

BRICK[®]

APPLICATIONS - DMS CATALOG





The ADDCO Advantage



ADDCO was founded in 1953 on the values of sound engineering, quality manufacturing and attentive service.

In 2007, we joined IMAGO, a global group that includes the ODECO Group. This gives us access to a broader range of resources and technology. ADDCO is the North American division of this visual communications leader whose product lines include:

Traffic - DMS, Mobile Traffic Control

Sports - Stadium, Arena & Venue
High Definition LED Displays

Advertising - Digital Billboards

Architectural - Integrated LED Systems

Why work with ADDCO?

- Proven Products
- Proven Service
- Proven Performance

ADDCO DMS systems feature the BRICK®. Used in numerous applications in the U.S. and around the world, the modular BRICK® is the best choice for DMS signage.

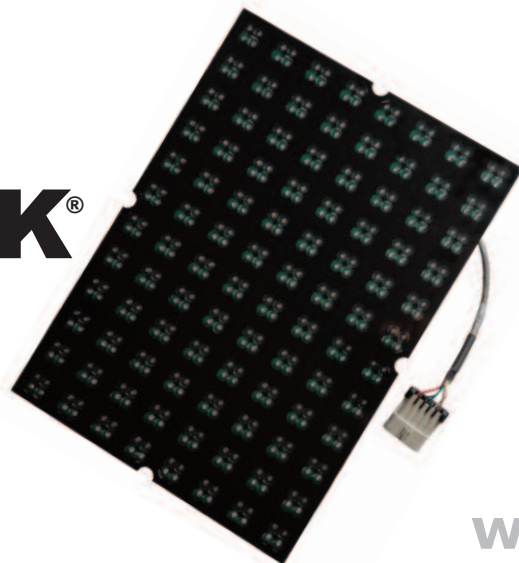
BRICK® DMS have been used on:

- Highways
- Freeways
- Arterial Roads
- Toll Facilities
- Parking Facilities
- Ports
- Airports

BRICK® DMS provides superior value:

- **Eliminates** installation of costly and unnecessary walk-in enclosures
- **BRICK is GREEN**-Consumes 80% less power than a typical DMS with a walk-in enclosure
- **No fans**, filters, environmental controls
- **Requires 87% less** structural support
- **Modular**, lightweight, sealed LED display
- **Configured** to exact customer dimensions
- **Integrates** into existing applications
- **No maintenance** required

the
BRICK®



Sealed LED module used for DMS display. Eliminates need for walk-in enclosures. Lightweight. Mounts like a static sign.

www.addco.com

Proven Performance

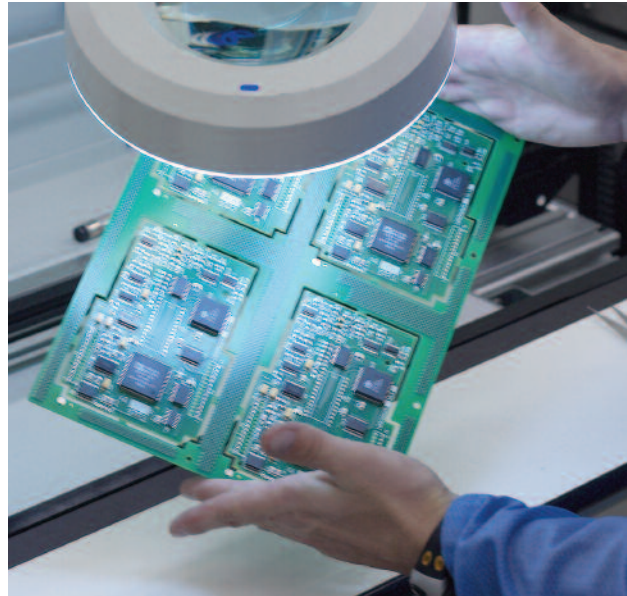
ENGINEERING

Our engineers adhere to strict ISO 9001:2000 protocols when designing, testing and manufacturing each DMS project. We provide:

- Dedicated engineering services
- End-to-end project management
- Experienced installation teams

MANUFACTURING

Skilled production workers follow established quality processes and procedures. Each DMS is tested rigorously before shipping to be sure that it meets customer specifications.



SALES

Our sales staff has in-depth product knowledge. Regional managers are based strategically throughout North America to provide first-hand knowledge of the projects and resources in their areas. International partners around the globe give you world-class products while maintaining a local connection.

CUSTOMER SERVICE

Experienced customer service representatives are available to answer questions and troubleshoot problems should they arise. Field technicians are based in key locations across North America to give you prompt, personalized service when you need it most.

