

# WAGNER ELECTRIC SIGN CO.



The Perfect Blend of Technology & Craftsmanship

SINCE 1954

Nationwide Theatre Marquee Design/Build Provider



# 2024

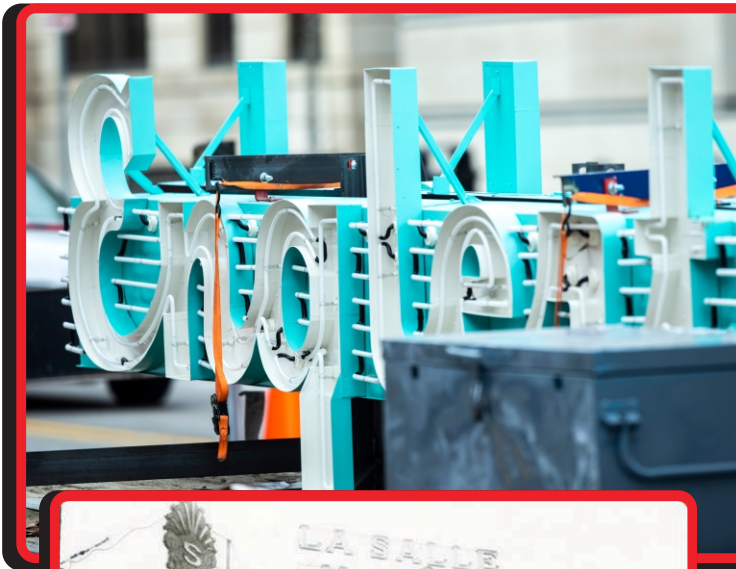


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Saenger Theatre - New Orleans



Englert Theatre - Iowa City



Saenger Theatre - New Orleans



Saenger Theatre - New Orleans



## What is a marquee?

This article is about the structure on the front of a hotel or theatre.

A marquee is most commonly a structure placed over the entrance to a hotel or theatre. It has signage stating either the name of the establishment or, in the case of theatres, the play or movie and the artist(s) appearing at that venue. The marquee is often identifiable by a surrounding cache of light bulbs, usually yellow or white, that flash intermittently or as chasing lights.

### ETYMOLOGY:

The current usage of the modern English word marquee, that refers specifically to a canopy projecting over the main entrance of a theater, which displays details of the entertainment or performers, was documented in the academic journal *American Speech* in 1926: "Marquee, the front door or main entrance of the big top."

### HISTORY:

Movie marquee designs in the United States are closely related to the social, political, and economic forces of the 20th century. The invention of the automobile influenced many elements of theater architecture. The marquee in particular became larger, and stood out from the street to serve as a physical and aesthetic landmark from other businesses along the sidewalk. The shape also evolved from a small rectangle to a trapezoid, making it more readable to automobile traffic.

The text also became less detailed but larger. The larger size of the sign and text, combined with the flashing lights and color, made the façade easily visible to fast-passing cars. Movie marquee designs in the 1930s prompted theater historian Ben M. Hall to call them "electric tiaras."

During World War II, aesthetic considerations of the marquee were dictated by the availability of labor and materials. Building materials such as steel, copper, bronze, and aluminum were limited. Even in the postwar years, these building materials were mostly dedicated to building civilian housing for returning soldiers and their families. Concrete and glass, two building materials that were not restricted, became essential to movie theater architects. Light was also an unrestricted resource for architects, and combined with glass it produced striking visual effects. The mild climate of certain locations, such as the American West Coast, also permitted the use of lightweight materials such as porcelain and plastics in marquees. Another benefit of using light and glass together (besides the dramatic appearance it created) was the economic bonus of it being cheap.[2]

Marquees are also used to illuminate the name of an arcade game at the top of its cabinet.

## Who is the Wagner Electric Sign Company?

Wagner Electric Sign Co., has been a family-owned company since 1954, specializing in creative and innovative restoration, designs and technology, for over 50 years, continuing to be an industry leader in the 21st century. From grandfather, to father, to sons, three generations have continued to hone their skill and expertise in communication design and customer service, breathtaking marquee's, blade signs and strong customer relationships.

From a simple canopy structure mounted to the front of a hotel or theater, to the creation of a fully animated marquee canopy or building vertical blade. Wagner Electric Sign Co. focuses their knowledge, abilities, and skills to ensure each project gets the individual attention and detail it deserves. We understand the importance of accuracy in history and appreciation of restoring back to what once was there.

