DIGITAL DISPLAY
SOLUTIONS 2015–2016
COMMERCIAL & ADVERTISING APPLICATIONS

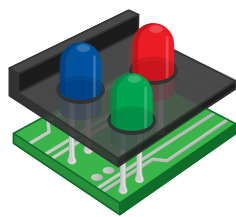## LED TECHNOLOGY 101

WHAT IS A PIXEL?

Learn more about our products at daktronics.com/learningcenter

Through-hole pixel
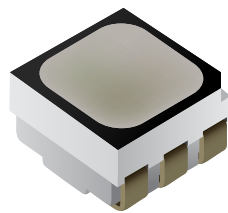
Surface-mount pixel

"Pixel" is short for "picture element." A pixel is the smallest element in the display system that is individually controlled – turned off and on at various brightness levels. So the pixels illuminate to form letters, words, graphics, animation, and video images.

When designing displays, we evaluate the number of LEDs needed in each pixel for necessary brightness, while keeping production and power costs low.

WHAT IS RESOLUTION?

approx. 5 ft

26.42 mm 48x105
5,040 pixels

19.81 mm 64x140
8,960 pixels

15.85 mm 80x175
14,000 pixels

10 mm 160x288
46,080 pixels

"Resolution" is the number of pixels in a display. To increase resolution, your customer can go to a smaller pixel pitch in the same physical size display or increase the display's physical size using the same pitch.

We can help you evaluate how pixel spacing affects picture quality. In the examples left, the display size and distance are the same, but the pixel spacings are different.

WHAT IS VIEWING ANGLE?

"Viewing angle" refers to the display's optimal viewing cone where the intended audience will be located. "Readability angle" or "viewing area" exceeds the optimum viewing angle, depending on the site and ambient light conditions (see graphics).

140°
150°
160°
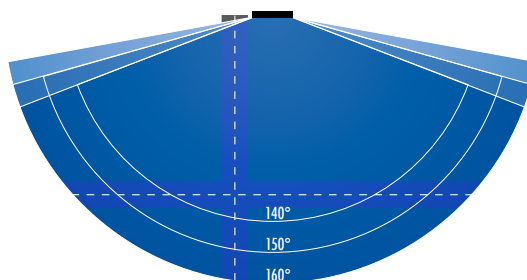
Viewing angle of Daktronics products

140°
160°
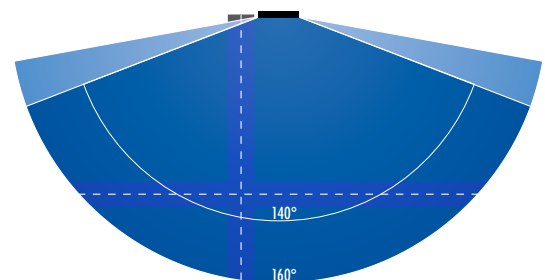
Optimum viewing angle vs. readability angle

THE SCIENCE OF A DISPLAY'S **VISUAL QUALITY**

So you can offer your customers LED signs with premier image quality, we integrate different features, procedures, and processes.
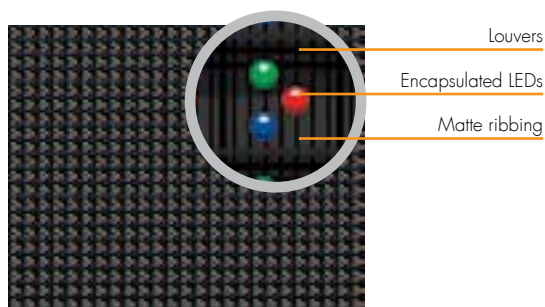
Louvers
Encapsulated LEDs
Matte ribbing

BRIGHTNESS & CONTRAST

LED displays with high contrast ratios show sharper, clearer, more effective images. "Contrast ratio" is the difference between an LED sign's full-on white brightness and the sign turned off with only ambient light reflection.

A high contrast ratio display shows crisper details and purer colors, especially in direct sunlight. We increase the darkness of the black state for a higher ratio contrast by using louvers that encapsulate the LEDs and a black matte finish. This reduces reflection and diffuses light to boost brightness levels, while maintaining power efficiency.

COLOR CALIBRATION

LED technology can dim over the years, but we offer several solutions so our displays maintain complete color uniformity throughout the equipment's lifetime.

First, we work with suppliers to buy color-consistent LEDs that are tightly binned and lot controlled. Then, before shipment, we calibrate individual LEDs and modules for color and intensity. After installation, technicians can lighten and darken modules as needed.

