

Display Solutions

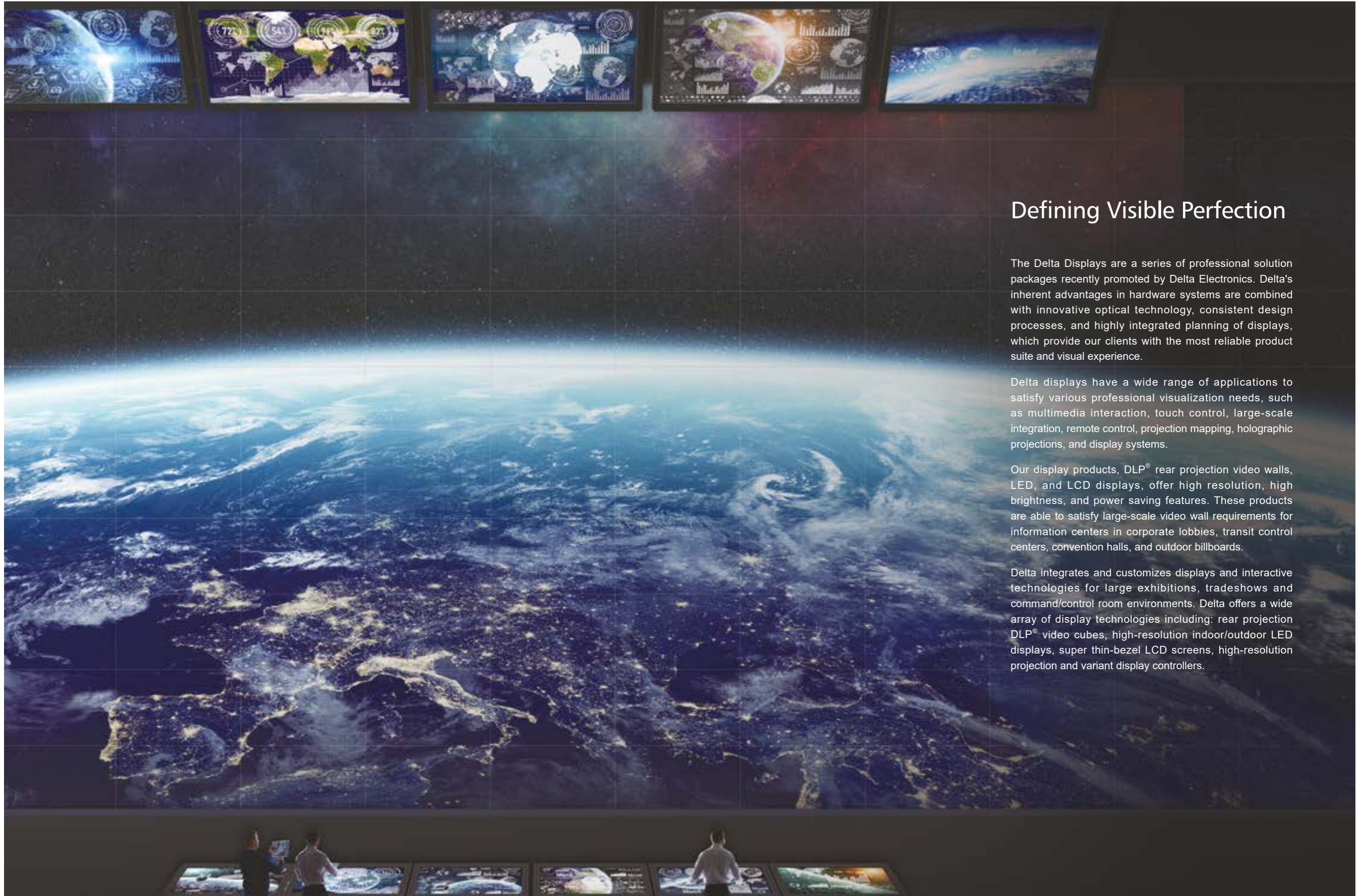
www.deltadisplays.eu

www.vivitek.eu



Delta Display Solutions





Defining Visible Perfection

The Delta Displays are a series of professional solution packages recently promoted by Delta Electronics. Delta's inherent advantages in hardware systems are combined with innovative optical technology, consistent design processes, and highly integrated planning of displays, which provide our clients with the most reliable product suite and visual experience.

Delta displays have a wide range of applications to satisfy various professional visualization needs, such as multimedia interaction, touch control, large-scale integration, remote control, projection mapping, holographic projections, and display systems.

Our display products, DLP® rear projection video walls, LED, and LCD displays, offer high resolution, high brightness, and power saving features. These products are able to satisfy large-scale video wall requirements for information centers in corporate lobbies, transit control centers, convention halls, and outdoor billboards.

Delta integrates and customizes displays and interactive technologies for large exhibitions, tradeshows and command/control room environments. Delta offers a wide array of display technologies including: rear projection DLP® video cubes, high-resolution indoor/outdoor LED displays, super thin-bezel LCD screens, high-resolution projection and variant display controllers.

Display Products and Solutions

Delta Display Solutions, a division of Delta, is a pioneer in the development of professional displays for control rooms in surveillance, security, traffic, command & control, energy companies, process control, telecommunications and broadcast applications.

Delta offers a wide range of display technologies, including: DLP® video walls with rear-projection with laser and Next Gen LED technology, ultra-flat LCD video walls and high-resolution indoor / outdoor LED displays with a powerful and extremely flexible management software suite.

