

# Technology



# Quality

# Uniformity

# Quality

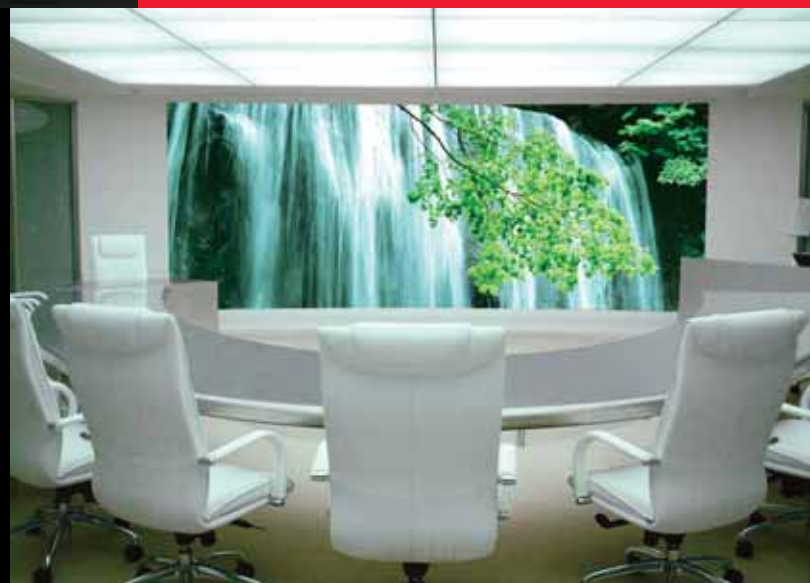


MTV, New York: 6.528m x 11.52m, 6mm Dot Pitch.

***“We have such a large viewing area... 5,324,800 LEDs and we can control each one individually, we have complete color uniformity across the spectrum at any angle.”***

Rich Stout, Video Director  
CDA Productions (Las Vegas), Inc.,  
Caesars Palace Colosseum

# Uniformity



INCS, Chino, Japan:  
2.496m x 6.528m,  
4mm Pixel Pitch 3 in 1 LED.

# Technology



Modular Transportable Screen

## Clearly... the best.

Diamond Vision™ large-scale full color display systems from Mitsubishi Electric

## Seeing is believing.

Whatever the time of day or night, whatever the viewing angle, whatever the location, Diamond Vision LEDerboards™ bring reality to the eyes of each viewer.

Unmatched sharpness, clarity, color accuracy and uniformity make Mitsubishi Diamond Vision the undisputed leader in high-definition electronic displays.

With over 50 years of experience in television technology, Mitsubishi Electric pioneered the development

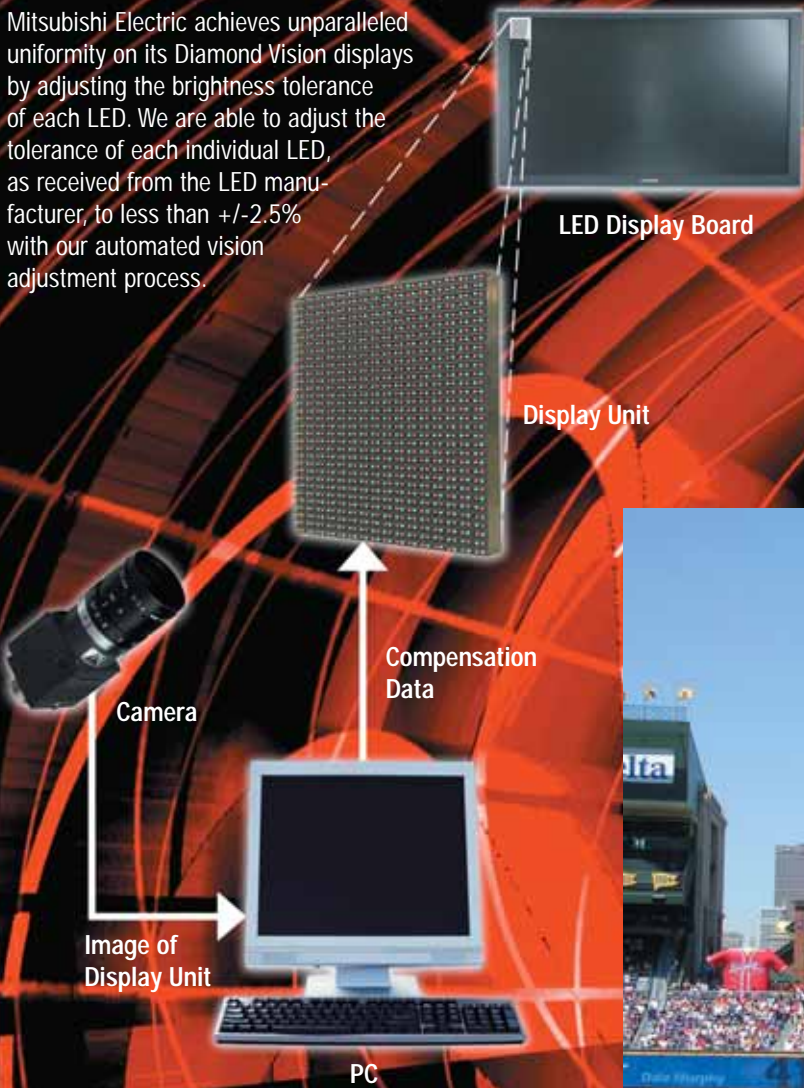
of large-scale displays and installed the world's first full-color version at the 1980 MLB All Star game. Since then, we have set the standard for our industry. The proof lies in over 970 displays installed and operating worldwide. Mitsubishi Electric's ongoing commitment to technological leadership has resulted in several patented and proprietary technologies. What's more, all Diamond Vision products are incredibly easy to operate, require virtually no maintenance, readily accept complex and ever-changing programming, and perform with unequalled reliability.