COLOR DEPTH vs COLOR RECOGNITION

COLOR RECOGNITION

256   32K   16.7M   68B   4.4T   144Q   4.7S   1Q
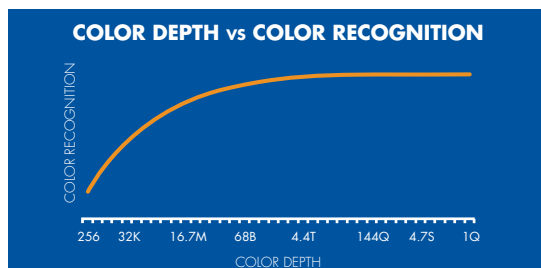
COLOR DEPTH

COLOR DEPTH

"Color depth" refers to the number of colors available to create an image. Generally, greater color depth can result in higher-quality images. But a color depth of more than 16.7 million isn't needed for high-quality images.* The graph, left, shows how increasing color depth improves color recognition at a lower color depth, but at a higher depth, the color recognition improvement is negligible.

*Amit Dhir, The Digital Consumer Technology Handbook (New York: Xilinx, Inc., 2004), p. 171.

TEXT VIEWING RANGES (APPROXIMATE)

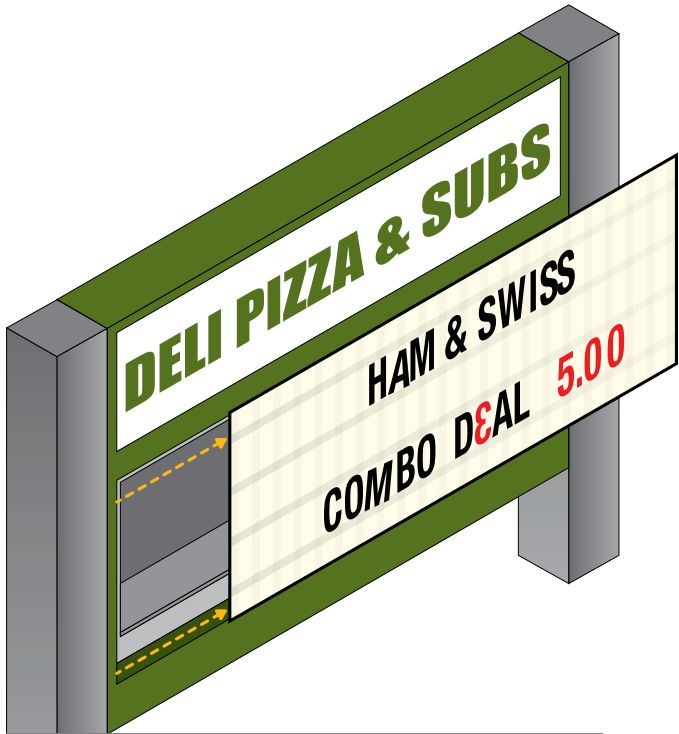| CHARACTER SIZE		MAX. VIEWING DISTANCE		CHARACTER SIZE		MAX. VIEWING DISTANCE	
in	mm	ft	m	in	mm	ft	m
3	76	150	46	18	457	900	274
6	152	300	91	24	610	1,200	366
9	229	450	137	36	914	1,800	549
13	330	650	198	48	1,219	2,400	732

This table shows the correct character size based on viewing distance.

MINIMUM VIEWING DISTANCES

LINE SPACING	MIN. VIEWING DISTANCE
10 mm	23'
15 mm	31'
16 mm	37'
20 mm	45'
26 mm	59'
34 mm	76'

This table shows the distance at which the light from individual pixels blends together into a complete image.

RELBLTY
FINCG
CMR SVC
INSTALL
CRV SVC
LED
COMM
DF
FL
CC
ECCB
VCS
COMM
GS6 15
GS6 19
GS6 26
DVX
DVNMC
CSTM

GALAXY®
ECCB

BankStar Financial Brookings, South Dakota
48 lines x 100 columns 19.8 mm red
eCCB series

The eCCB installs into a copyboard cabinet and runs on the power that was already used for backlighting.

Traditional changeable copy boards can be difficult to update, especially in bad weather, so messages often aren't as current as they should be. This restricts content to messages that are typically more generic.

Facilities with existing changeable copy boards can now easily install a Galaxy® eCCB display. The eCCB eliminates many of the problems that arise with a manual board.

THIS AFFORDABLE DISPLAY OFFERS:

› Dynamic self promotion

› Time sensitive messaging

› Easy to update in any weather

› Multi-page messaging

› Basic scheduling

"The eCCB display was a perfect solution for BankStar Financial. It was an affordable upgrade to LED from our manual changeable copy board. The 'text only' feature is just right for us to re-emphasize our marketing campaign, talk to our customers, and support community events."