Wagner Electric Sign Co. specializes in researching history, restoring or manufacturing new to replicate the past, with the intervention of today's technology and energy conservation, creating the seamless transition from idea to the final product.

### *How do we do it? The 3 C's*

#### **Clear Constant Communications**

**Client Meeting** - listen and learn: what is their concept, ideas, and expectations.

•  
**Design Team** - research: what is the best way to make it reality.

•  
**Client Sign-Off on Design** - our expertise: we can advise what is possible & available to work best for the needs.

•  
**Project Managing** - coordinating: meet the needs of client and community.

•  
**Production/Fabrication:** understands client expectations as depicted in designs and shop drawings.

•  
**Installation:** whether provided by Wagner or client, Wagner offers on site supervising for a successful finished project.

•  
**Technical Support:** training before completion, support available after the project is complete.



# Frequently Asked Questions

## How much does a marquee or blade cost?

This depends on many factors;

1. Size
2. Shape
3. Design
4. Illumination
  - a. Type
    - 1) Incandescent
    - 2) Fluorescent
    - 3) Compact Fluorescent Lamp (CFL)
    - 4) Neon
    - 5) LED
      - a) Lamp Style
      - b) Tube Style
  - b. Quantity
5. Special Materials
  - a. Stamped Metal
  - b. Controllers
    - 1) Flashers
    - 2) Digital Multiplex (DMX) Controller
  - c. Communications
    - 1) Direct Wire (Hard Wire)
    - 2) Ethernet
    - 3) Fibre
    - 4) Radio
    - 5) Cellular

## How does it attach to building/structure?

This depends on;

1. Existing Available
2. New Required

## Who installs?

This depends on;

1. Location of Job Site
  - a. Wagner - Local
  - b. Sub - Out of State
2. Installer Determined by Contract
3. Clients Installer

## What type of changeable message?

This depends mainly on budget/preference;

1. Flat Printed Letter on Backer
2. Injection Molded Letter
3. LED Display

## What type of lighting? - also see 4. Illumination a. Type

This depends mainly on budget/preference;

1. Bulb Style (exposed)
2. Neon (exposed)
3. LED Strip

## What paint color(s) to use?

This depends on preference/historic samples. Colors can be matched based on Major Paint Manufacturers (PPG, BM, SW, etc) and mixed in house. Samples are always approved prior to applying on final product.

## How is it controlled?

Normally, on site electrician handles this in coordination with Wagner. Wagner will provide special equipment with training per agreement.



## Type of Lighting Available

### **Incandescent**

Typically the three main style bulb styles used are G11, S14 and A15. Available in Clear, Frosted, Transparent, or Painted. The G11 & S14 normally are 10 or 11 watts compared to the A15 at 25 or 30 watts. The bulbs are rated for 120V and normally are the standard medium screw socket. This style lamp is the style originally used but is being slowly phased out due to energy conservation.

### **Compact Fluorescent (CFL)**

Also come in G11, S14, A15 styles. Available in Clear, Frosted, and limited in Transparent, or Painted. The S14 at 10 watts compared to the A15 at 14 watts. The bulbs are rated for 120V and normally are the standard medium screw socket. Color range is 2700K - 5000K. 2700K more yellow and 5000K more blue. More energy efficient than incandescent.

### **LED**

Also come in G11, S14, A15 styles. Available in Clear, Frosted, and limited in Transparent, or Painted. Wattage ranges from 1 watt to 3 watts. The bulbs are rated for 120V and normally are the standard medium socket. Color range is 2700K - 5000K. 2700K more yellow and 5000K more blue. Also colored LEDs are available. Considered most energy efficient of all bulb types.

### **Neon**

Custom manufactured for each project. Many colors available. Used for letters, designs, and borders.

### **LED (Strip/Tube)**

There are many styles, colors, and lengths that are available. In special cases, a neon effect can be produced in a standard static color or capable of being changed with the assistance of a computer and controller. Many colors and white variations are available.

