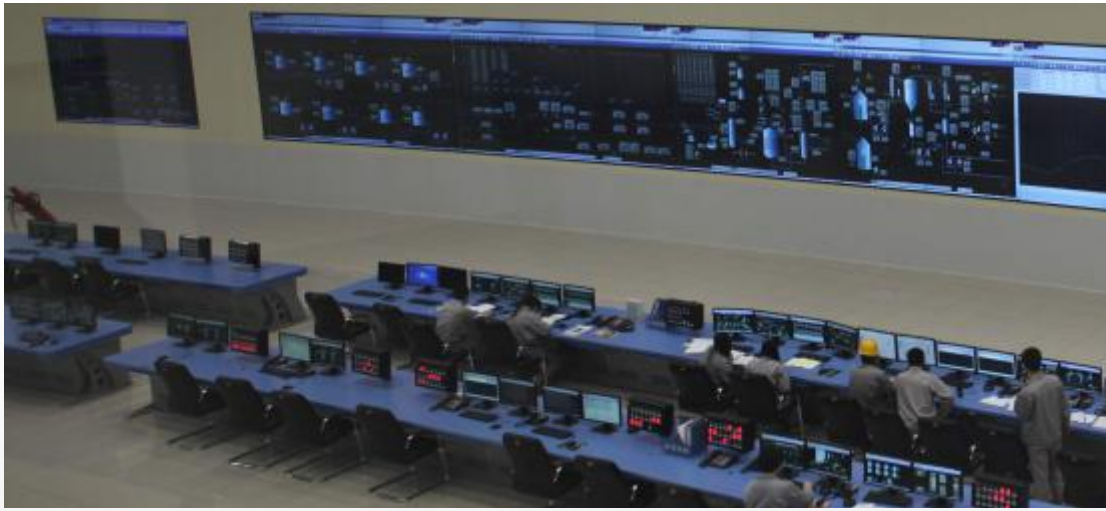
Laser DLP® Video wall

Laser Lit
Ultra High Brightness
True Redundancy
Monitoring & Diagnostics

www.deltadisplays.com

DELTA
Smarter. Greener. Together.

Solutions For Every Control Room Application



Control rooms are the nerve center of any major operation. Whether it's the distribution of electricity, refining of petrochemicals, surveillance of city streets or managing a major disaster, the control room holds the reins of the operation and must have a tight grip on it at all times. To do this effectively, the control room needs clear, precise & accurate information, which typically comes in from a variety of different sources: from CCTV cameras and instrument sensors to regional NOCs and substations. Control rooms simply cannot afford downtime. All this information needs to be continuously monitored, comprehended and acted upon.

Because of their ability to display a vast array of information simultaneously and present it collectively to a wide audience these large high – resolution displays (often known as video walls) are the backbone of any command and control center. They are vital tools for collaborative monitoring and decision making.

Largest OEM of Optical Engines in the World

Delta's extensive experience in DLP® technology is unsurpassed in the marketplace. No other company has more accumulated experience in DLP engine design and manufacturing than Delta.

Manufacturing Leadership

As a global multi-billion dollar company, Delta places innovation, quality and reliability at the heart of its culture. This focus and unrelenting drive to deliver the best have helped Delta to achieve its leadership position in the control room video wall Display market.

Delta prides itself in producing its entire video wall system based on its own design and manufacturing capabilities. This includes the projection engine, cube mechanics and controllers. Delta even manufactures its own color wheel and other optics including the lens.

This philosophy provides the company with full control over the quality and costs of the system. This is critical for long–term reliability and long–term support, the important factors to consider when choosing your control room display.

The unique combination of DLP expertise, in-house design and manufacturing excellence, and unrelenting dedication to quality and reliability, ensures that you will receive state-of-the-art performance, superior quality and exceptional levels of reliability for your Delta video wall solution.

Delivering you the Detail

DLP technology used in all Delta's video wall displays brings the ultimate visual experience to your control room. Delivering sharp, crisp video images and clear, easy-to-read text and graphics, DLP technology ensures that your control room operators always have the detail to perform at their best.

Driving Technology To New Levels

Laser illumination

Delta's Laser DLP® videowall Series comes with environment friendly, laser solid-state light source using the latest generation high brightness and high performance laser diodes thus delivering you enhancements-both in image quality and cost of ownership compared to traditional LEDs. You can achieve the best color gamut resulting in a much richer visual experience. Undoubtedly, Delta's Laser DLP videowall series are the brightest display solution available in the market.

Display Redundancy

Laser DLP® Cube offers display redundancy feature through the illumination unit. If any Laser diode fails due to any reason, the display does not lose the image or any color in that image.

Unique Color Sensor Design

For cube to cube color and brightness matching, Delta has incorporated an auto-color system based on a unique color sensor design. With sensors positioned on the light beam of the optical lens, the color calibration system encompasses the tolerances of all the optics in the system – including the lens and glass components. The system automatically adjusts the color temperature and brightness, ensuring control room operators view a perfectly uniform image across the entire screen at all times.