Julie Puetz
Vice President
BankStar Financial
Brookings, South Dakota

Deuel School District Clear Lake, South Dakota
48 lines x 80 columns 19.8 mm red
eCCB series

ECCB
SERIES

Quick and easy message creation from a mobile phone or tablet (most Wi-Fi ready devices)

Ability to post timely messages in any weather condition

Basic messaging schedules

Low cost of ownership

Simplified installation

CONTROL FROM A MOBILE DEVICE WITH WI-FI ACCESS

The Galaxy eCCB offers organizations a product that attracts more business than a manual changeable copy board. Users control the display from a Wi-Fi ready mobile device using a web browser.

FEATURE SET
› Installs into a copyboard cabinet for quick installation
› Simple control interface requires no set up or training
› Use existing line power already being used for backlit copyboard

DISPLAY CONFIGURATION
All sizes are available in single-face (SF) or two-view (2V) configurations.

Single-face (SF)
Available in all sizes

Two-view (2V)
Available in all sizes

SERIES TECHNICAL SPECIFICATIONS

Estimated LED Lifetime	100,000+ hours
Contrast Enhancement	Non-reflective black louvers and module face grooves disperse light
Graphic Capability	Fixed format text only; schedule up to 18 messages
Control Software	Web browser based interface
Control Device/Range	Popular smartphone and tablet devices; line of sight device & environment dependent
Cabinet Configuration	Front-ventilated single cabinet
Service Access	Front access
Power	120 VAC single phase
Display Dimming	64 levels (automatic or manual control)
Communication Options	Router access
Operating Temperature	-40°F to 120°F with 99% RH non-condensing
Compliance Information	UL and cUL Recognized, UL and cUL Classified, FCC compliance
Warranty Coverage	2 Years
Product Support	Parts support for 7 years, see page 6 for details

GALAXY ECCB

RELBLTY · FINCG · CMR SVC · INSTALL · CRV SVC · LED · COMM · DF · FL · CC · **ECCB** · VCS · COMM · GS6 15 · GS6 19 · GS6 26 · DVX · DVNMC · CSTM

Klein's Crafts Watertown, South Dakota
48 lines x 80 columns 19.8 mm red
eCCB series

Big Clock of Berea Family Restaurant Greenville, South Carolina
48 lines x 100 columns 19.8 mm red
eCCB series

TECHNICAL SPECIFICATIONS

Lines of Text	1–4 lines of text depending on display size
Line Spacing	19.8 mm (0.78")
Pixel Configuration	1 red
Maximum Brightness	4,000 nits
Optimal Viewing Angle	140 degrees horizontal; 70 degrees vertical
Readability Angle	160 degrees horizontal; 90 degrees vertical

eCCB A100 MODEL SPECIFICATIONS

Sizes	Lines and Columns	Character Height	Number of Lines	Characters per Line
3' x 8'	32x100	10"–16.5"	1	6–8
			2	11–13
4' x 6'	48x80	11"–16.5"	1	4–6
			2	6–8
			3	8–10
4' x 8'	48x100	11"–16.5"	1	6–8
			2	8–10
			3	11–13
5' x 8'	64x100	12.5"–22"	1	4–6
			2	6–8
			3	8–10
			4	11–13
5' x 10'	64x140	12.5"–22"	1	7–8
			2	9–11
			3	12–14
			4	16–18

Specifications are approximate. Request a Daktronics shop drawing for precise specifications.
For square footage, refer to the specifications in the back of the catalog.

"The eCCB definitely is generating business. We put specials such as '10% off meal to your church,' and the sign attracts many people to stop in. The control is quite simple to use."

Stelios Katsamperis
Owner
The Big Clock of Berea Family Restaurant
Greenville, South Carolina

MODEL NUMBER GUIDE

eCCB - A100 - 3FT x 8FT - 19.8 - R - SF

Series	Generation	Height	Width	Line Spacing	LED Color	Single Face or Two View

Sidebar tabs: RELBLTY · FINCG · CMR SVC · INSTALL · CRV SVC · LED · COMM · DF · FL · CC · ECCB · VCS · COMM · GS6 15 · GS6 19 · GS6 26 · DVX · DVNMC · CSTM

INTRODUCING THE NEW **VENUS**® CONTROL SUITE

VENUS CONTROL SUITE

Operators at any level can access this software any time, anywhere, on any device.