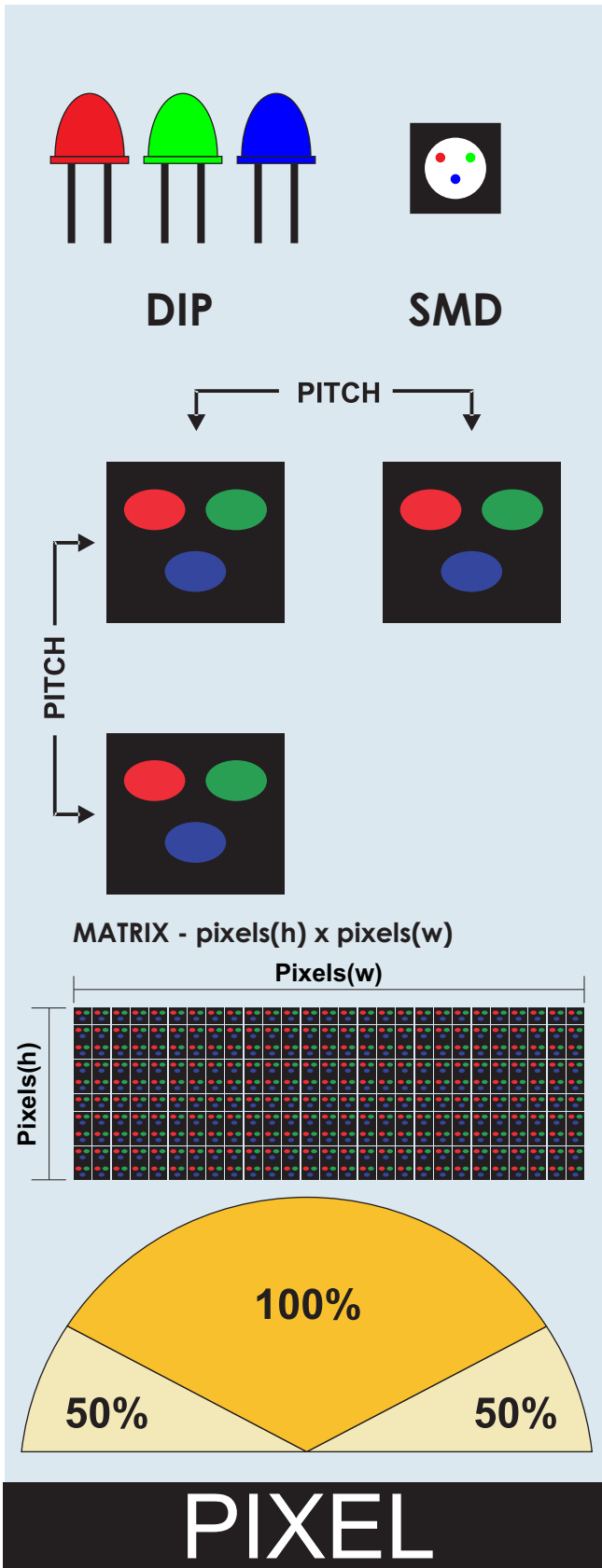
### **Fluorescent Tube**

These are normally used behind plastic. Commonly used to light panels with graphics or changeable letters.

### **LED Display**

Today many theaters have begun to use LED displays. Messages are changed quickly with the capabilities of using pictures, videos or mocking and old style changeable message board. Live streaming is also possible. They have been proven to be the most safe. No ladders required, or fear of falling letters. Displays come in RGB and can produce over a trillion colors. Different pixel sizes are available for budget purposes.

### LED IOI



**LED (Light Emitting Diode):**

An electronic semiconductor device that emits light when an electric current passes through it. They are considerably more efficient than incandescent bulbs, and rarely burn out. LEDs are used in many applications such as flat-screen video displays, and increasingly as general sources of light

**DIP vs. SMD**

These acronyms describe the type of LED. DIP stands for **D**ual **I**n-line **P**ackage while SMD designates that the LED is a **S**urface **M**ount **D**iode. Other than the physical mounting differences of these types of LEDs, there is also a difference in how the pixels are made. DIP LEDs require 3 separate LEDs (red, green, and blue) to make a pixel. SMD LEDs have all three colors in one package and each SMD LED is one pixel.

**Pixel:**

The smallest image-forming unit of a video display. In our units, pixels are made up of one red, one green, and one blue LED. A pixel is the grouping of these LEDs. In a DIP display, there are 3 physical LEDs. In a SMD display, all 3 LEDs are inside a single surface mount package. This allows for much higher resolution displays.