Display Products



DLP®



LED



LCD

Control Systems



DVCS3



matriXpro
MULTI VIS

Display Solutions



Why Delta Display Solutions?



Company strength

Optional Hard- and Software systems. Remote management and complete professional team with R&D, manufacturing, quality control, system integration and after-sales capabilities.



Product Advantages

Longevity, reliability, outstanding display performance, innovative design and production craftsmanship, product energy efficiency of more than 90%.



Cost-performance ratio

Delta guarantees to provide best quality products with the best cost-performance ratio.

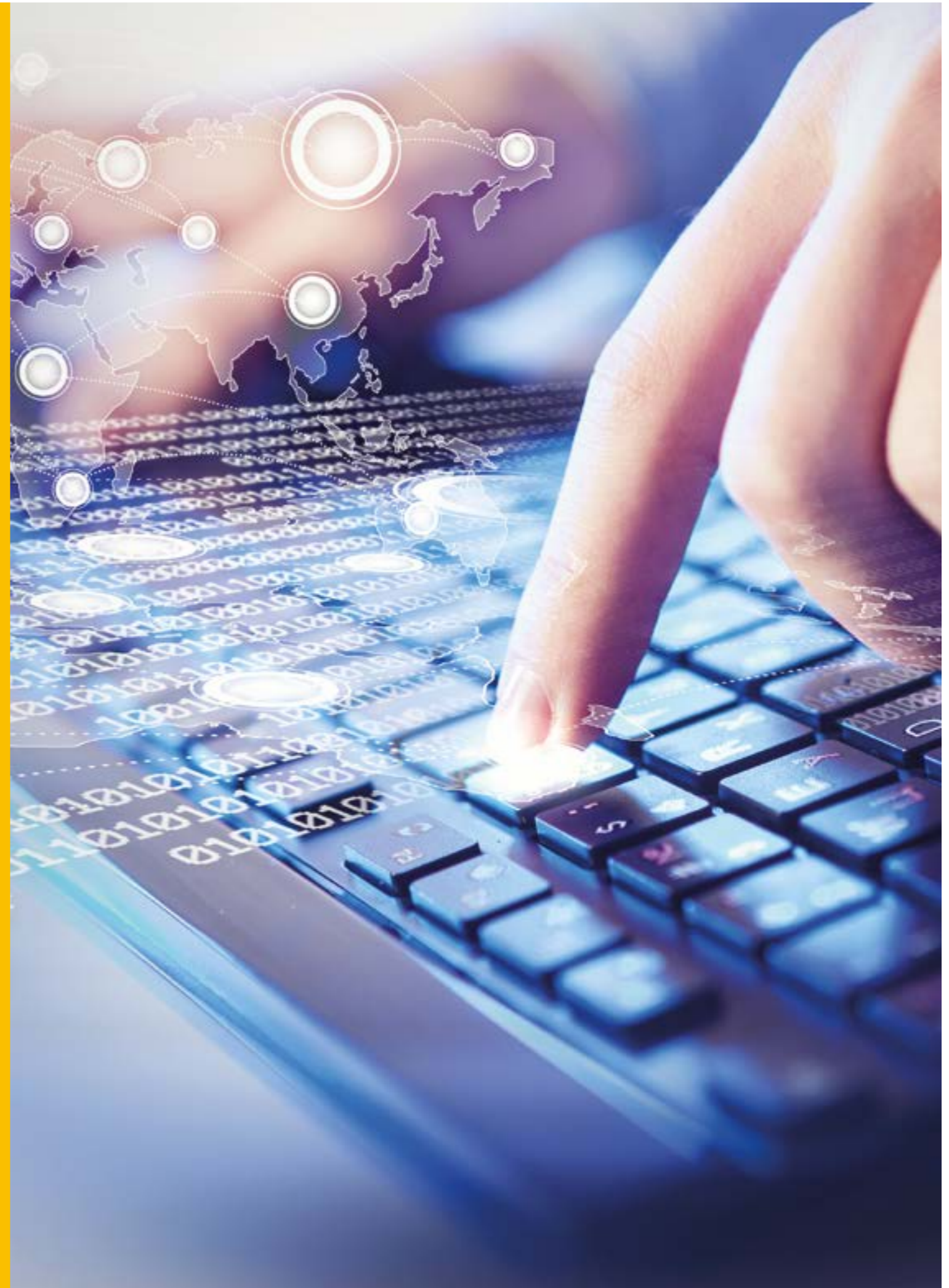


Quality assurance

Comprehensive after-sales service, product training, and response within 24 hours.



Display Technology



Rear Projection DLP® Video Walls

/ Overview /

Delta's rear projection video wall cubes are a space-saving solution that offers many efficient and reliable features for 24/7 control rooms, operation centers and management centers.

Available in 50", 60", 67", 70" and 80" diagonal sizes with resolutions ranging from XGA, SXGAplus, UXGA, FULLHD to UHD 4K. Delta's Laser video wall has one of the Highest Brightness in the DLP® video wall industry, exceeding 4000 lumens.



Rear Projection DLP® Video Walls

/ Extraordinary Video Walls /



Delta's rear projection DLP® video wall is powered by Texas Instruments' Digital Light Processing (DLP®) technology. Delivering extraordinary image quality with incredible color depth and contrast, DLP® technology brings video images to life and enables detailed data to be read with ease – extremely important factors in many mission-critical environments.

