

# TELESTO SERIES



INDOOR HD DISPLAY | P4-16MM



## HIGH PRECISION & SLEEK CABINET ALIGNMENT

The Telesto Series' Indoor LED Display cabinet has a sleek aluminium cabinet which has been CNC processed to ensure a precise and durable cabinet alignment. Our cabinets seamlessly connect ensuring there is less than a <math><0.2\text{mm}</math> tolerance while projecting a stunning uniform image.



## LOW BRIGHTNESS & HIGH GREY LEVELS

The Telesto Series' Indoor LED Display cabinet has the ability to project high levels of grey while maintaining low brightness. The grayscale comparison can be seen below to prove our technology's pristine imagery. Standard LED display cabinets fail to reach high levels of grey scale due to low quality engineering from their software and calibration, however Pledco's advanced software, control system and calibration enables us to reach these picturesque levels while maintaining low brightness.

## HD BROADCAST COMPATIBLE

The Telesto Series' Indoor LED Display cabinet is HD Broadcast compatible for television recording. Our ultra-high refresh rates ensure when broadcasting live television the LED display stays flicker free but more importantly continues to project pristine imagery. In addition all our HD LED display are fully equipped with a full redundancy control system to ensure zero downtime during a live event.



# PRODUCT ADVANTAGES

PLEDCO's Telesto Series offers a variety of cabinet sizes in both front/back service and rental. Most companies are limited to their availability in cabinet sizes. This limitability can make it extremely difficult when trying to meet a client's dimension demands for an exact sized project request. At PLEDCO we are able to produce any size of LED display requested based on our versatile cabinet structure size availability.