**Pitch:**

The distance between two adjacent pixels. One of the determining factors in character size and display size; i.e. 20mm.

**Matrix:**

The number of pixels that make up the height and the width of a display; i.e. 64 x128.

**Viewing Angle:**

The angle which the light output of an LED is perceived at 100% brightness; outside of this angle the visibility is reduced by half.

**Brightness (NITS):**

The light output per square meter.

## Resolution

Resolution is a combination of pitch and pixel matrix that defines the quality of an image or video

When determining the resolution of an LED sign the viewing distance and height of the sign (as well as other variables) will determine the pitch and matrix that will work best for you.

## Optimal Viewing


Viewing Distance (feet)	Recommended min. Text Height (inch)	Recommended min. Pitch (mm)	Approx. Viewing Time @ 30 mph (sec)	Approx. Viewing Time @ 55 mph (sec)
30	1	4	1.0	0.5
60	2	4/6	1.5	1.0
90	3	6	2.0	1.0
120	4	6/8	3.0	1.5
150	5	8	3.5	2.0
180	6	8/10	4.5	2.5
210	7	10	5.0	2.5
240	8	10	5.5	3.0
300	10	10	7.0	4.0
360	12	16	8.5	4.5
420	14	16	9.5	5.5
480	16	16	11.0	6.0

\*\*\*All data is an approximation


Although these distances are a general approximation of optimal viewing distance, many factors can affect the appearance of the display including sunlight, weather, display age, along with other natural obstructions.

It's probably obvious at this point that the lower the pixel pitch, the higher the resolution and the clearer the display will be.


Any sizes smaller than 10mm all fall within the 30ft. viewing distance outlined in the chart above.




16mm



10/8mm



5/6mm



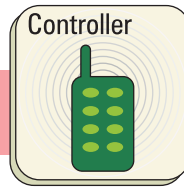
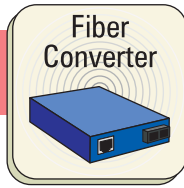
4mm

Resolution comparison at a distance of 30' - 90'

\*\*\* This diagram is a representation for the effects of pitch and resolution. It is an artistic rendering for the purpose of example only



**Communication  
Options Key**

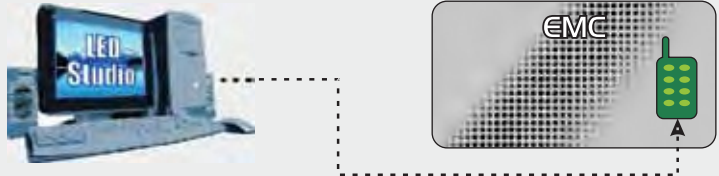


## Sign Connection Options

**Communication with Ethernet:**

**Max Distance – 300 ft**

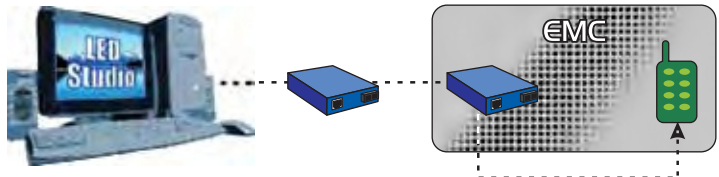
Standard hard-wired connection using CAT 5 cable.



**Communication with Fiber Optic:**

**Max Distance – 1500 ft**

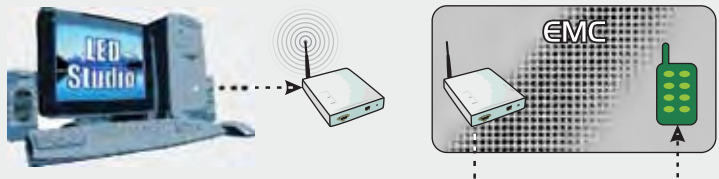
Hard-Wired connection for controlling signs over great distances or areas with high EMF interference.



**Communication with Wireless Ethernet:**

**Max Distance – 0.5 miles**

LINE OF SIGHT  
Wireless option for connecting to high-bandwidth displays.