With the Laser Video wall, Delta introduces the first of its kind intellisense, a built-in unique and intelligent auto correction system to ensure enhanced system performance and long life without external intervention. The rugged design cube and industrial-grade components can withstand tough demands of 24/7 running and long years of service life.

/ Features /

- Redundant Laser or LED light sources and power
- Superior color uniformity
- Six-axis adjustment for perfect alignment
- Network diagnostics and control

High Reliability

- 24/7 operation
- Redundancy at light source, power and inputs
- Anti dust design- IP6X rated

High Brightness

- Gen-X light Source LED/Laser
- Excellent efficiency, longer life up to 11 years

High Performance

- Smart heat dissipation design
- Higher lumens efficiency

Slim Design

- Lowest depth
- Easy maintenance- front & rear

Rear Projection DLP® Video Walls

/ Product Specifications /

Type		LED Slim		Laser Slim						Laser Regular			
Image													
Model		HD		4K			HD		UXGA		4K	HD	UXGA
Resolution (pixel)		1,920 x 1,080		3,840 x 2,160			1,920 x 1080		1,600 x 1,200		3,840 x 2160	1,920 x 1,080	1,600 x 1,200
Product No.		DVS-508RSL DVS-608RSL DVS-708RSL	DVS-508FSL DVS-608FSL DVS-608FSL	DVS-70ARSH DVS-80ARSH	DVS-60ARS DVS-70ARS DVS-80ARS	DVS-60AFS DVS-70AFS DVS-80AFS	DVS-508RS DVS-608RS DVS-708RS DVS-808RS	DVS-508FS DVS-608FS DVS-708FS	DVS-606RS DVS-676RS DVS-806RS	DVS-606FS DVS-676FS	DVS-60AR DVS-70AR DVS-80AR	DVS-608RAN DVS-708RAN DVS-808RAN	DVS-506RAN DVS-606RAN DVS-676RAN DVS-806RAN
Service Access		Rear	Front	Rear	Rear	Front	Rear	Front	Rear	Front	Rear		
Cabinet Size (inch)		50", 60", 70"		60", 70", 80"			50", 60", 70", 80"	50", 60", 70"	50", 60", 67", 80"		60",70",80"	60", 70"	50", 60", 67", 80"
Engine Brightness (lumens)		Bright	1,100	4,000	2,500	2,400	2,400	2,400	2,500	2,400			
		Normal	750	3,000	1,800	1,700	1,700	1,700	3000 / 1800	1,700			
		ECO	525	2,000	1,200	1,200	1,200	1,200	1,200	2,000	1,200		
Contrast Ratio		1,000:1		1,800:1			1,800:1		1,800:1		1600 : 1 / 1800:1	1,800:1	
Uniformity		98%		95%			98%		98%		95%	98%	
Color Depth (million)		16.7		16.7			16.7		16.7		16.7		
Power Consumption (w/cabinet)		Normal	180	450	250	250	250	250	450 / 250	250			
		ECO	140	300	170	185	185	185	185	300 / 170	185		
Screen Type		CSI		CSI			CSI		CSI		CSI		
Light Source Average Life (hrs)		Bright	60,000	60,000			60,000		60,000		60,000		
		Normal	80,000	80,000			80,000		80,000		80,000		
		ECO	100,000	100,000			100,000		100,000		100,000		
Engine Dust Proof Level		IP6x		IP6x			IP6x		IP6x		IP6x		
Regulatory Certificates		CB, CE, CCC, cTUVus, FCC		CB, CE, CCC, cTUVus, FCC			CB, CE, CCC, cTUVus, FCC		CB, CE, CCC, cTUVus, FCC		CB, CE, CCC, cTUVus, FCC		

LED Displays

/ Overview /

Discover what's possible with Delta's innovative LED displays. Providing the largest selection, Delta offers a display that's optimal for your venue. With stunning clarity and a remarkable image quality, Delta LEDs command attention in a fast-paced environment, even in high ambient lighting.

Delta's LED series run the gamut from 1.2mm pixel pitch to 16mm featuring the highest brightness and contrast to serve a broad range of commercial markets. With Delta Displays, you can enjoy all the benefits of Delta's proven LED technology.



LED Displays



/ Innovative LED Displays /

Delta offers a complete lineup of high-impact and optimal performance LED displays ideal for both indoor and outdoor applications.

Delta's Indoor LED Displays are based on SMD technology, providing a seamless, high-resolution, high-contrast display solution for interior areas with short viewing distances. Its compact and lightweight design guarantees easy and quick installation. With a contrast ratio of up to 8,000:1, a light output of up to 6,000nits and native 16-bit color processing, the indoor LED series delivers excellent image and video quality in any indoor setting. Using the most advanced PWM (Pulse Width Modulation) image processing technology, the Indoor LED series ensures an excellent, flicker free viewing experience.

Delta's outdoor LED Video wall Series offers high-end performance with reliability. Using the finest quality components available today, the lightweight yet rugged tiles ensure excellent image quality and flicker-free video. The unique all-weather design guarantees reliability under the toughest operating conditions while offering front and rear access for ease of service.