We offer:

- Qualified technicians
- On-site instruction and training
- 24/7/365 toll-free phone support

CORPORATE STRENGTH

As part of the IMAGO Group, we have the financial strength to support large, multi-phase projects. Our customers benefit from this global partnership by receiving:

- Highest performing, most cost-effective DMS system
- Knowledge of local practices and procedures
- Personalized support and service



800.616.4409

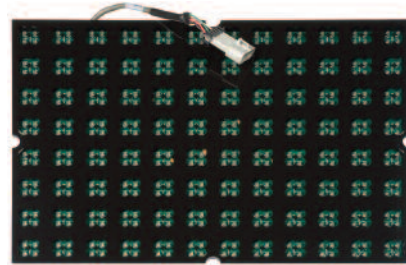


The Right BRICK[®] For the Job



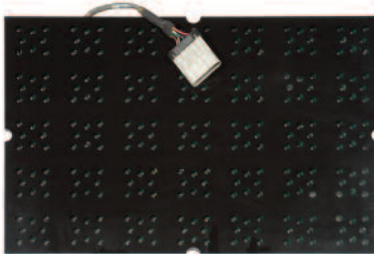
Standard Density

Length	19.25 in/48.8 cm
Width	13.75 in/34.9 cm
Depth	2 in/5.08cm
Weight	4 lbs/1.8kg
Pixel arrangement	5x7
Number of pixels.....	35
LEDs per pixel	4
Number of LEDs.....	140
LED spacing in pixel	1.35 in/3.4cm
Pixel spacing.....	2.7 in/7cm
LED type	592 nm amber
Min character size 5x7 font.....	19.25 in/48.9 cm
Angularity.....	15°, 70°



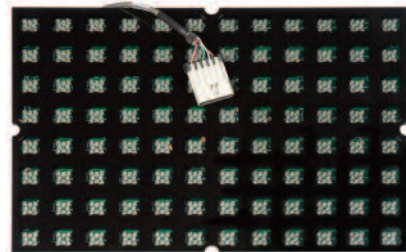
High Density

Length	19.25in/48.8 cm
Width	13.75 in/34.9 cm
Depth	2 in/5.08cm
Weight.....	4.3 lbs/1.95kg
Pixel arrangement	8x12
Number of pixels.....	96
LEDs per pixel	4
Number of LEDs.....	384
LED spacing in pixel	0.50 in/1.27cm
Pixel spacing.....	1.6 in/4cm
LED type	592 nm amber
Min character size 5x7 font	12 in/30.6 cm
Angularity	15°, 30°,70°



Standard Density Pixel Diagnostic

Length	19.25 in/48.8 cm
Width	13.75 in/34.9 cm
Depth	2 in/5.08cm
Weight	4 lbs/1.8kg
Pixel arrangement	5x7
Number of pixels.....	35
LEDs per pixel.....	4 or 8
Number of LEDs.....	140 or 280
LED spacing in pixel	1.35 in/3.4cm
Pixel spacing.....	2.7 in/7cm
LED type	592 nm amber
Min character size 5x7 font.....	19.25 in/48.9 cm
Angularity	15°, 30°, 70°
Temp compensation for extended LED life.....	Yes
Temperature reporting.....	Yes



High Density Pixel Diagnostic

Length	19.25in/48.8 cm
Width	13.75 in/34.9 cm
Depth	2 in/5.08cm
Weight.....	4.3 lbs/1.95kg
Pixel arrangement	8x12
Number of pixels.....	96
LEDs per pixel.....	4 or 8
Number of LEDs.....	384 or 768
LED spacing in pixel	0.50 in/1.27cm
Pixel spacing.....	1.6 in/4cm
LED type	592 nm amber
Min character size 5x7 font	12 in/30.6 cm
Angularity.....	30°
Temp compensation for extended LED life.....	Yes
Temperature reporting.....	Yes



BRICK® Display Applications

ASSEMBLY AND TESTING

BRICK® DMS are manufactured, assembled and tested at the factory.

This approach ensures that the DMS:

- Performs to specification
- Delivers aesthetic value

MOUNTING

Lightweight BRICK® displays are the only DMS that can be mounted the same as a static sign - using **an extruded aluminum back plate**. The modularity of the BRICK® allows the display to be configured to fit the size of the message.

BRICK® DMS also can be mounted:

- Overhead
- Roadside
- Cantilever
- Bridge
- Overpass
- D channel
- Existing structures
- Retrofit

WALK-IN ENCLOSURES

The self-contained BRICK® eliminates the need for a costly, walk-in enclosure.