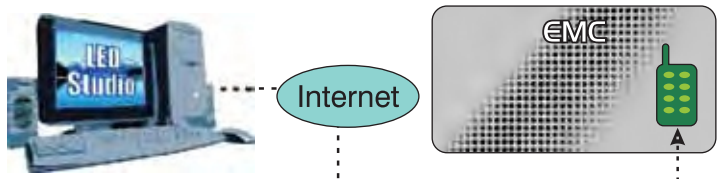


**Communication with a Network:**

Networked (DSL, FIOS, SATCOM):

**Max Distance – Unlimited**

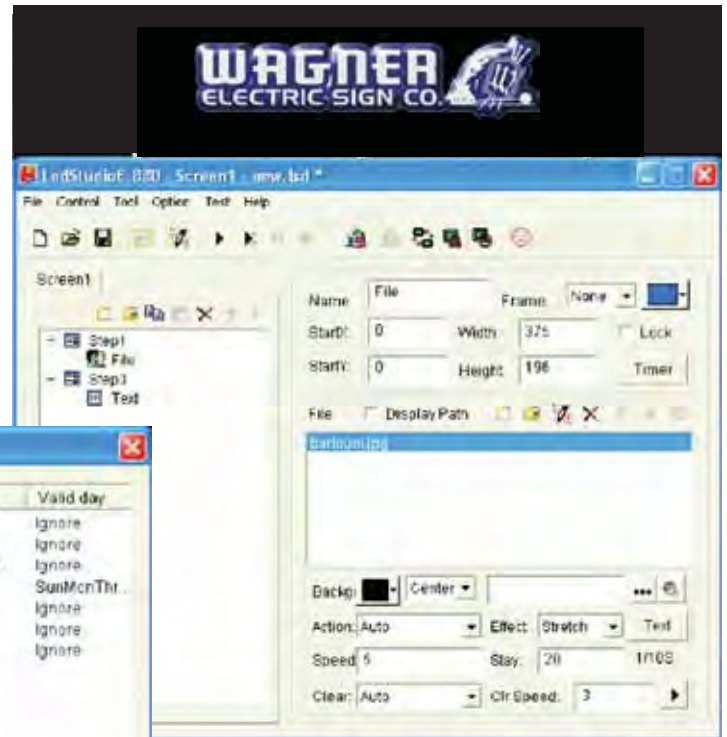
Used for connecting with displays anywhere in the world. Requires Internet connection.



*Colors are not exact and are for visual purposes only*

## Key Features

- Can easily design with Microsoft Office & PowerPoint
- Split screen capability
- Adjust brightness & color on the fly
- Easy to use scheduling software
- Remote access for real-time editing
- Compatibility with almost all picture and video files



Compatibility with Microsoft Office makes creating and sending messages to a sign quick and easy. PowerPoint is a powerful tool for creating custom animated messages with images and word art.

Scheduling is made easy with the built-in schedule table. Here you can schedule dates and times for specific messages as well as changing brightness of the LEDs for day and night use and turning the LED screen on or off.

Remote access allows users to send new files to a controlling computer as well as update the schedule. It also allows real-time display of the controlling computer to view or change the message that is currently playing.

LED Studio can play any type of picture file (.bmp, .jpeg, .gif, .png, .etc.) and any type of video (.avi, .mpeg, .wmv, .etc.). Other file types that are playable with LED Studio include .txt, .exe, .swf, and .html.

LED Studio has the ability to split the screen into multiple sections. This allows you to put a static image or company logo on one part of the screen while the other part displays dynamic text animations or the time and temperature.

Brightness and color contrast can be changed on the fly through the setup options in LED Studio. Test patterns are built in to check the brightness and contrast of the sign.

## {Quality from start to finish}

Here at Wagner Electric Sign Co., we have advanced equipment to ensure the excellent quality of our products. Through many years of development we have held a leading position domestically; we lead in aspects such as on-the-spot management, quality control, technical development of mechanisms and audits recording management and personnel appraisal systems within the LED industry.

### **The Reliability Test for Semi-finished Products**

Before sealing semi-finished modules, and after the quality check inspection, more than 48 hours aging is completed in a high temperature environment for all of our products.

### **The Waterproof Test**

During the rainy season, your outdoor LED displays are subject to intense atmospheric conditions from pouring rain to intense humidity. We perform a high-pressure water spray test on all of our products to ensure your display is waterproof and protected from the elements.