It's easy to focus on just the hardware when you sell an LED sign. But sharing the software's selling points further convinces your customers to buy. The control solution we offer combines functionality with a great user experience that is innovative and yet easy to use.

CLOUD-BASED SOFTWARE ACCESS FROM ANY DEVICE

Venus® Control Suite is browser based, so users can access the software from any device with an Internet connection—smartphones, tablets, laptops, and desktops.

FLEXIBLE EXPERIENCE FITS ANY OPERATOR

Venus Control Suite adjusts to meet the needs of any level of user. From basic to advanced, this system works for everyone.

SECURE SOLUTION, WE TAKE CARE OF IT

Daktronics hosts the Venus Control Suite on our secure servers, so we take care of computer software and operating system compatibility. We also ensure that your customer always has access to the latest version.

FEATURES & BENEFITS:

> Easily import graphics and organize files:
>> Drag-and-drop content directly to media library.
>> Use tagging to quickly manage media.
> Choose simple to sophisticated scheduling and multiple playlists.
> Secure hosted servers and communication eases IT needs.

> Use the dashboard to see the status and content on your display.
> Use from your smartphone—this software is mobile optimized.
> Get the latest feature updates automatically.
> Multiple authorized user access

To help support your sale, we've put together a Venus® Control Suite web area and software videos. Use daktronics.com/venus when you call on your next customer.

EVEN BEFORE INSTALLATION, CUSTOMERS BEGIN CONTENT CREATION

As soon as we create your customers' account, they can access the software and start creating content. Using the free, professionally created content that comes with the display will speed up and enhance their ad campaigns.

YOUR CUSTOMERS WANT MORE?

We tailor Venus Control Suite for your customers' needs. To do this we have different packages available to choose from. All of the features explained are part of the Prime software package, which comes with each display purchase. If your customers are interested in more, they can upgrade to the Pro package, which adds features such as:

External Data Feeds
Pull in real time information, such as weather forecasts, news, headlines, and sports scores from any Internet provided data source and display it on your LED message center.

Reporting (proof of play)
Access reports showing what played on your display, how many times, and when. Compare the report to your sales numbers and promote product lift.

For more details on packages, talk to your local sales representative.

VENUS® LEARNING CENTER

Offer your customers self-guided training to successfully set up and operate Venus Control Suite software at daktronics.com/venuslearning

FREE VIDEO TUTORIALS

Daktronics provides your customers with a set of free tutorials. They're a great way to learn the software or to use as a refresher course.

Each video tutorial demonstrates how to perform a specific task in the software. Learn how to configure displays, create memorable presentations, schedule playlists, and more.

Find the complete set of tutorials at daktronics.com/venuslearning

IMPORTABLE FILE TYPES

Video file types	.avi, .mpg, .mp4, .mov
Image file types	.png, .bmp, .gif, .jpg, .tif, .tiff, .psd
Data feed types	Time, Temp, RSS*, Atom*, .XML*

*Only on data capable displays.

SUPPORTED MOBILE BROWSERS

iOS Safari®

Android® Chrome®

SUPPORTED DESKTOP BROWSERS

Microsoft® Internet Explorer® v11 and newer

Microsoft® Edge®

Google® Chrome®

Mozilla Firefox®

Sidebar tabs: RELBLTY | FINCG | CMR SVC | INSTALL | CRV SVC | LED | COMM | DF | FL | CC | ECCB | VCS | COMM | GS6 15 | GS6 19 | GS6 26 | DVX | DVNMC | CSTM

GALAXY® GS6
COMMUNICATION

Ethernet network is necessary for GS6 displays.

The Galaxy® GS6 displays need an Internet connection to reach out to the cloud based Venus control system for content and schedule updates. Daktronics offers several Ethernet based communication options that can be added to a customer's local area network for Internet access.

Cloud — Fiber converters — 2V / SF — Local network
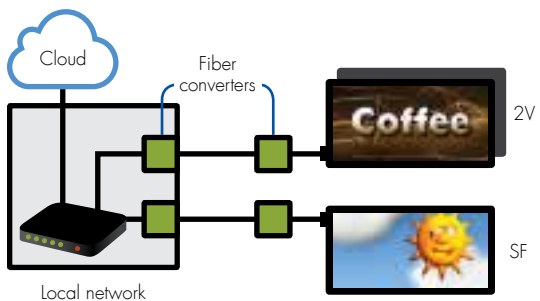
ETHERNET FIBER OPTIC

Fiber Optic is the most reliable communication option offered. Electrically isolated fiber optics prevent damage due to electromagnetic interference from lightning or electrical storms.

› Distance from the Ethernet network router to the display must be less than 6,547 ft (2,000 m).