Redundant Power Supply

Laser DLP® Cube have in-built automatic hot swappable power supplies which ensure high transfer efficiency and reduces power consumption by more than 10% as compared to the standard cubes. Modular design of power supply aids in quick & easy maintenance.

Pixel-Perfect Alignment

The projection engine is mounted inside the cube on a six-axis adjustment base. This base provides the ability to make precise geometric adjustments in six directions to obtain pixel-perfect alignment between individual cubes. Electronic adjustments can also be made afterwards for fine-tuning at a pixel level. This enables physical seams between screens of neighboring cubes to be adjusted to less than 0.2mm, delivering a near-seamless picture.

Integrated Optical Engine Design

Designing the projection engine right is critical to maintaining a good display over time. Delta's integrated engine module design provides excellent heat conduction to ensure brilliant optical performance. Its integrated electronic and optical components provide compact outlook and excellent EMI performance. The integrated design helps reduce the MTTR giving you the least cost of ownership and maintenance in the industry.

Advanced Screen Design

Selecting the right screen is critical to maintaining a good display over time. The standard screen used on all Delta cubes is the Cross Prism Screen FXS/XPS which offers unsurpassed contrast, wide viewing angles and superb centre-to-corner brightness uniformity. The advanced screen design incorporates a Fresnel lens and two crossed prism Lenticular lenses, ensuring maximum brightness and minimum glare. The screens feature a unique glass back to prevent bulging and are extremely tolerant of high ambient light, making them ideal for control room environments.

Novel Cooling Mechanism

Delta's extremely reliable cooling mechanism is based on the Heat Pipe technology. This technology uses liquid vaporization phase change cycle architecture, in which the sealed liquid (pure water) circulates to draw heat away from the laser with no chance of any leakage. Maintenance free mechanism, as there is no electro-mechanical device for liquid circulation. Innovative cooling system ensures the longer life and better performance.

Near-Seamless Displays

The projection engine resides inside a specially designed enclosure which also holds the display screen. These cubes – as they are known – are modular in nature allowing you to stack them both horizontally and vertically to form large displays of any size or form.

Monitoring, Diagnostics & Control

Delta's Laser DLP® videowall Series are accessible over the IP through browser / server architecture based software tool for monitoring, controlling and diagnostic purpose. This software provides the operator with direct feedback on the status of the system with multiple levels of alarms. Whether it's the number of hours of a Light source or their temperature, the operator will be automatically notified via the predefined alarms.

Monitoring

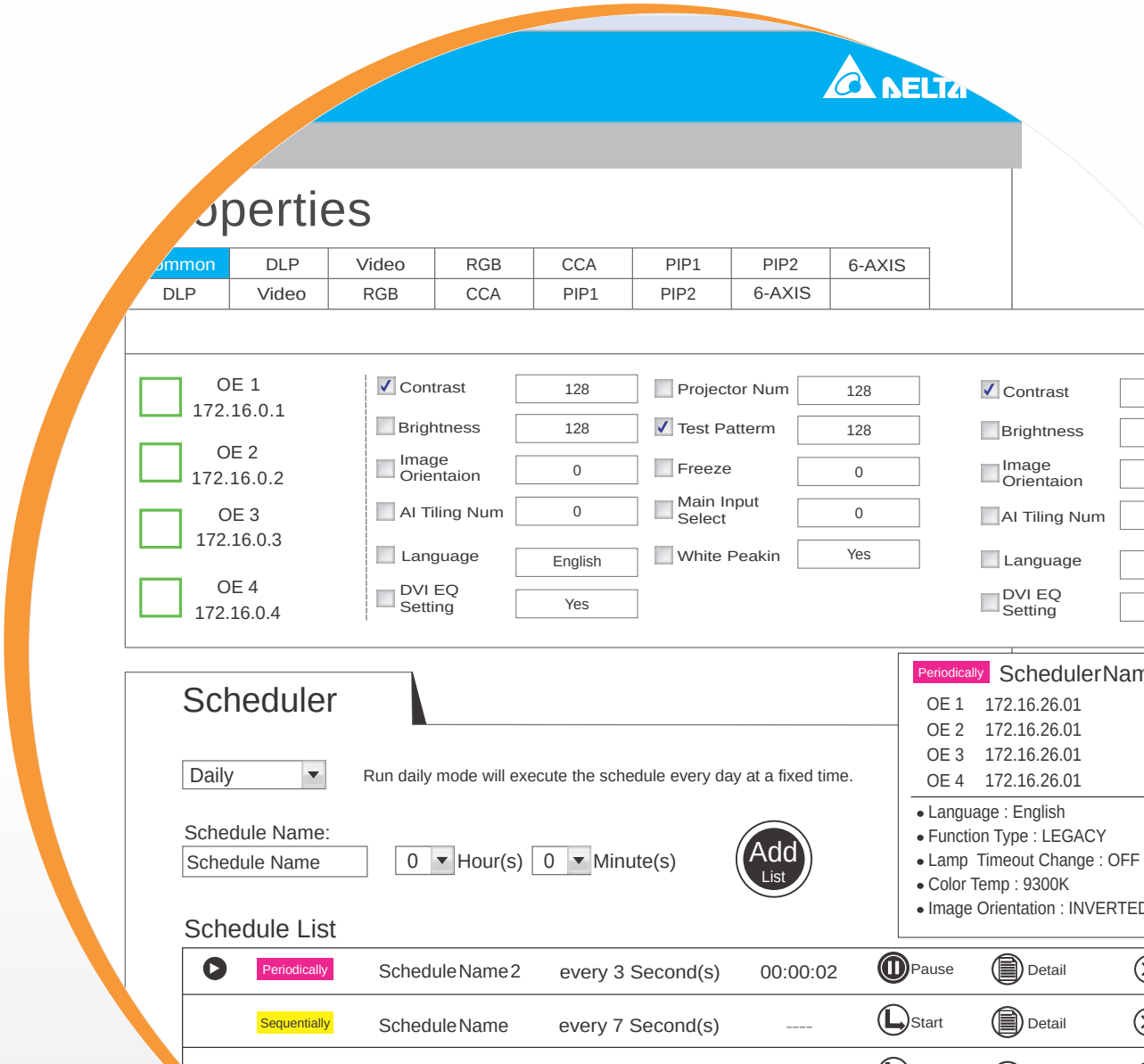
- Lamp monitoring status
- Message window
- Alarms
  - Serious
  - Warning
  - Information