This greatly reduces the:

- Weight of the sign
- Parts inventory
- Seasonal maintenance requirements

Available option: Walk-in enclosure

DISPLAY CONFIGURATIONS

Line Matrix



MODEL: AL0 - 2S1A0 - 2203V (5x7 ADDCO font - 19.25")

Full Matrix



MODEL: AF0 - 2S1A0 - 1605H (5x7 ADDCO font - 19.25")

Character Segmented



MODEL: AC0 - 2S1A0 - 1803V (5x7 ADDCO font - 19.25")

CONTROL CABINETS

Lockable control cabinets are constructed of heavy-duty aluminum. Cabinets are built to customer specification. They can be mounted on a pole or concrete pad.



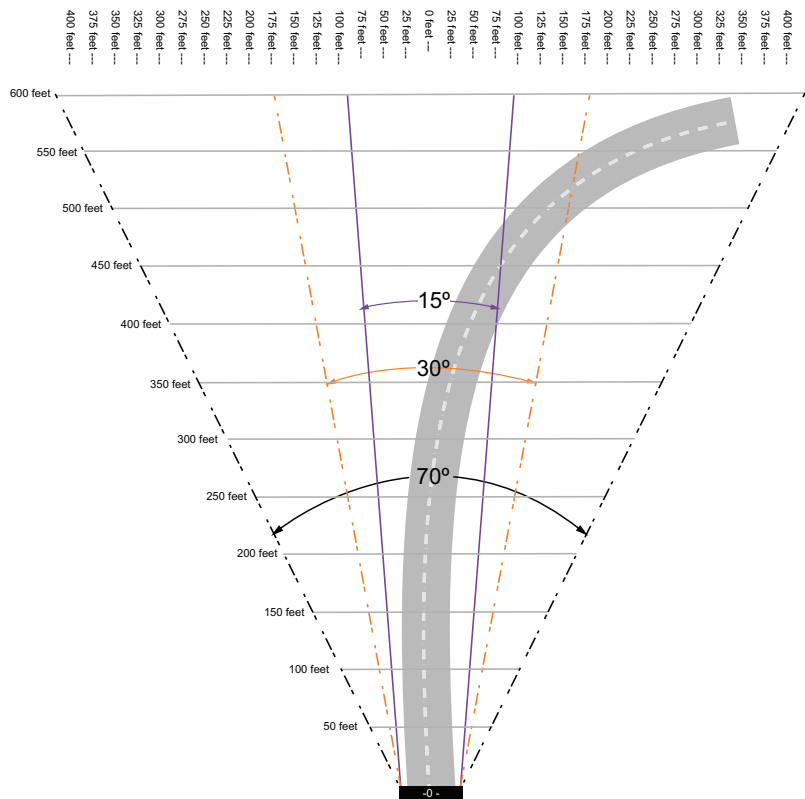
Viewing Angle and Distance

The viewing angle is the maximum point at which a DMS can be seen and read by an approaching motorist.

The viewing angle and the motorists' speed help determine which degree of angularity is best suited to the application.

ADDCO has 15°, 30° and 70° LEDs to meet the needs of any DMS application.

Your ADDCO representative can help you determine which DMS model is best for your project.



LED intensity and consistency are key

Luminous intensity of LEDs plays a critical role in:

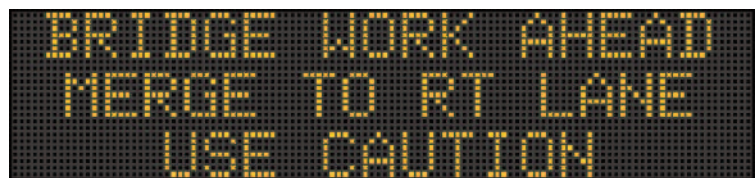
- Legibility
- Viewing distance

LEDs are embedded in the sealed BRICK® module. The unit's polycarbonate face:

- Enhances contrast ratio
- Protects LEDs/components

Our LEDs deliver:

- Uniform brightness across the display
- Superior legibility at 1,200 feet



BRICK® module single BIN LEDs - Uniformity



Other DMS used mixed BIN LEDs - Inconsistency

The Brains Behind the BRICK®



BRICK® DMS are fully compliant with:

- NTCIP
- NEMA/TS4

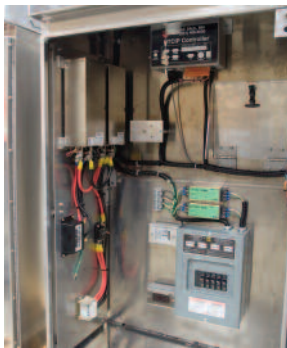
Connectivity for central control signs:

- Ethernet
- RS232 Serial

Local control capabilities:

- Handheld terminal
- Perform sign diagnostics
- Change message

Control cabinets: On-site controls for BRICK® DMS are housed in a lockable NEMA 3 cabinet. The NEMA 3R distribution box is mounted on the back plate of the DMS.