/ Features /

- Full range of indoor and outdoor models
- High reliability for 24/7 operation
- Wide viewing angles and perfect color mixing
- Uniform colors and luminance with auto calibration
- Easy on-site calibration
- High contrast video quality
- Rugged and lightweight design
- Front and rear access for ease of serviceability
- Advanced video processing
- Easy-to-use control and management software

Perfect Visualization

- Adjust the brightness with personal preference to make it comfortable
- H/V 160° wide viewing angle for clarity in every angle

Precision & Installation

- Aluminium die-cast frame for quick & precise installation
- FE-Series machined contact points between cabinets provide superior accuracy and seamlessly tight display
- Uniformity calibration technology
- Front installation options

Energy Efficiency




- Innovative design & production craftsmanship
- Optimized power supplies to minimize power consumption
- Low cost of ownership

Environment-friendly

- All-weather work, even extreme outdoor environment
- Long service life thanks to rugged and lightweight design

LED Display

/ Product Specifications /

Type		Outdoor				Indoor			Indoor (Fine Pitch)			
Image												
Model		SE-6	SE-8	SE-10	SE-16	IE-3	IE-4	IE-6	FE-12	FE-15	FE-19	FE-25
Pixel Pitch (mm)		6	8	10	16	3	4	6	1.26	1.58	1.9	2.53
Pixel Density (pixel/m ²)		27,777	15,625	10,000	3,906	111,111	62,500	27,777	623,269	398,892	277,008	156,971
Brightness (cd/m ²)	Calibrated	5,500	5,500	5,500	5,500	1,200	1,000	2,000	600	800		
Contrast Ratio		1,500 : 1	2,000 : 1	3,500 : 1	4,500 : 1	4,000 : 1		5,000 : 1	3,000 : 1			
Refresh Rate (hz)		2,160	1,920	1,920	8,100	2,400		3,840	3,900	3,900		3,900
Gray Scale (bit)		15	12	12	16	14			13	15	1	15
Viewing Angle	Horizontal	140°				160°			160°			
	Vertical	90°				140°			160°			
Power Consumption (w/cabinet)	Max.	760	833	828	828	220	520	380	140	180	180	170
	Avg.	253	278	276	273	73	173	126	47	60	60	58
Cabinet Size (WxHxD) (mm)		960 x 960 x 140	960 x 960 x 141	960 x 960 x 142	960 x 960 x 143.5	576 x 648 x 88	864 x 864 x 83		608 x 342 x 62			
Weight (kg/cabinet)		43.5	41.5	41.5	41	12	23		7.9			
IP Grade (front/rear)		IP65 / IP54				IP30 / IP20			IP40 / IP20			
Certification		UL, CB, CE, FCC, CCC				UL, CB, CE, FCC, CCC			UL, CB, CE, FCC, CCC			

LCD Video Walls

/ Overview /

See your message displayed bold, bright, and big. Delta's LCD video wall displays are an ideal solution for demanding space-constrained control rooms. LCD displays can be stacked together to achieve virtually any screen size, setting a new standard for large format, high-impact display solutions. Your message is as limitless as your imagination.

Built with high quality industrial grade components for demanding applications. LCD displays deliver you an unsurpassed image quality with incredible color depth and contrast. The LCD video walls are available in High Definition (Full HD) Resolution (1920 x 1080) and in variant panel sizes.



Narrow Bezel LCD Video Wall Displays

/ Product Specifications /

Type		XNB UNB LCD Multi-media					
Image							
Model		HD			HD		
Product No.		LR-5581MR VC	LR-5581MR VA	LW-5581LR VC	LW-5581LR VA	LW-4981LR VB	
Cabinet Size (inch)		55"			49"		
Combined Bezel (mm)		1.8		3.5		3.5	
Resolution (pixel)		1,920 x 1,080			1,920 x 1,080		
Brightness (nit)		500	700	500	700	450	
Contrast Ratio		1,200:1		1,400:1		1,300:1	
Viewing Angle	Horizontal	178°			178°		
	Vertical	178°			178°		
Response Time (ms)		12			12		
Color Depth (billion)		1.06			1.06		
Power Consumption (w/cabinet)	Normal mode (typical)	250		185		110	
	Stand by mode	< 0.5W at 110V			< 0.5W at 110V		
Input/output connector		DVI x 1, HDMI x 1, DP x 1, USB x1 OPS Audio in DVI-D out x 1, DP out x1 Audio out			DVI x 1, HDMI x 1, DP x 1, USB x1 OPS Audio in DVI-D out x 1, DP out x1 Audio out		
Dimension (WxHxD) (mm)		1,211 x 682 x 99		1,214 x 684 x 103		1,078 x 608 x 104	
Back Light Average Life (hrs)		>50,000			>50,000		
Regulatory Certificates		CE, FCC			CE, FCC		

Display Controllers

/ Overview /

Delta's display controller perfectly supports any type of video and data sources for any display configuration.

The displayed content which comes in simultaneously from multiple sources can be presented across multiple display units as one large image, separate images, or a combination of both. Different types of controller options provide the right solution to meet your requirements. Delta's display controllers are available in 2 variants with optionally excellent control software.

DVCS - Distributed Video Wall Controller

Delta's Distributive Vision Control System (DVCS) is one of the world's most advanced video-wall 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 encoding efficiency, DVCS enables customers to capture, distribute, control and display high definition video sources over an IP network reliably.