› This option requires fiber-optic signal converters and 62.5μm multi-mode fiber-optic cables.

Cloud — 2V / SF — Local network — Radios
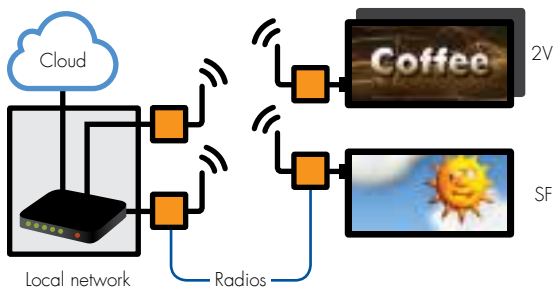
ETHERNET BRIDGE RADIO

Provides a wireless connection to Local Area Network on site.

› Use this option when fiber Ethernet cannot be pulled and the distance from the Ethernet network router to the display is less than 1,500 ft (450 m).

› This option requires outdoor installation for direct line of sight between server radio at the building and client radio at the display.

› This option is not recommended where significant RF interference exists (RF interference could be caused by cellular towers, radio/TV stations, wireless headsets, etc.).

Note: Wireless communication devices may be affected by site-specific conditions. Daktronics does not guarantee that wireless communication is suitable for every location.

Fiber optic is the fastest, most reliable communication option available.

ETHERNET CAT5

› Use when fiber Ethernet cannot be pulled and the distance from the Ethernet network router to the display is less than 250 ft (76.2 m).

› This option requires direct CAT5 wire.

Cloud

Maximum distance: 250 ft

2V

SF

Local network
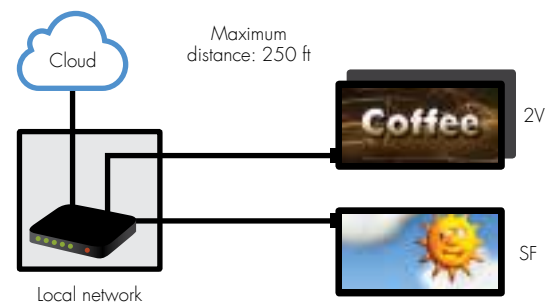
ETHERNET SWITCH

› Use when multiple displays are on a single Ethernet connection from the above options.

› Displays must be within 25 ft.

› This requires each display to have different IP addresses.

Maximum distance: 25 ft

Ethernet switch

From primary communication shown above

2V

SF

Maximum distance: 25 ft
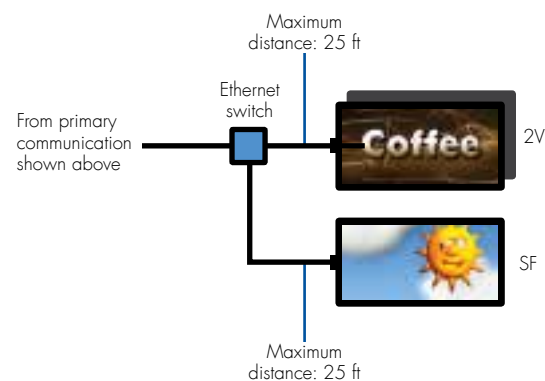
REMOTE CELLULAR

Provides an Internet connection without a Local Network.

› Avoid customer's network by having the display connect directly via cellular.

› Use when there is not a Local Area Network or Internet connection available on site.

Note: Each display must be located in a reliable cellular signal area.
This connection does require a cellular service.

2V

SF

Cellular converters
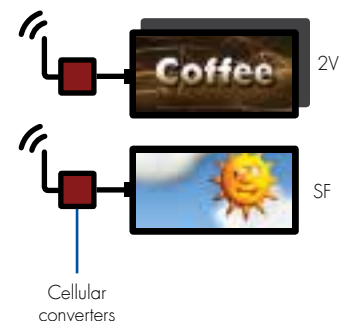
PERFORMANCE TRAITS	ETHERNET FIBER OPTIC	ETHERNET BRIDGE RADIO	ETHERNET CAT5	REMOTE CELLULAR
Max. distance from local network router to display	1.2 miles	1,500 feet	250 feet	unlimited
Reliability	best	good	good	good
Noise immunity	best	good	good	good
Data speed	best	good	best	good

RELBLTY
FINCG
CMR SVC
INSTALL
CRV SVC
LED
COMM
DF
FL
CC
ECCB
VCS
COMM
GS6 15
GS6 19
GS6 26
DVX
DVNMC
CSTM

Merit Construction Edmonton, Alberta
80 lines x 208 columns 16 mm RGB
Previous series shown

GALAXY GS6
FEATURES

This is the best full-feature, high-quality Galaxy series yet – Galaxy GS6. This product provides users a display that runs outstanding graphics and animations using the best contrast in the industry. As for the control software, we've developed the most convenient user experience to date.

