# PERIMETER SERIES



# COLLAPSIBLE LED DISPLAY





# PRODUCT DESIGN

PLEDCO's Perimeter Series is a combination of two 960mm x 768mm cabinets (figure 1) from our RENTAL Series. We designed and developed both a collapsible (figure 2). Finally, our patented protective rubber cushion integrates seamlessly on top of the structure to guarantee maximum safety.



(FIGURE 1)



The main benefit of this cabinet is its ability to integrate into a multitude of applications in a matter of minutes. The end user can decide to use the Perimeter Series as a fixed or rental screen. This cabinet has been specifically designed to be light-weight and rugged thus labeling the product is the only all-in-one solution on the market.



install the top cover cushion



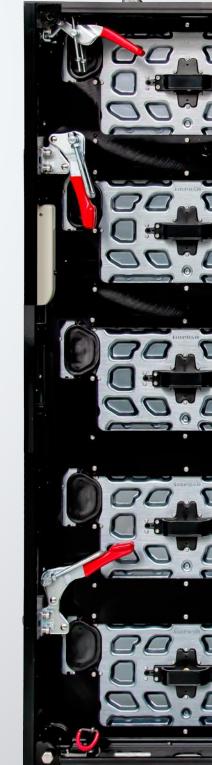
lock the middle rig to bind the two panels



lock the bottom rig



(FIGURE 2)



### PRODUCT ADVANTAGES

PLEDCO's Perimeter Series is a combination of two 960mm x 768mm cabinets from our Callisto Series. We designed and developed both a collapsible and fixed base to secure the cabinets firmly. Finally, our patented protective rubber cushion integrates seamlessly on top of the structure to guarantee maximum safety.



#### CUTTING-EDGE TECHNOLOGY

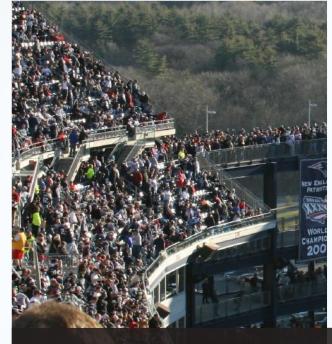
Revolutionary Modular Display for brilliant High-Quality broadcasting.

#### SAFETY

Impact resistant panels designed with a cushion foam and treated LED encapsulation ensuring safety & display durability.

#### LIGHTWEIGHT

Designed for both fixed and mobile applications, our perimeter series is dedicated to provide clients with a hassle-free installation



## FRONT & BACK

Users can easily repair panels without compromising the location of the panel's installation.

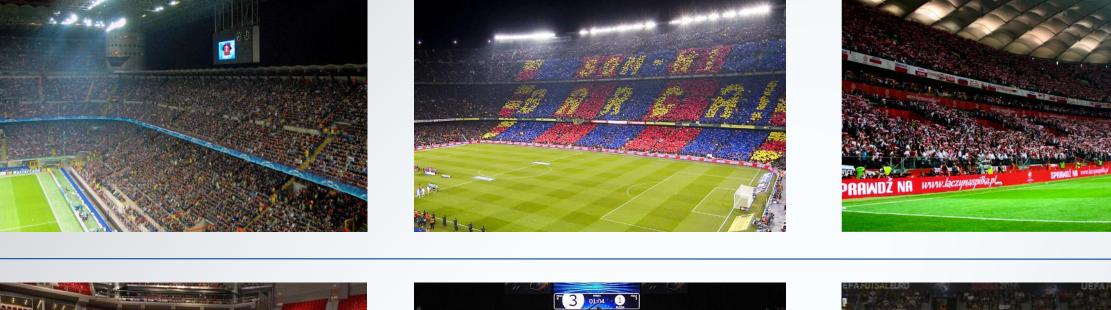
### FAST INSTALLATION

Our zero tool panels have been designed for time sensitive events. The rig and click panel connection and adjustable hanging bracket create a seamless display.



# FULL TOURING

This cabinet has been specifically designed to be lightweight and rugged thus labeling the product as the only all-in-one solution on the market.









FUTSAL ARENA









PLEDCO HD DISPLAY

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



### 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.

# 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.



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.

### 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 you will not see any color differences, however, when white is at 50% brightness, the user may see a slight difference in color.



# CONTROL SYSTEM 4K PROCESSING

Туре	Channel	Connector	Details						
DisplayPort	1	DisplayPort Standard	Supports DisplayPort 1.2. Max.3840×2160@30H						
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@60H						
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									
Туре	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	Neu	utrik powerCON	connector, 100-240 VAC, 50-60 Hz, Max.25W						
Temperature	-10 ~ +50 °C								
Mechanical	472×375×90 mm								