United Center, Chicago:  
3.901m x 6.178m 4 sets, 2.276m x3.901m x 8sets 5mm Dot Pitch.

## Uniformity Adjustment of LEDs

Mitsubishi Electric achieves unparalleled uniformity on its Diamond Vision displays by adjusting the brightness tolerance of each LED. We are able to adjust the tolerance of each individual LED, as received from the LED manufacturer, to less than  $\pm 2.5\%$  with our automated vision adjustment process.

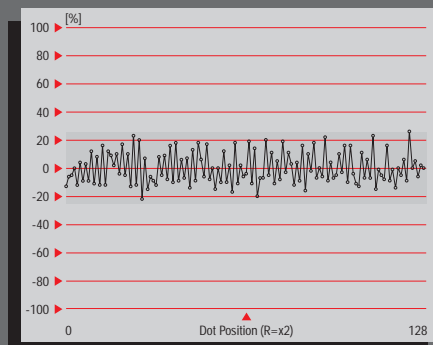


# Leadership

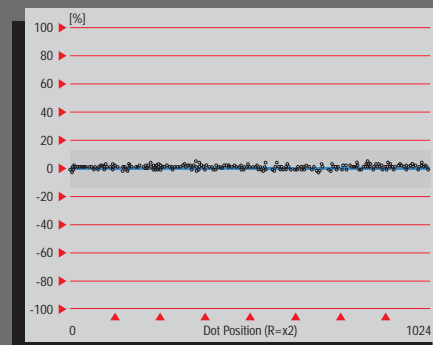
Turner Field, Atlanta:  
21.76m x 24.0m, 10mm Dot Pitch.



### LED Tolerance Before



### LED Tolerance After



# Performance



V-Tech, Tokyo:  
4.608m x 6.144m, 8mm Dot Pitch.

***“We were doing something that had not been done before... a 110 foot curved screen with a door in the middle of it. We needed a partner and Mitsubishi stepped up to the plate and wanted to be part of the project.”***

Rich Mooney, Technical Director  
Caesars Palace Colosseum

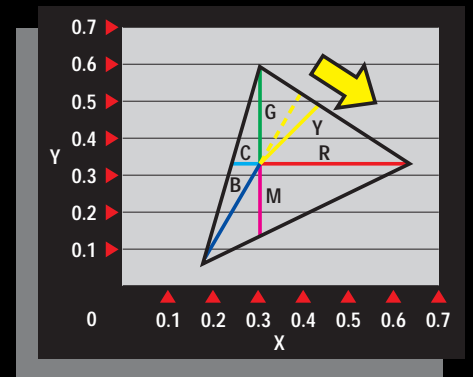
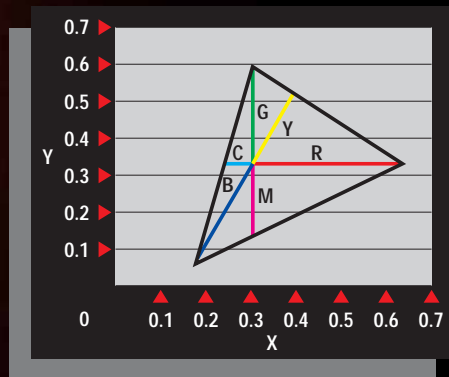
# Dynamic

## True Color Reproduction

Conventional LED color adjustment conversion algorithm.