SIGNAL REDUNDANCY

Image data is sent to individual LED modules from multiple directions. If a signal path fails, the module continues to operate from the additional signal.

FRONT VENTILATION

The installer doesn't need to deal with special ventilation requirements. It's built in with displays up to 7 feet tall.

Outlet
Fan
Inlet
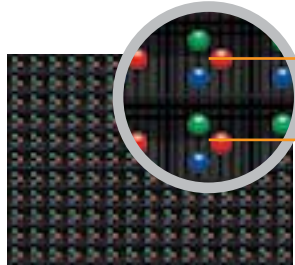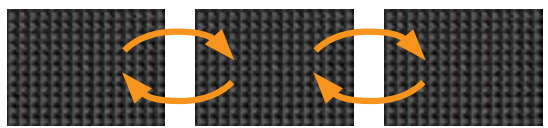
15.85 mm

HIGHER RESOLUTION

A true 15.85 millimeter pixel spacing allows more pixels per module resulting in higher resolution.
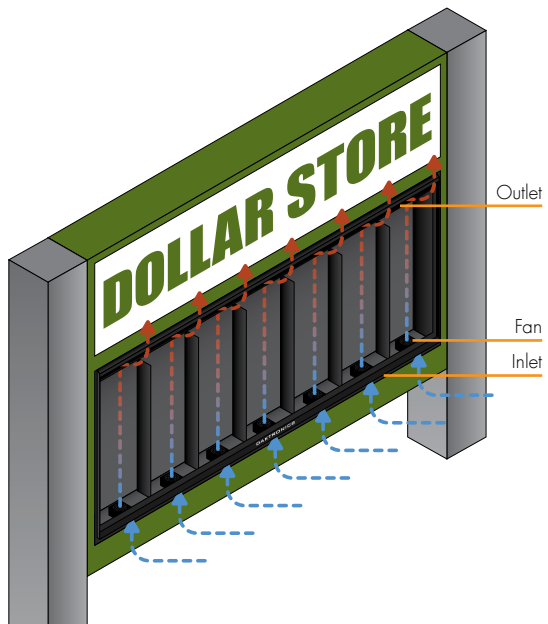
ALL SEALED COMPONENTS

Modules, power supplies, controller, power term panel, fan, and all connections fully sealed.

QUICK CONNECTIONS

Offer plug-and-play capability. Along with an external junction box for easy power connection.

SINGLE-STEP MODULE REMOVAL

A single turn of the wrench removes the multi-point attached module.

MOUNTING CLIPS

Slotted clip angles and multiple locations allows flexibility in mounting.

IMPROVED, CLEAN CABINET APPEARANCE

› Narrow cabinet borders.

› Shallow 5-inch cabinet depth on displays up to 7 feet tall.