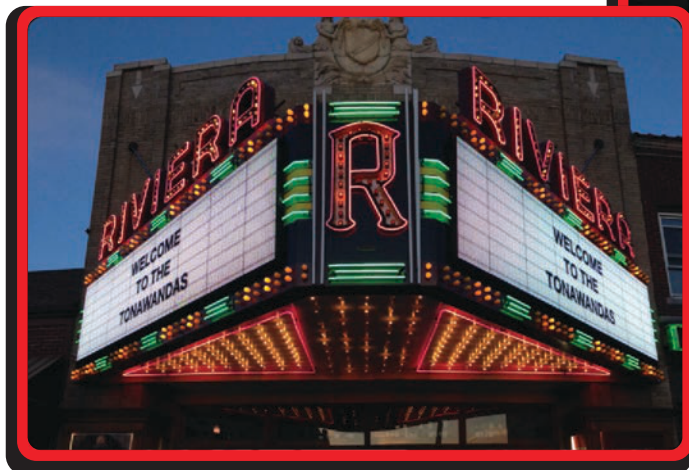
### **The Reliability Test for Finished Products**

When assembling the finished modules within the LED cabinets and simulation on-the-spot whole panel assembly, we continue aging for 48 hours; during which, if no defects are found, the finished product can be moved forward to sign integration and installation.

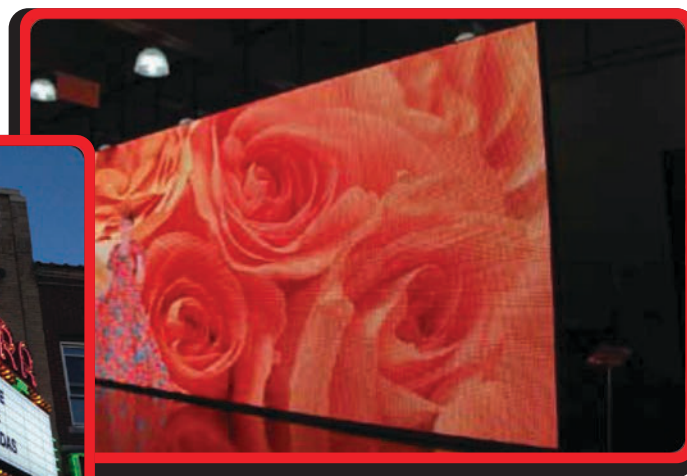
### **The Anti-Corrosion Test**

In order to ensure the reliability of anti-corrosion on the LED display cabinets, we preform salt-stream tests on all of our product lines during their production and before final delivery.

**5 year**  
limited warranty



Outdoor Full Color Display



Indoor Run-in-Test Equipment

# Marquee LED Displays

## Full Color

## Features

- **Sealed water tight LED modules**

By creating a water tight sign we ensure that your investment will be protected from moisture and unpredictable weather. This keeps your sign running smoothly, and for years to come.

- **True and vibrant color**

Our display panels are among the few in the industry with a high level of consistency and uniformity of color. Our displays absorb extra LED reflected light as well as removing dark and overlapping shadows. Able to create as many as 256 million colors your palette is limited only by your imagination.

- **Sturdy construction**

Built from high quality extruded aluminum. Each cabinet is precision cut and welded to enhance strength. We finish it off with a black powder coated finish to resist corrosion from the elements and time.

- **Easy to maintain**

All displays can be configured for either front or rear service. Making maintenance quick and easy. We have specialists on call if you run into any problems.

- **Efficient and low energy use**

Our LED's provide higher brightness combined with less energy usage.

- **Industry leading warranty**

Five year limited warranty with each display will have you confident that you made a safe and valuable investment.