MatriXpro - Centralized Video Wall Controller

The matriXpro video wall controller technologies deliver the performance and features that are required by demanding professional applications. The matriXpro MULTI VIS system incorporates a broad range of sophisticated professional applications that are thoroughly tested and backed by a global team of support specialists. This gives you the peace of mind to manage and control your sources and display the required information on your video wall. This can be done locally or from any other location (free seating).

Multi Vis Control Software

MULTI VIS offers a complete platform for command and control centers, meeting rooms and crisis rooms, covering equipment, software tools and specialized services for your application.

These environments using very large displays have unique technical and operational challenges that require the use of specialized software and equipment to allow the extraction of data and information.

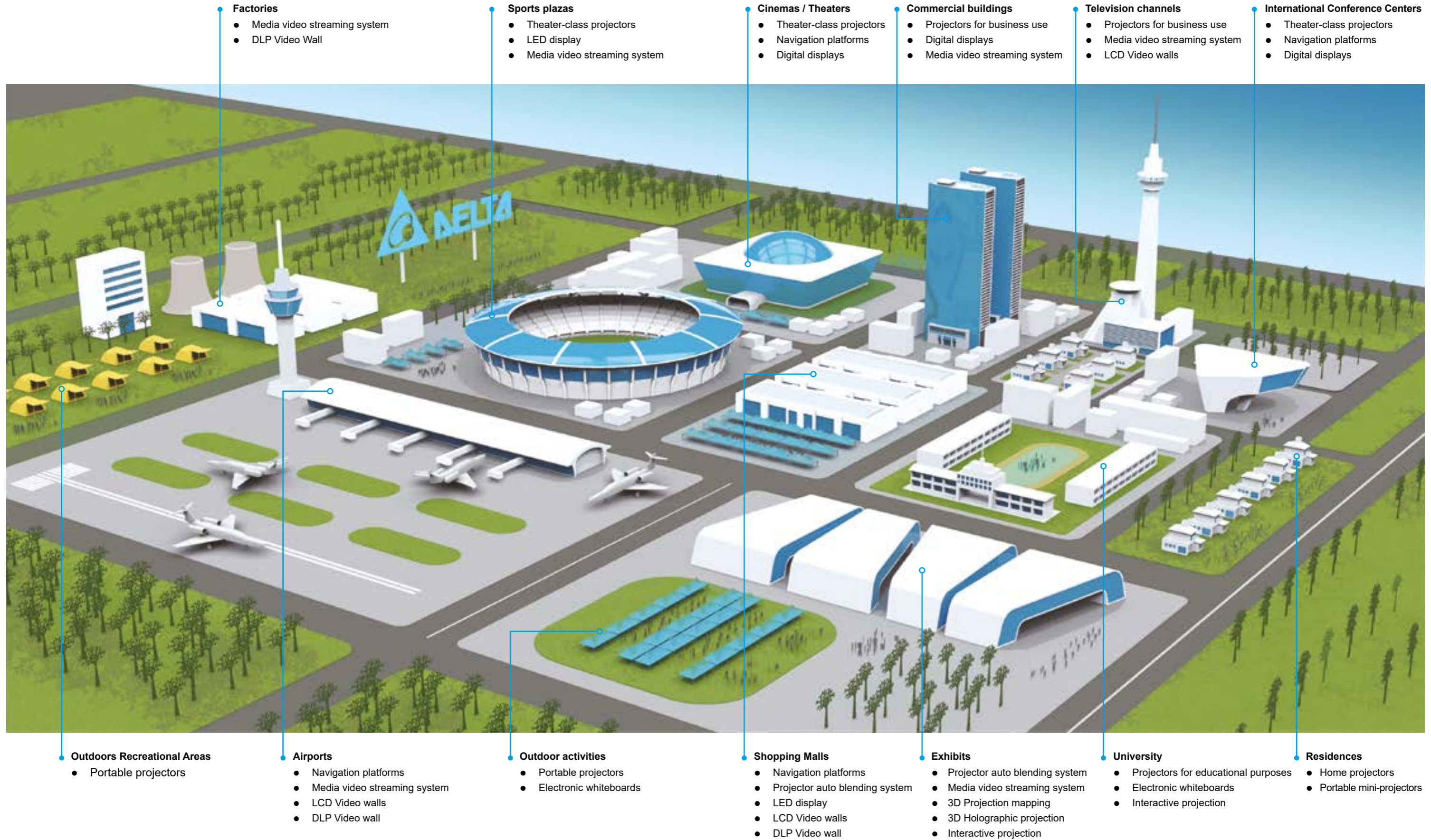
The MULTI VIS technology offers a collaborative infrastructure, flexible enough to support operators in solving problems of various natures.