1.5 inches

5 inches
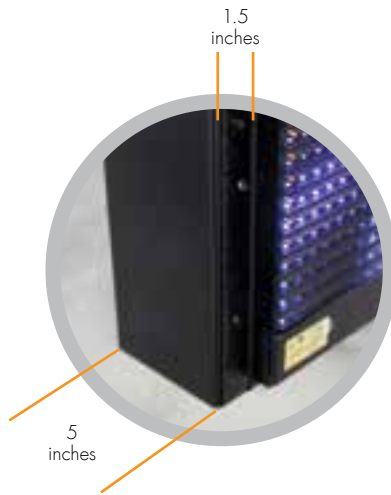
FEATURE SET

› All sealed components

› Quick connects

› Mounting clips

› High contrast louvers

› Redundant module signal

› Large sections for fast installation

› Front ventilation on displays less than seven feet tall

› No spreader beam required for displays greater than seven feet tall

› Same module size and cabinet size for all pixel pitches

The District Sioux Falls, South Dakota
70 lines x 98 columns 26 mm RGB
Previous series shown
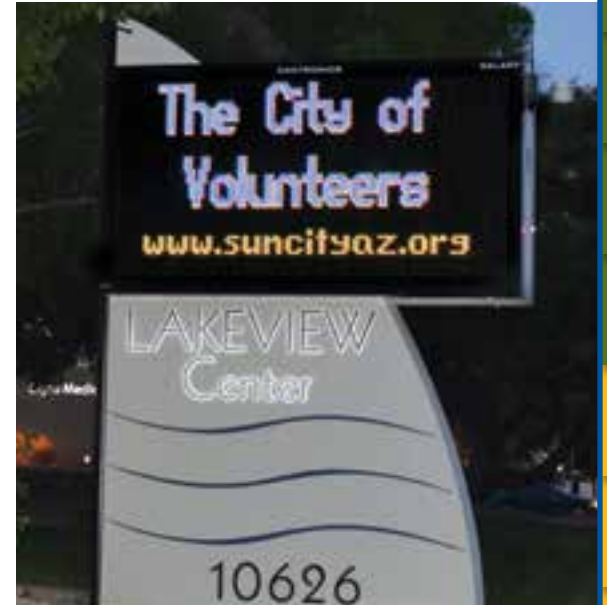
Lakeview Center Sun City, Arizona
64 lines x 128 columns 16 mm RGB
Previous series shown

Graham Automotive Sioux Falls, South Dakota
154 lines x 176 columns 16 mm RGB
Previous series shown

SERIES TECHNICAL SPECIFICATIONS

Estimated LED Lifetime	100,000+ hours
Contrast Enhancement	Non-reflective black louvers and module face grooves disperse light
Message Capability	Text, graphics, logos, basic animation, video clips, data integration, multiple font styles, and sizes
Control Software	Venus® Control Suite
Power	120, 120/240 VAC single phase
Display Dimming	64 levels (automatic, scheduled or manual control)
Communication Options	Ethernet Fiber Optic, Ethernet Bridge Radio, Remote Cellular, Ethernet CAT5
Operating Temperature	-40°F to 120°F with 99% RH non-condensing
Compliance Information	UL and cUL Listed, UL-Energy Verified, FCC compliance
Warranty Coverage	5 Years
Product Support	Parts support for 10 years, see page 6 for details

Raising Cane's Omaha, Nebraska
80 lines x 150 columns 15.85 mm RGB
GS6 series

GS6 15.85 mm
MONOCHROME & COLOR

After calculating the physical space you want to fill, use this chart to determine the corresponding display size. Additional sizes are available as a special order. For square footage, refer to the specifications in the back of the catalog.

DISPLAY CONFIGURATION
All sizes are available in single-face (SF) or two-view (2V) configurations.

Single-face (SF)
Available in all sizes

Two-view (2V)
Available in all sizes

DISPLAY

cabinet dimensions			5'6"	6'9"	8'1"	9'5"	10'8"	12'0"	13'3"	14'7"	15'11"	17'2"	18'6"	19'9"	21'1"	22'5"	23'8"	25'0"	26'3"
	active area dimensions		5'3"	6'6"	7'10"	9'2"	10'5"	11'9"	13'0"	14'4"	15'8"	16'11"	18'3"	19'6"	20'10"	22'2"	23'5"	24'9"	26'0"
		matrix	100	125	150	175	200	225	250	275	300	325	350	375	400	425	450	475	500
1'7"	1'1"	20																	
2'7"	2'1"	40																	
3'8"	3'2"	60																	
4'8"	4'2"	80																	
5'9"	5'3"	100																	
6'9"	6'3"	120																	
			5'9"	7'0"	8'4"	9'8"	10'11"	12'3"	13'6"	14'10"	16'2"	17'5"	18'9"	20'0"	21'4"	22'8"	23'11"	25'3"	26'6"
7'10"	7'4"	140																	
8'10"	8'4"	160																	
9'11"	9'5"	180																	
10'11"	10'5"	200																	
12'0"	11'6"	220																	
13'0"	12'6"	240																	
14'1"	13'7"	260																	
15'1"	14'7"	280																	
16'2"	15'8"	300																	
17'2"	16'8"	320																	
18'3"	17'9"	340																	
19'3"	18'9"	360																	

DISPLAY HEIGHT

Sidebar navigation: RELBLTY, FINCG, CMR SVC, INSTALL, CRV SVC, LED, COMM, DF, FL, CC, ECCB, VCS, COMM, GS6 15, GS6 19, GS6 26, DVX, DVNMC, CSTM

Sidebar tabs: RELBLTY · FINCG · CMR SVC · INSTALL · CRV SVC · LED · COMM · DF · FL · CC · ECCB · VCS · COMM · GS6 15 · GS6 19 · GS6 26 · DVX · DVNMC · CSTM

Downs at Albuquerque Albuquerque, New Mexico
144 lines x 270 columns 20 mm RGB
Previous series shown

GS6 19.8 mm
MONOCHROME & COLOR

After calculating the physical space you want to fill, use this chart to determine the corresponding display size. Additional sizes are available as a special order. For square footage, refer to the specifications in the back of the catalog.