Mitsubishi Electric's proprietary LED colorspace conversion algorithm.



Because LEDs generate color characteristics beyond the spectrum of typical video standards, color conversion must be performed. Typical LED display manufacturers can only adjust limits for red, blue and green which inaccurately display blended colors like yellow. Mitsubishi Electric's algorithm independently controls the color conversion of each color in the spectrum independently producing vivid, accurate images with LED technology.



Hong Kong Jockey Club, Sha Tin Race Course, Hong Kong:  
8.0m x 70.4m, 10mm Dot Pitch.

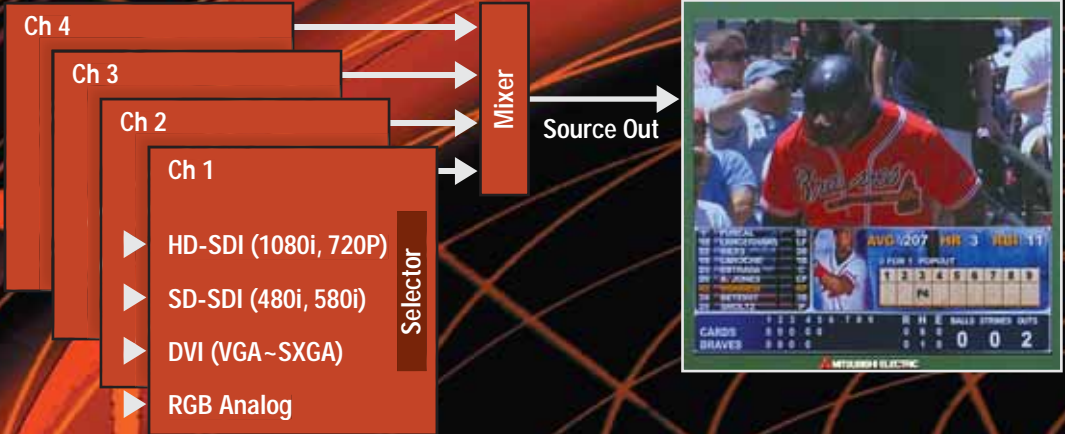
# Excellence

U.S. Cellular Field, Chicago:  
1.2m x 91.2m Ribbonboard.



# Flexibility

Reuters, New York:  
11 screens with total of 682.7m<sup>2</sup>.



## Versatile Processing (Digital Screen Controller)

Mitsubishi Electric's Digital Screen Controller (DSC) can support up to 4 channels of video, with each channel supporting up to 4 video input types. Multiple DSCs can be combined to address extremely large screens or larger video input requirements.



Colosseum at Caesars Palace, Las Vegas: 10.24m x 33.28m, 8mm Dot Pitch.



AEG, New York:  
2.88m x 26.88m, 10mm Dot Pitch.

## Clearly... the best technology.

- **Excellent Uniformity**  
Dot-by-dot LED adjustment assures the brightest, most uniform color imaging across the entire color spectrum—and maintains it for the lifetime of the screen.
- **Supreme Viewing Angle with Ultra-High Contrast**  
Our proprietary individual pixel and louver design eliminates color shift found in other displays, while providing dramatically higher contrast—even in direct sunlight.
- **True and Natural Color Reproduction**  
Our Natural Color Matrix system retains the chromaticity of each color independently and produces the most natural and vibrant colors possible with LED technology.
- **Customized Screen Control**  
Diamond Vision offers three Display Controllers that offer a cost effective solution for the needs of your individual application. Our most advanced Digital Screen Controller allows displays to project any combination of recorded or live video, data, messaging, animation, graphics or images (flicker free) at any time, on any part of the screen, from virtually any source.
- **True HD/LED capability.**  
A true High Definition display uses a video screen with an integral HD processor, one that has the necessary lines of resolution to accurately depict an HD image. Only Diamond Vision has been offering true HD/LED capability for over 5 years—including the world's first in 2001 and the world's largest in 2005.