Outdoor 20mm Full Color Display



Outdoor 20mm Full Color Display

## Installation Profile



Module



Case Body



Quick & Simple  
Installation Framework



Specifications	General Specifications for currently available models
Available Sizes/Pixel Pitch	16mm DIP & 10mm DIP, 10mm, 8mm, 6mm, 5mm, and 4mm SMD
Pixel Composition	1 Red, 1 Green, 1 Blue
Display Colors	Up to 291 Trillion
Brightness	≥ 8000cd/m <sup>2</sup> up to 10250cd/m <sup>2</sup> outdoor DIP - 1200nit Indoor SMD
Viewing Angle	Horizontal: ≥ 160° ; Vertical: ≥ 90° outdoor DIP - 120°/120° Indoor SMD
Frames Per Second	≥ 60fps
Refresh Frequency	≥ 400Hz/Sec
Brightness Adjustment	Automatic or Manual
Control Method	Controlled by PC, synchronized to display
Video Input	VGA mapped / NTSC / PAL
Communication Cable	Transmit distance between PC and screen: >100m Fiber Optics. < 100m CAT5/6
Lifespan	≥ 100,000 hours
Max. Power Consumption	≤ 1100w/m <sup>2</sup> s, Average power is 60% of Max. power
Net Weight/sqm	Approx. 85kg
Input Voltage	AC220V/50Hz ±10% or AC110V/60Hz ± 10%
Operating Environment	-20°C to +60°C Humidity: 10% RH to 90% RH
Operating System	Windows 7/10 , in - phase or asynchronous
Intelligent Control	Automatic power on/off and remote power on/off function
Video Display Function	Synchronized display of text, graphics, pictures, signs, flashes, and any signal from TV, VCD, DVD, Camera, and scanner and so on, support PAL, NTSC.

## SIGNS OF THE TIMES

**BEST ORIGINAL DESIGN AND FABRICATION,  
ILLUMINATED, LARGE SHOP OF 2019**

Western Neon (Seattle) claims first with sign for Lapis Theater.  
By Mark Kissling

SEPTEMBER 4, 2019



**Second Place**  
Fabricator: Wagner Electric Sign Company (Elyria, OH)

## SIGNS OF THE TIMES

**BEST ORIGINAL DESIGN AND FABRICATION,  
ILLUMINATED, LARGE SHOP OF 2020**

Wagner Electric Sign Co. incorporated local flowers and architectural accents for the Lexington Opera House.  
By Mark Kissling

OCTOBER 31, 2020



**First Place**  
Fabricator: Wagner Electric Sign Company (Elyria, OH)

### THE NEW YORK LANDMARKS CONSERVANCY

In recognition of the outstanding preservation efforts made by

Wagner Electric Sign Co.

for

Belasco Theatre

LUCY G. MOSES PRESERVATION AWARD

April 27, 2011

  
Peg Green, President

*The Morris*  
PERFORMING ARTS CENTER

To Whom It May Concern:

It is with much pleasure that I recommend the Wagner Electric Sign Company to assist you in your anticipated marquee project.

The Morris Performing Arts Center contracted with Wagner Sign on a design/build basis to handle our total project. The Morris is listed on the National Register of Historic Buildings and required a company with strong experience in historic marquees. Wagner Sign worked closely with us on developing a marquee design that met all our needs and complimented our historic building. The shop drawings they developed were very detailed and have been added to our archives. Fabrication of the marquee was completed in their plant and shipped to our site for installation. Wagner Sign served as the general contractor and were very effective coordinating all the trades to complete the installation in a timely fashion. We now have a beautiful state-of-the-arts historic looking marquee.

The Wagner Electric Sign Company is a resource that I would not hesitate to call on to assist on any sign project. They were very professional, conscientious, and it was a privilege to work with them on the creation of our new marquee. I believe that Wagner Sign would prove to be an asset to any company that employs their services.

Sincerely,



Dennis J. Andres  
Executive Director

Morris Performing Arts Center • 211 N. Michigan Street • South Bend, IN 46601

Office: (574) 235-9198 • Fax: (574) 235-5604 • <http://www.MorrisCenter.org>



259 Genesee Street Utica, New York 13501

Ticket Office: 315 / 724 - 4000 Administration 315 / 724 - 5919  
Fax: 315 / 724 -1227 jfaust@cnyarts.com

Mr. Mark Wagner  
The Wagner Electric Sign Company

March 11, 2008

The Stanley Center for the Arts is most grateful to the Wagner Electric Sign Company of Elyria, Ohio for the splendid restoration of the 1928 marquee of the Stanley Theatre in Utica, New York.

The care and quality of the workmanship on this project was evident from our first meeting with members of the firm.

We were most impressed by the care they took in the assessment of the project, and the subsequent removal of the many components of the marquee. The pieces were safely transported to the Wagner plant in Ohio, and we were kept apprised of all developments in the restoration process.

We were most excited by the many discoveries made of the "original" marquee, which made it fairly simple to make decisions on its final color choice and the restoration of hidden components of the marquee (such as the original "WB" lighted circle on the front.

The work was done in a timely manner, and was returned to Utica as planned.