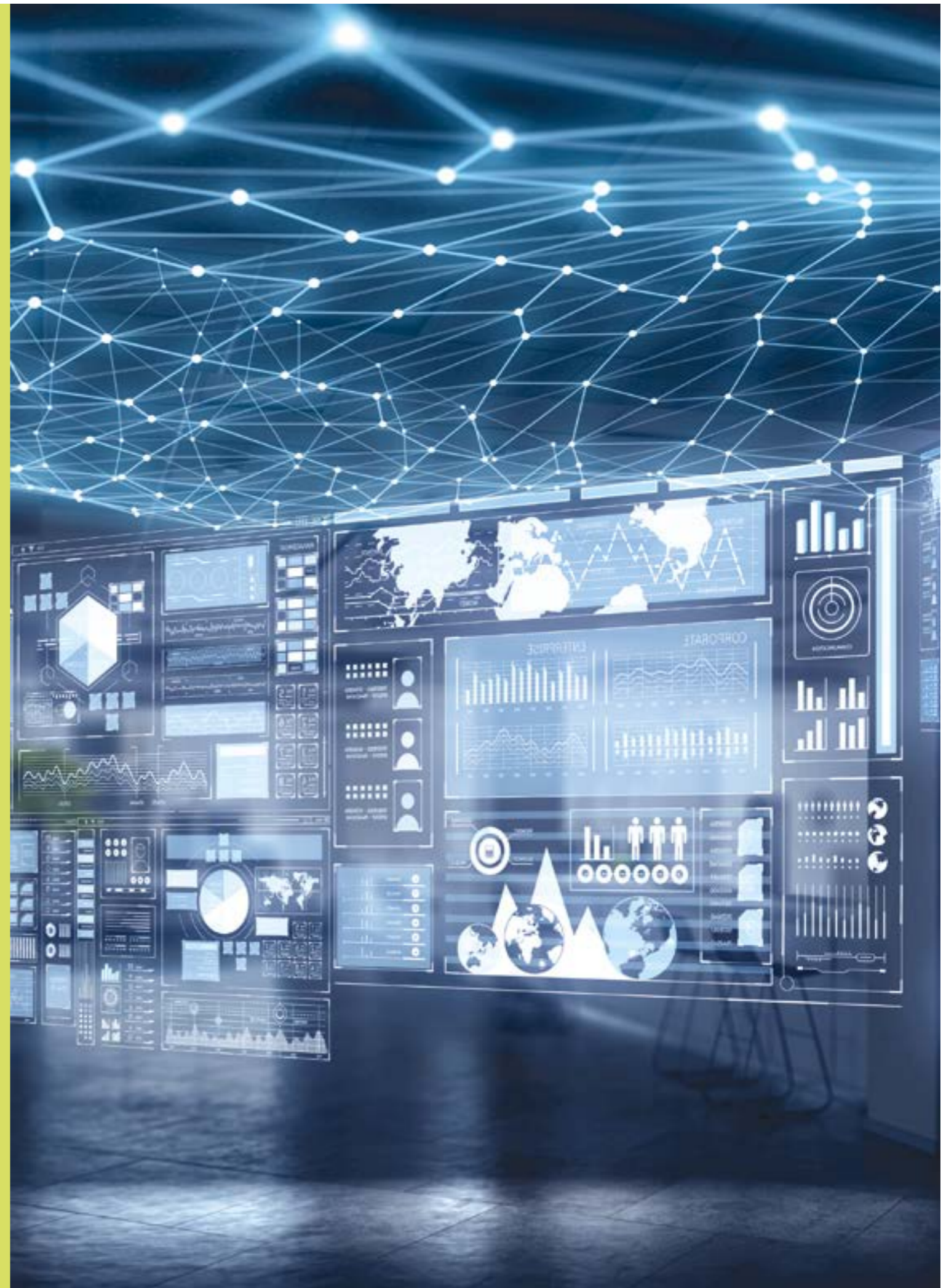
DISPLAY WALL



Applications



Display Applications



Need of Traffic Monitoring to Ensure Safe Travel

Transportation has witnessed a sea of change in road, rail, air and sea transportation. Managing safety in today's air-space and controlling the increasing road, highway and port traffic has become a complex responsibility. Situational awareness, analysis and rationale decision is imperative to maintain the traffic flow in a secured way. This can be achieved by intelligent traffic monitoring system that will continuously monitor the traffic situation. Video walls for a safer mobility system.

Delta video wall solution delivers a reliable, flexible and revolutionary solution that caters to the traffic management needs. Delta's 24x7 display solutions' innovative endeavors enable the crucial control rooms to analyze the situation correctly and guaranty safety to the commuters. Delta's Video walls are capable of integrating with today's intelligent traffic management systems which can display route information, live video feeds, traffic congestions and critical updates avoiding hindrances to traffic management system.



Bangalore Railway Traffic Control Center, India



Mumbai Metro, India



Railway Traffic Control Center, China

Control Room Solutions for Mission Critical Operation Centers

A proactive, comprehensive and sustained approach to disaster management is required to reduce the detrimental effects of disasters. A disaster management control room helps in the dissemination of warnings, monitoring of relief and rescue measures during disaster, assessment of preparedness, preparation and compilation of Standard Operating procedures, assessment of disaster vulnerability,

preparation of community based disaster management plan, creating awareness through mock drills and training etc.

The Delta display walls act as a backbone for these control rooms and help in 24/7 disaster coordination and management effective. At Delta, we know that when disaster strikes, every milli second counts!



- Global ICT solutions provider, China 1
- National Traffic Control Center, India 2
- Kenli Petrochemical Group, China 3
- Power Transmission Control Center, Mexico 4

City Surveillance

A Round-the-Clock Monitoring

Video surveillance deployments, especially with large number of cameras installed require 24/7 continuous monitoring where security personnel needs to watch for any small or big unusual movement or activity. In such sensitive applications, the Video Wall aids the viewer with the best picture clarity and with excellent projection up time. With the help of Delta display walls, security officers would

keep a round-the-clock vigil on all the movements on traffic violation, airport security and other sensitive areas and activities. Large cities and metros where a large number of surveillance cameras have been installed, a sophisticated technique and state-of-the-art video walls are needed to monitor all these cameras from a central control room



Bangalore Traffic Control Center, India 1

Portland Traffic Control Center, USA 2

Surat Safe City, India 3

Police Administration Surveillance Center, China 4

Highway Traffic Center, China 5

Anhui Traffic Control Room, China 6

Sports

Big sports displays can not only transmit graphical information or a score but also a live broadcast, a close-up repetition of the most interesting moments of sports competitions, video information about sponsors of a club, a stadium, a match, a competition and a tournament.