### Color Clarity/Color Shift



Conventional pixel/louver arrangement results in color shift with off-axis viewing angle.



Diamond Vision dot/louver arrangement results in consistent color at any viewing angle.



## Innovation

### Vivid Contrast Ratio

Standard Screen



Diamond Vision Screen



Mitsubishi Electric's UV Protected black coating, outdoor dot/louver arrangement, and indoor contrast enhancement panels provide superb contrast ratio under any conditions.

Screen images are simulated

## Clearly... the most reliable

Diamond Vision displays have been operating flawlessly for many years in a wide variety of extreme environments and weather conditions

Diamond Vision displays are built in an ISO 9001 certified factory and installed by experienced technicians, so you can expect the longest, trouble-free performance, as well as impeccable customer support.

## Clearly... the most flexible.

No matter the size, the venue, the complexity, the format, the audience, the environment, the program or the message, we can bring it to life. We've worked with architects, designers, builders, owners, creative directors, construction firms and a variety of others to create everything from eye-catching, informative message boards to the most spectacular stage on the planet. We stand ready to provide you with a "one of a kind" display that will dazzle your audiences - backed with unrivaled technical support and customer service.

## Challenge us...

We have the expertise, the experience and the technology to make your large screen dreams come true. Let's talk.



High heat/humidity:  
(Kiryu Boat Race Course, Kiryu, Japan)

# Expertise



High heat/arid environment:  
(Equestrian Club, Riyadh, Kingdom Saudi Arabia)



Cold weather:  
(Transportable Screen-Ruhpolding, Germany)



Water/salt water:  
(Kojima Boat Race Course, Kojima, Japan)

***“Management  
looked at football  
and hockey  
stadiums in  
Canada and the  
U.S... everybody  
said we need to  
get the Mitsubishi  
product...  
it’s the best.”***

Jeff Szynal  
Manager of Scoreboard Operation and Production  
Chicago White Sox

Landmark Installations—Examples  
of Our Ingenuity, Technology and  
Breadth of Experience:

- The first full color video display—  
5.4m H x 8.8m W—  
Dodger Stadium, Los Angeles, CA  
(1980)
- The first High Definition LED  
display—7.424m H x 13.056 W—  
Studio ALTA, Tokyo (2001)
- The world’s longest television  
display— 8.0m H x 70.4m W—  
Hong Kong Jockey Club (2003)\*
- The world’s tallest display—  
51.6m H x 4.0m W—  
Reuter’s New York, NY
- The world’s largest indoor  
High Definition display—  
10.24m H x 33.28 W—  
Colosseum at Caesar’s Palace,  
Las Vegas, NV (2002)
- The world’s largest outdoor  
High Definition display—  
21.76m x 24m—  
Turner Field, Atlanta, GA (2005)\*\*

\*Certified by Guinness Book of World Records 2003

\*\*Certified by Guinness Book of World Records 2005

**Commitment**

## Contact Information

### North America

Mitsubishi Electric Power Products, Inc.  
Diamond Vision Systems Division  
530 Keystone Drive  
Warrendale, PA 15086  
Phone: +1 724-778-3185  
e-mail: [DiamondVisionSales@meppi.com](mailto:DiamondVisionSales@meppi.com)  
<http://www.diamond-vision.com/>

### Europe

Mitsubishi Electric Europe B.V.  
Travellers Lane,  
Hatfield, Hertfordshire, AL10 8XB, UK.  
Phone: +44 (0) 1707 278908  
<http://www.diamond-vision.nl/>

### Asia and Other areas

Mitsubishi Electric Corporation  
Overseas Marketing Dept Public Utility Systems  
2-7-3 Marunouchi Chiyoda-ku,  
Tokyo 100-8310 Japan  
Phone: +81 3-3218-9241  
e-mail: [diamondvision@zd.mitsubishielectric.co.jp](mailto:diamondvision@zd.mitsubishielectric.co.jp)  
<http://global.mitsubishielectric.com/diamondvision/>

Request Online Information using our  
convenient online form.

# Leadership

# Innovation

# Performance