1-855-717-2606