Running commercials on a display during a sporting event is without a doubt profitable for sponsors and advertisers: a commercial will be seen both by fans present at the stadium and by TV viewers.



Stamford Bridge, England 1 2

International Baseball Field, Taiwan 3

Hualien County Field, Taiwan 4

Tianmu International Baseball Field, Taiwan 5

Chengcing Lake Baseball Field, Taiwan 6

Public Display for Public Information

Delta's display solutions are an ideal solution for public displays. Delta displays are the best display tools be it at stadium, hospitals, etc for public information or at retails stores for branding purpose or at sports venues for

displaying scorecard. Best suited option for concourses, passenger waiting halls, reservation centers, hospitals and airport lobbies and other such locations.



- Chimelong Ocean Kingdom, China [1](#) [2](#) [3](#)
- Huayi Control Room, China [4](#)
- South Wall CMH Airport, USA [5](#)
- Kennedy Space Center, USA [6](#)

Increasing Demand for 24/7 Monitoring

As the demand for utilities (power, water, gas etc.) is increasing, there is also a need for efficient around-the-clock methods to monitor procedures and systems. These industries have a complex flow of resources and needs

a sophisticated and quick responsive video wall control room to maintain the flow of information. The operators must be provided with real time information with clearly-displayed data 24/7.

Reliable Control Room Solutions for Efficient Operations

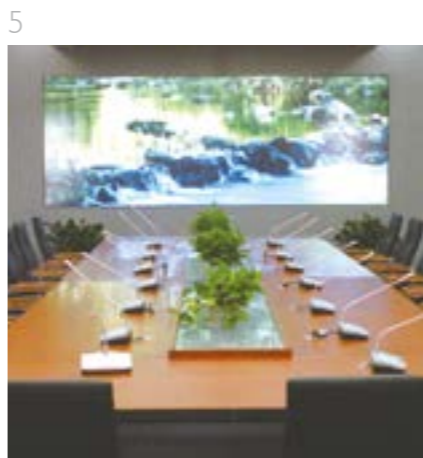
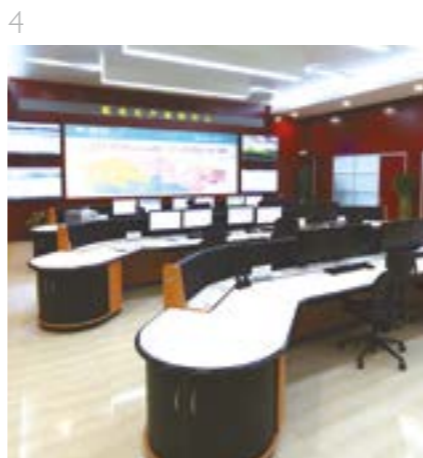
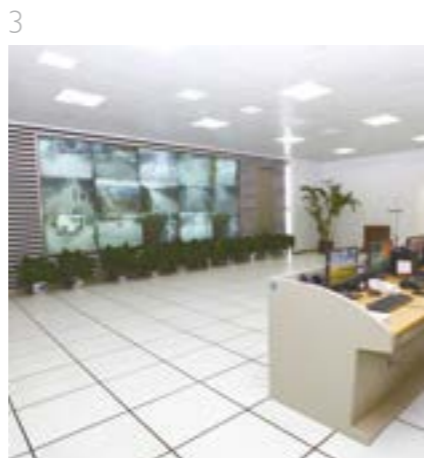
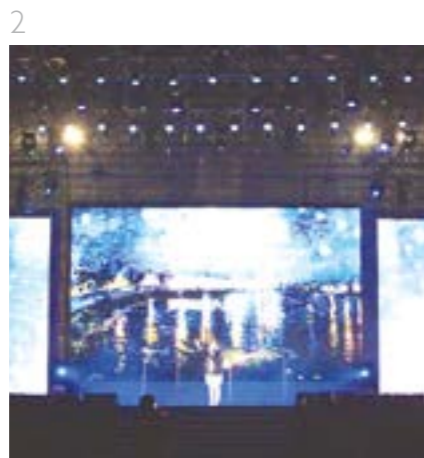
Delta's display solutions is playing a vital role in setting up utility control rooms with its video walls that enable the teams working in these fields, to work efficiently with prompt and rationale response. Delta's reliable and highly

flexible Video wall solutions help operators to view detailed information. Any kind of display up-gradation of existing control rooms is undemanding as Delta's video walls can be installed with existing infrastructure with minimal changes.