CABINET INSTALLATIONS



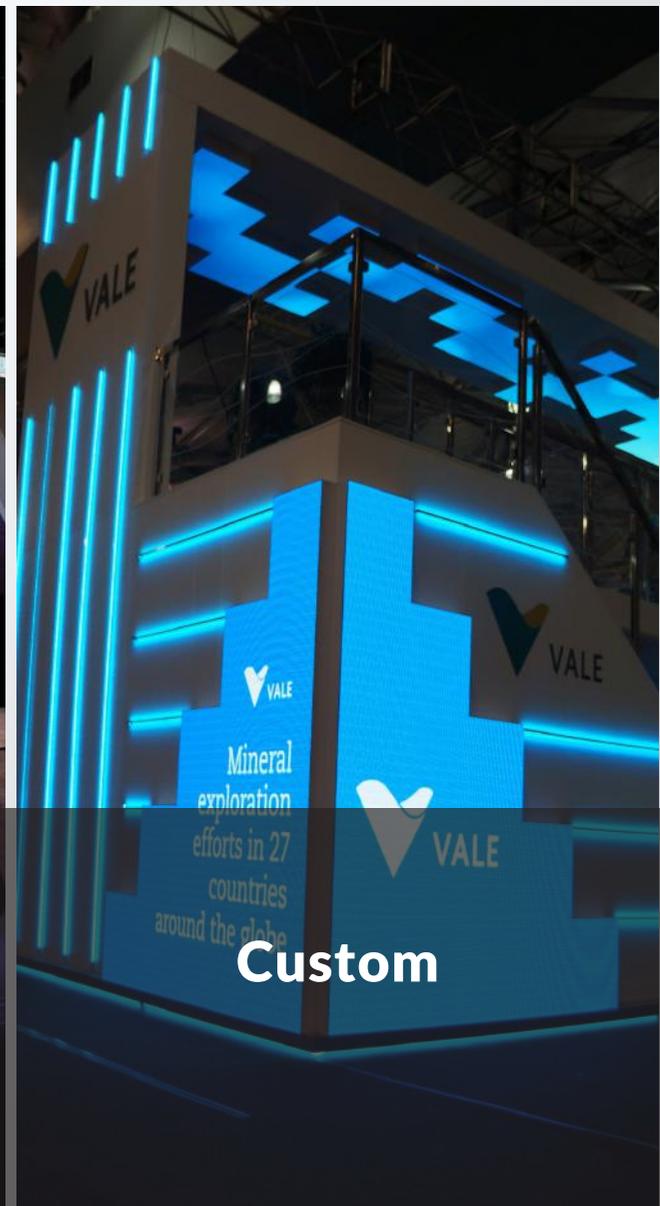
Front Service



Back Service



Rental



Custom

# CABINET STRUCTURES

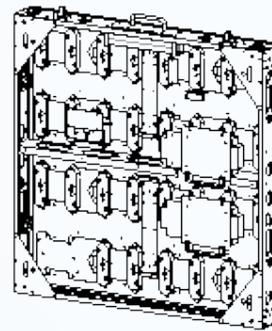


## BACK SERVICE

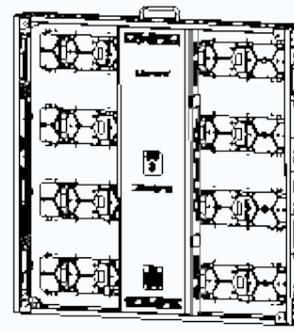
The Pledco Telesto series cabinets can be freely used for fixed installation, rental purposes, or even as a perimeter display with front or back maintenance cabinets.

All Pledco Telesto series displays are for indoor uses.

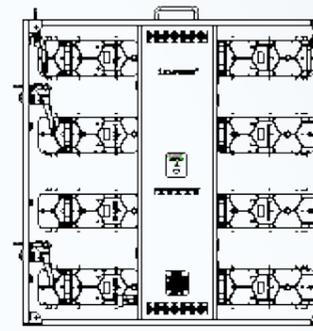
Cabinet size (unit: mm) 768×768



Fixed installation  
(Front maintenance)

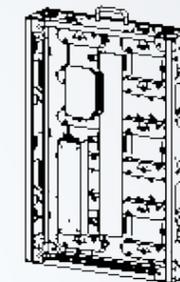


Fixed installation  
(Back maintenance)

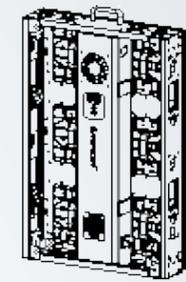


Rental series

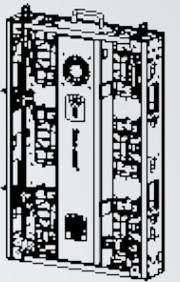
Cabinet size (unit: mm) 576×384



Fixed installation  
(Front maintenance)



Fixed installation  
(Back maintenance)



Rental series

## FRONT SERVICE

Special design with pulley lock, which is convenient and practical for module fixation.

The smallest pitch for front-access modules: 4 mm.



Front view



Front maintenance



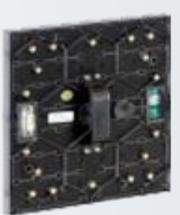
Back maintenance



When pulley is  
opened, mod-  
ule is locked



Front  
maintenance



Back  
maintenance



“Ability to integrate into a multitude of applications in a matter of minutes”

The main benefit of this cabinet is its ability to integrate into a multitude of applications in a matter of minutes. Whether you choose to integrate into a fixed or rental project is completely up to the end user. This cabinet has been specifically designed to be light-weight and rugged thus labeling this product as the only all-in-one solution on the market.

PLEDCO's Telesto Series has been designed and developed to either a collapsible or fixed base, which secure the cabinets firmly in place. Our step by step guide on how to integrate the CALLISTO Series Cabinets (figure 1) into a Perimeter Collapsible Display (figure 2) can be seen below.