Diagnostics

- Log file
- Error / Alarm feedback
  - Serious
  - Warning
  - Information

Control

- Switch on/off
- Virtual Remote Control (VRC)
- Get/Set cube data
- Save/Load options
- Scheduling options
  - Daily
  - Periodically
  - Sequentially



Control System

You're I

DVCS: Distributive Vision Control System

Delta's Distributive Vision Control System (DVCS) is one of the world's most advanced control systems designed specifically for control room visual display systems. Combining the latest advances in Digital Signal Processing (DSP) technology and with recent improvements in video compression rates, the Delta DVCS enables customers to capture, distribute, control and display high-resolution graphics/HD video/ SD Video/ 4K/ RGB/ DVI/ 3G-SDI/ Audio signals over an IP network-reliably and cost effectively.

Icon Pro Series Controller

The Delta Icon Pro Series Controller is a multi-screen graphics controller running on the Windows® Platform. The Icon Pro Series controller drives multiple cubes to form one large logical screen called a video wall or a data wall. The video wall displays graphics information from the controller workstation as well as information from various sources connected to the controller.

MiNiCON: Embedded Vision Control System

The MiNiCON is a real-time, lossless and embedded display wall controller for arrays of projectors, video wall cubes or flat panel displays. Employing cutting-edge embedded computing technology and a switch fabric architecture, the MiNiCON offers up to 150 Gbps of bandwidth, which is capable of supporting multiple high-resolution RGB/SD Video/ 4K/ HD Video/ DVI/ 3G-SDI signals.

Specifications

Laser DLP® videowall	
Description	Laser Light Source UXGA Cube
Individual Cube Sizes	60", 67", 80" Diagonal
Image Size (mm)	1219 x 914/ 1361 x 102/ 1600 x 1200
Display Technology	DLP, single chip
Native Resolution	1600 x 1200 pixels
Aspect Ratio	4:3
Screen to Screen Gap	Adjustable up to 0.2 mm
Light Source	Laser
Brightness	Typ. 2150 Lumens
Brightness Uniformity	≥98%
Contrast Ratio	Typ. 1800:1
Screen Options	FXS / XPS / CSI / High Gain / Custom
Full Viewing Angle	180 degree
Colors	16.7 million
Color Temperature Range	3200K to 9300K, Custom
Standard Inputs	1x Digital DVI-I 1x Digital HDMI 1x Analog D-sub 15pin 1x Analog 5BNC (RGBHV or YPbPr)
Standard Outputs	1x Digital DVI-D

Laser DLP® videowall	
Optional Board- I*	Inputs:1x Digital DVI-D 1x HDMI 1x Display port 1x Analog 5BNC (RGBHV or YPbPr) 1 X Analog S-video
Optional Board- II*	Inputs :1x Digital DVI-D 1x 3G-SDI 1x Display port 1x Analog 5BNC (RGBHV or YPbPr) 1 X Analog S-video Output : 1 x 3G-SDI
Optional Board- III*	Inputs:1x Digital DVI-D 1x HD-baseT 1x Display port 1x Analog 5BNC (RGBHV or YPbPr) 1 X Analog S-video
Control Options	RS-232 / RS-422, IP, IR
Laser Lamp Life	Eco mode: 60,000 hours
Input Voltage	AC 90~240V@50/60 Hz
Power Supply	Dual Power supply available as an option
Power Consumption	Eco mode : 185W
	Typ. mode : 250W
Operating Temperature	5°C - 40°C (41° F - 104° F)
Non Operating Temperature	-20°C - 60°C (-4° F - 140° F)
Operating / Storage Humidity	10% - 90%, non-condensing

Note: * Only one of the optional boards can be used with standard input / output board.

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QR Code

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