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

NO

- 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





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

### **SPECIFICATIONS**

OVERVIEW	FEATURES	OUTDOOR SMD							OUTDOOR DIP					
MECHANICAL	Model Name	EIII 6mm	IIEIII 10mm				EIII 16mm	Ell 10mm	Ell 13mm	Ell 16mm	Ell 20mm	Ell 26mm		
	Structure type	EIII	EIII	EIII	EIII	Ell	Ell	EII	EII	EII	EII	EII		
	Physical pitch	6.41mm	8mm	10.6mm	10.3mm	12mm	16mm	10.6mm	13.3mm	16mm	20mm	26.6mm		
	Model Number	VFO6.4BLT	VFO8LT	VFO10.6LT	VFO10.3LTS	VF012LT	VF016LT	VFO10.6DLT	VFO13.3DLT	VFO16DLT	VFO20DLT	VFO26.6DLT		
	Optional structure ref Drawing	VI 00.46E1	1											
	Cabinet Material	ALUMINUM, PLASTIC, STAINLESS STEEL												
2	Cabinet Surface (SQM)	0.589			0.436	(	).589	0.6144						
Ā	Standard Cabinet Size (WxHxD mm)	768 x 768 x 124			660.4 x 660.4 x 124		768 x 768 x 124	640 x 960 x 124						
I	Cabinet Resolution WxH (pixels)	156 X 156	96 X 96 72 X 72			<b>x 64</b> 48 x 48		72 X 72	48 x 72	40 x 60				
<u> </u>	Cabinet Weight (KG)		24		18		24	25						
AE AE	Cabinet Flatness (mm)					1	<= 0.3		1	1	1			
<	Pixel Density (SQM)	24336	15625	8789	9425 330.2 x 165.1 ( 2 x 4 per	6944	3906	8789	5625	3906	2500	1406		
	Tile Size (mm) L x H		384 x 192 ( 2 x 4 per panel)				384 x 192 ( 2 x 4 per panel)	320 x 320 (2 x 4 per panel)						
	Tile Resolution (pixels)	60 x 30	48 x 24	36 x 18	32	32 X 16 24 x 12			24 x 24	20 × 20	16 x 16	12 x12		
	Pitch Tolerence	0.05mm												
	IP Grade	Tiles IP67 PSU IP54 (optional IP65 PSU)												
	Voltage		110/220VAC, 50-60HZ											
	LED Type	3 in 1 SMD 3535 True Black		3 in 1 SME	) 3535 Black Body ( Optional	led available )		DIP 346						
	Power Supply Unit					x2 - 32	0W Meanwell ( TDK Lamda o	ptional )						
	Power Supply Redundancy					Optional on E3 and E	2 structure only (Dynamic B	rigtness Management)						
	Data Line Redundancy	Yes (Real Time Watchdog Monitoring) data and fault log and pixel check function optional												
	AV-input	DVI Dual link / HDMI 1.4 - HD4K optional on LDU9000												
	Gamma	Dynamic Gama DUal Map 1.8 2.0 2.1 2.2 and custom on independant color												
	Operating Humidity Range	0-90%												
	Greyscale	16 bit ( Optional 20 bit for HD4K )												
76	Refresh Frequency	>4000HZ on MSB and LSB Grey scale and special proprietary cross scanning technology.												
	Brightness Control	100 levels by manual control or scheduler / 256 levels by light sensor ( Optionnal UDP command for external control throught TCPIP )												
	White Balance Brightness at 6500K after Calibration	5500 Nits	6500 Nits (opt	ional 7500 nits)	8000 Nits		6500 Nits (optional 7500 nits)							
TECHNICAL	Operating Temp. Range						-35 to 65 °C							
≥	Scanning Mode		1/2 Cross Scan		Static Drive			1/2 Cross Scan						
Ŧ	Color Temperature	3200K to 9500K (4 fix Presets and 1 Custom)												
Ū	Dot Brightness Calibration	Yes (Using Radian Camera, Stored In Tiles with auto calibration for easy maintenance ) Real time user selectable HD2K or HD4K color space. Selft user tiles color space adjustement without calibration camera. +-2%												
Щ	Brightness Uniformity													
	Color Calibration Patented eclusive HD2K or HD4K user selectable with calibration stored in tiles.													
	Chroma Uniformity						+- 0.002 ( Cx, Cy )							
	Frame Rate Hz					50 / 60 / 100	120 optional 240 and 3D act	ive processing						
	Typical lifetime					>	= 100 000 hrs MTBF 25 000 h	nrs						
	Maintainance Acces						Rear (Front Acess Optional)							
	Viewing Angle			>= 170 x 170° (H +75.5	5 / -75.5 and +V75.5 / - 75.5)			>= 160° x 70° (H +80 / -80 and +V37.5 / - 37.5) Optional V bending						
	"Directivity Angle (viewing angle at 50% brightness)"			140	0° x 140°			>= 140° x 55° (H +70 / -70 and +V27.5 / - 27.5) Optional V bending						
	LED Binning Wavelenght	+/-1.5Nm												
	LED Binning Brightness					+/-2.5%								
	MAX. Thermal load BTU (per cabinet)		663		490	490 663			464					
	Avg. Thermal load BTU (per cabinet)		211		164	64 211			155					
	LDU2800-8000 ( Video encoder)				2-4 Gigabyte output with	full redundancy between	controllers , 20bit color proc	essing. Optional Offline pl	layer built in, NTCIP, Artnet					
Control Sytem	Maximum (per cabinet)	650 Wh 552 Wh 650 Wh 455 Wh												
Power Consumption	Average (per cabinet)		250 Wh		184 Wh	2	50 Wh			180 Wh				
	And age (per cabinet)		200 WII		104 101	2				TOU WIT				

### 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

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