(FIGURE 1)



install the top cover cushion



lock the middle rig to bind the two panels



lock the bottom rig



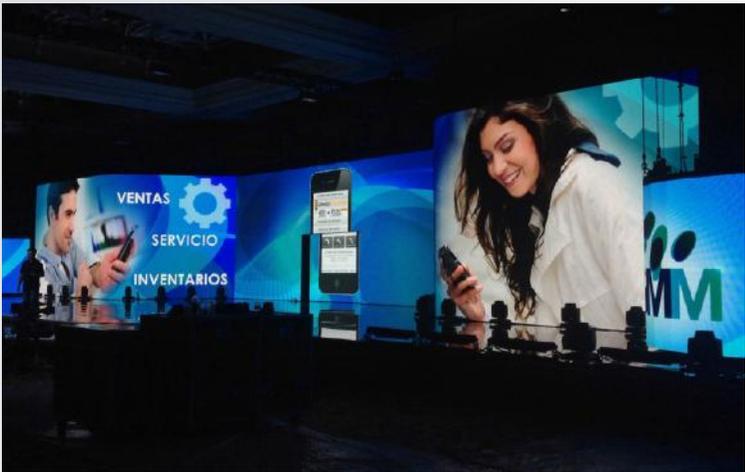
(FIGURE 2)



INDOOR APPLICATIONS



AIRPORT



EVENTS



FINANCIAL



## PLEDCO HD DISPLAY

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

## 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.

## 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.



## 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



MPU9000 SPECIFICATIONS

| 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.<br>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



KEY FEATURES

# PRODUCT

## FEATURES & SPECIFICATIONS

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



**PLEDCO**

### THE FUTURE of LED technology

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



| Physical Pixel Pitch                                | 4.36mm  | 5.33mm                                       | 6mm       | 8mm     | 9.6mm   | 10.6mm  | 12mm    | 16mm    |
|---|---|--|-----------|---------|---------|---------|---------|---------|
| Standard Cabinet Size (WxHxD mm)                    | 768 x 768 x 92  |  |           |         |         |         |         |         |
| Cabinet Resolution WxH (pixels)                     | 176 x 176   | 144 x 144                                    | 128 x 128 | 96 x 96 | 80 X 80 | 72x72   | 64 x 64 | 48 x 48 |
| Cabinet Weight (KG)                                 | 17  |  |           |         |         |         |         |         |
| Tile Size (mm) L x H                                | 384 x 192<br>(2x4 per panel)  |  |           |         |         |         |         |         |
| Tile Resolution (pixels)                            | 88 x 44   | 72 x 36                                      | 64 x 32   | 48 x 24 | 40 X 20 | 36 x 18 | 32 x 16 | 24 x 12 |
| LED Type  | SMD 1212 True Black   | SMD 3528 Black Body or True Black            |           |         |         |         |         |         |
| Grayscale   | 20 bit  | 16 bit ( Optional 20 bit for HD4K )          |           |         |         |         |         |         |
| Refresh Frequency                                   | >4800HZ on MSB and LSB Grey scale and special proprietary cross scanning technology . |  |           |         |         |         |         |         |
| White Balance Brightness at 6500K after Calibration | 1200 nits   | Black Body-2500 nits<br>True Black-1500 nits |           |         |         |         |         |         |
| Color Temperature                                   | 3200K to 9500K (4 fix Presets and 1 Custom)   |  |           |         |         |         |         |         |
| Maintenance Access                                  | Rear (Front Access Optional)  |  |           |         |         |         |         |         |
| Viewing Angle                                       | >= 170° x 170°  |  |           |         |         |         |         |         |
| Voltage   | 110/220VAC, 50-60HZ   |  |           |         |         |         |         |         |
| Operating Humidity Range                            | 0-90%   |  |           |         |         |         |         |         |
| Operating Temp. Range                               | -20 to 65°C   |  |           |         |         |         |         |         |
| Typical lifetime                                    | >= 100 000 hrs  |  |           |         |         |         |         |         |
| Maximum (per cabinet)                               | 400 Wh  |  |           | 300 Wh  |         |         |         |         |
| Average (per cabinet)                               | 130 Wh  |  |           | 100 Wh  |         |         |         |         |



## 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

---

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