Customization provides an array of options

The modularity of the BRICK® allows DMS to be precisely sized to each customer's specifications.

BRICK® DMS can be configured:

- Vertically
- Horizontally
- By shape

Optional features:

- Flashing beacons
- Custom paint colors
- Solar power



800.616.4409



The BRICK® is GREEN

Reduces Power Consumption 80%

BRICK® displays use **80% less** electricity on an annual basis than a DMS with a walk-in enclosure.¹

Fewer Maintenance Trips

BRICK® displays have **no moving parts** and **no seasonal maintenance** requirements. Crews conserve fuel and resources by making fewer trips to maintain the display.

Less Support Structure

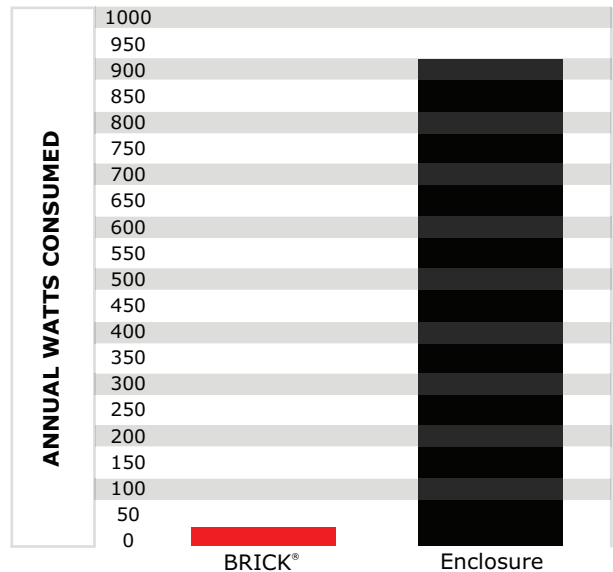
BRICK® displays are **lightweight** and mounted using the same method as a static sign. This approach reduces the amount of steel support structure AND the **resources** needed to refine, produce and ship materials.

Minimal Parts Inventory

Maintaining parts inventories can be **costly and time** consuming. The only inventory necessary to maintain a BRICK® display are a few spare BRICK® modules.

BRICK® equipment advantages:

- No fans
- No filters
- No heaters
- No danger of condensation
- No risk of exposed electronics



BRICK® structural advantages:

- No costly, bulky walk-in enclosure
- Numerous mounting options
- Weighs **87%** less than walk-in DMS²

BRICK® maintenance advantages:

- Sealed bus connector
- Plug-and-play simplicity
- No seasonal maintenance

Maintenance cost considerations

- BRICK® warranty: 2 years
- Module replacement: 5 minutes
- Fewer trips to repair/maintain

Notes:

1 - Assumptions: 30% LEDs lighted for 4 hours per day, 260 days per year.

2 - Full matrix BRICK® sign mounted on extruded aluminum back plate vs. same pixel width sign with walk-in enclosure.

BRICK[®] Applications



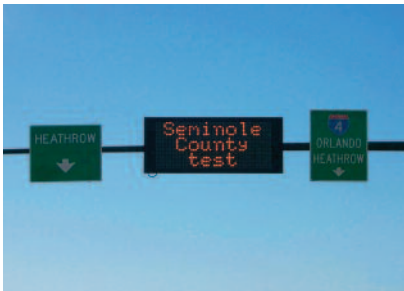
Congestion Pricing
Dallas, Texas



Port Entry
Fort Lauderdale, Florida



Reversible Express Lane
Tampa, Florida



Arterial Road
Sanford, Florida



Variable Toll
New Jersey Turnpike



Toll Plaza
Gary, Indiana



Parking Facility
Winnipeg, Manitoba



Expanded Capacity
Johannesburg, South Africa



Motorist Advisory
Rochester, Minnesota



240 Arlington Ave E St. Paul MN 55117
800.616.4409 or +1 651.488.8600 f: 651.558.3600
www.addco.com

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