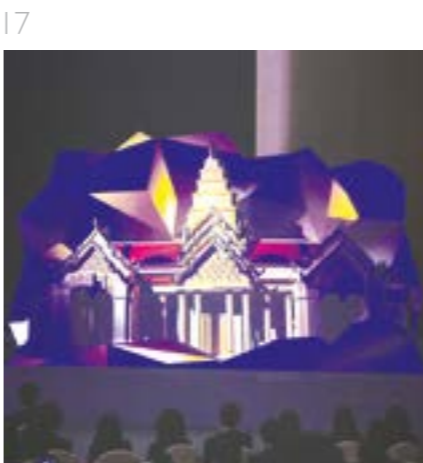
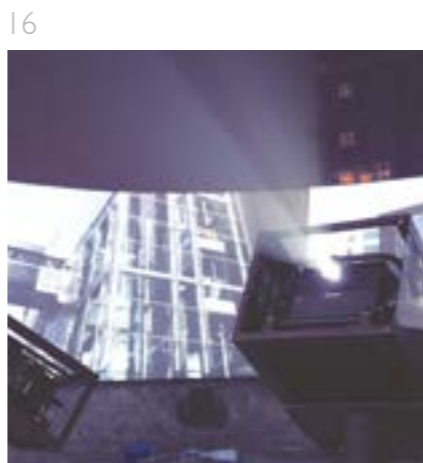
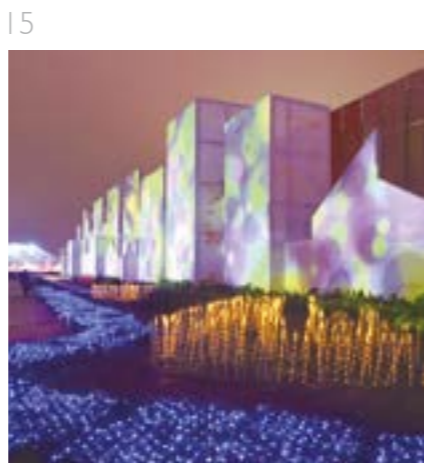
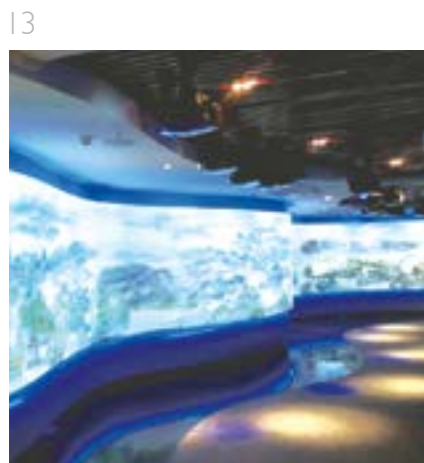


ZHCC Central Control Room, China 1

Shen-Luo Highway Control Room, China 2



DELTA
DISPLAY
SOLUTIONS



PROJECTION
MAPPING



1. Frontop Company Exhibition Hall Canton /
2. CKS Memorial Hall Life of Faraday Stage Play /
3. Government Emergency Center / 4. Power Authority Control Room / 5. Conference Room / 6. Finland Turku Wiklund / 7. Chimelong International Ocean Tourist Resort Zhuhai/
8. Sahara Conference Room / 9. Taipei National Palace Museum / 10. National Palace Museum □ Multimedia Gallery of Painting and Calligraphy / 11. Retail Store / 12. Pucheng Clean Energy Chemical Company Central Command Room / 13. Projection displays in a live concert performance / 14. National Museum of Natural Science in Taichung □ End of the World Exhibition □ Catastrophe and Revival / 15. Taiwan Lantern Festival □ Dreaming City Dreaming Life / 16. Taiwan Lantern Festival □ Ring of Celestial Bliss. / 17. Thailand LED EXPO / 18. Europe Immersive Adventure / 19. Corporate. Show Room / 20. Barcelona Light Festival / 21. Guangzhou International Light Festival / 22. Taichung Metropolitan Opera House / 23. Tainan City Government □ The Grand 3D Projection Mapping Show



Delta Global Operations

[/ About Delta Electronics /](#)

Power source and parts

- Embedded power supplies
- Fans and thermal management
- Mobile power supplies
- Electronic components for ICT equipment

Energy Management

- Industrial automation
- UPS and datacenter infrastructure
- Automotive electronics & electronic vehicle charging
- Telecom power systems
- Renewable energy

Smart Green Life

- Displays and visualization systems
- Networking systems
- LED lighting
- Smart voice recognition systems
- Medical devices
- Vivitek®
- Innergie®

Global Operations Reliable and Robust Core Values

For the past 40 years, we at Delta Electronics have adhered to our corporate mission of innovation, research, development, and integration of resources around the world. During our journey, we have grown and established ourselves in numerous countries and became world leading manufacturers of numerous products, earning consecutive nominations as Asia's Fab 50 by Forbes.

The Delta Group has established business offices around the world as well as research and development centers and production facilities in Taiwan, Mainland China, the US, Thailand, Japan, Mexico, India, Brazil, and Europe.

In order to live up to our commitments to environmental protection, our new office buildings and production facilities constructed after 2004 are compliant to green architecture and design requirements.

Delta Electronics has accumulated years of experience, using professional knowledge and display system technologies to create a strong foundation, ensuring that our products offer clients with the best and optimal display solutions.

We started off as a leader in OEM of CRT monitors and liquid crystal displays. After years of hard work, we now offer a wide range of product applications as well as highly specialized solutions that range from home theater projectors for family use, extreme short throw projectors for electronic whiteboard in classrooms, LCD Signage and LED walls for commercial and entertainment applications, seamless large screen monitoring systems for surveillance, and theatrical 3-chip DLP® projectors for performances.

Delta Display Solutions





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