The reinstallation of the marquee was not an easy process, as the installers had to battle adverse January weather (wind, rain, sleet, freezing temperatures). The crews worked many extra hours to make sure all components were installed and working properly.

The only major hitch was the initial setting up of the new Galaxy Pro digital signboards from Daktronics, but representatives from Wagner kept working with Daktronics to resolve these issues for us.

The "new" Stanley marquee has received a lot of attention since its relighting last week. It has received universal acclaim, and the marquee is lighting up downtown Utica again!

We heartily recommend Wagner Electric Sign Company for any kind of restoration of old signage. They go beyond restoration as they successfully integrate new technology into the signs so that they work for the future.

Thank you!

Regards,

*John Faust*

Stanley Theatre Manager  
The Stanley Center for the Arts  
261 Genesee Street  
Utica, NY 13501

## LEBRON & ASSOCIATES

ENGINEERS, GENERAL & MECHANICAL CONTRACTORS  
P.O. BOX 175 AÑASCO, PUERTO RICO 00610

September 18, 2008

Mr. Mark Wagner  
President  
Wagner Electric, Sign Co.  
Cleveland, OH

**Re: Improvement to Yaguez Theater, Mayagüez, PR.**

Dear Mr. Wagner:

We would like to take this opportunity to convey to you, as well as to the other members of your team, how much we appreciate the quality of your work. We could not have asked for better quality in your design, engineering and timely delivery. Your hard work and dedication made it possible for us meet our commitment and to deliver the Project in time for the inaugural festivities on Friday the 12<sup>th</sup>.

We would like to also thank Miss Jennifer Bradley who answered all our requests so politely.

Sincerely,

**LEBRON Y ASOCIADOS, INC.**

Jesley Pagán Galloza  
Project Engineer

Cc. Eng. Edgardo Lebrón Vagú



September 11, 2018

Mark Wagner  
Wagner Electric Sign Co.  
7135 W Ridge Rd.  
Elyria, OH 44035

Project: Miller Theater Rehabilitation  
Subject: Thank You

Mr. Wagner,

As we approach the one year anniversary of the Marquee Lighting Ceremony, I wanted to take a minute to thank you for your company's efforts with the Miller Theater project in Augusta, GA. Wagner's attention to detail, care for the customer's desires, and acknowledgement of our construction schedule made the overall restoration and unveiling of the historic marquee an absolute joy for the project team and supporting community around. Since that time, Christman has completed the interior restoration and re-opened the building for the first time in over 30 years. The old building is flourishing with new patrons who want to see the restored theater in person. This could not have been accomplished without the hard work of our trade contractors like yourself. The Symphony Orchestra and Miller Staff have received multiple awards and accolades for the restoration effort which continues to solidify the success of the project. It was truly a pleasure and we look forward to future opportunities to work together again.

Respectfully,  
The Christman Company

*Tanner Parker*  
Tanner Parker  
Project Manager

1021 Broad Street, Augusta GA 30901 Phone: 706-550-1010 Fax: 706-550-1019



**CINEMA TREASURES**  
Discover. Preserve. Protect.

Home » Link Directory » Marquees » Wagner Electric Sign Company

**Wagner Electric Sign Company**  
<https://www.wagnersign.com/theatermarquees.htm>  
Specializes in marquee design and restoration. Site includes tons of marquee photos.  
9870 hits | added Nov 16, 2003 by Patrick Crowley | report

**YOUR COMMENTS**

Wagner is awesome. They recently installed the new marquee at the State in kingsport, TN. They were very professional and delivered an exact replica of the original which had been removed in the 1950s. Their price is not cheap but we feel they were worth every penny.

doug Beatty  
DB3 Development Company, LLC  
posted by kingsport state on Feb 4, 2009 pm28 5:03pm



## Sales & Marketing

- ◎ The Wagner Electric Sign Company  
7135 West Ridge Road, Elyria OH 44035  
USA

### Contact: Mark Wagner

TEL: 800.553.6366 x 134  
FAX: 440.233.6455  
Email: [mark@wagnersign.com](mailto:mark@wagnersign.com)

## Technical Services

- ◎ The Wagner Electric Sign Company  
7135 West Ridge Road, Elyria OH 44035  
USA

### Contact: Jim Parker

TEL: 800.553.6366 x 144  
FAX: 440.233.6455  
Email: [jparker@wagnersign.com](mailto:jparker@wagnersign.com)