DISPLAY CONFIGURATION
All sizes are available in single-face (SF) or two-view (2V) configurations.

Single-face (SF)
Available in all sizes

Two-view (2V)
Available in all sizes

DISPLAY

cabinet dimensions	active area dimensions	matrix	5'6" / 5'3" / 80	6'9" / 6'6" / 100	8'1" / 7'10" / 120	9'5" / 9'2" / 140	10'8" / 10'5" / 160	12'0" / 11'9" / 180	13'3" / 13'0" / 200	14'7" / 14'4" / 220	15'11" / 15'8" / 240	17'2" / 16'11" / 260	18'6" / 18'3" / 280	19'9" / 19'6" / 300	21'1" / 20'10" / 320	22'5" / 22'2" / 340	23'8" / 23'5" / 360	25'0" / 24'9" / 380	26'3" / 26'0" / 400
1'7"	1'1"	16																	
2'7"	2'1"	32																	
3'8"	3'2"	48																	
4'8"	4'2"	64																	
5'9"	5'3"	80																	
6'9"	6'3"	96																	

DISPLAY HEIGHT

cabinet dimensions	active area dimensions	matrix	5'9"	7'0"	8'4"	9'8"	10'11"	12'3"	13'6"	14'10"	16'2"	17'5"	18'9"	20'0"	21'4"	22'8"	23'11"	25'3"	26'6"
7'10"	7'4"	112																	
8'10"	8'4"	128																	
9'11"	9'5"	144																	
10'11"	10'5"	160																	
12'0"	11'6"	176																	
13'0"	12'6"	192																	
14'1"	13'7"	208																	
15'1"	14'7"	224																	
16'2"	15'8"	240																	
17'2"	16'8"	256																	
18'3"	17'9"	272																	
19'3"	18'9"	288																	

GALAXY GS6

RELBLTY · FINCG · CMR SVC · INSTALL · CRV SVC · LED · COMM · DF · FL · CC · ECCB · VCS · COMM · GS6 15 · GS6 19 · GS6 26 · DVX · DVNMC · CSTM

American Furniture Warehouse Gilbert, Arizona
216 lines x 288 columns 20 mm RGB
Previous series shown

Single-section
Front-ventilated
5" deep formed cabinet

Spare parts optional
IAP optional

Single-section
Rear-ventilated
8" deep extruded cabinet

Spare parts included
IAP optional

Multi-section
Rear-ventilated
8" deep extruded cabinet

Spare parts included
IAP included

WIDTH

27'4"	28'8"	29'11"	31'3"	32'6"	33'10"	35'2"	36'5"	37'9"	39'0"	40'4"	41'8"	42'11"
420	440	460	480	500	520	540	560	580	600	620	640	660

SIZES AVAILABLE AS SPECIAL ORDER

27'10"	29'2"	30'5"	31'9"	33'0"	34'4"	35'8"	36'11"	38'3"	39'6"	40'10"	42'2"	43'5"

TECHNICAL SPECIFICATIONS

Character Height	5.5" (7 pixel font)
Line Spacing	19.8 mm (0.78")
Pixel Configuration	Monochrome:1 red or 1 amber RGB:1 red, 1 green, 1 blue
Maximum Brightness	Monochrome red: 4,500 nits Monochrome amber: 6,000 nits RGB: 11,000 nits
Monochrome Color Capability	4,096 shades of red or amber
Full Color Capability	281 trillion colors
Optimal Viewing Angle	140 degrees horizontal 70 degrees vertical
Readability Angle	160 degrees horizontal 90 degrees vertical
Min Viewing Distance	45'

MODEL NUMBER GUIDE

GS6 - 80 x 200 - 19.8 - A - SF

Series | Lines High | Columns Wide | Line Spacing | LED Color Red, Amber, or RGB | Single Face or Two View

HCA Chippenham Hospital Richmond, Virginia
56 lines x 112 columns 26 mm RGB
Previous series shown

GS6 26.4 mm
MONOCHROME & COLOR

After calculating the physical space you want to fill, use this chart to determine the corresponding display size. Additional sizes are available as a special order. For square footage, refer to the specifications in the back of the catalog.

DISPLAY CONFIGURATION

All sizes are available in single-face (SF) or two-view (2V) configurations.

Single-face (SF)
Available in all sizes

Two-view (2V)
Available in all sizes

DISPLAY

cabinet dimensions	active area dimensions	matrix	5'6"/5'3"/60	6'9"/6'6"/75	8'1"/7'10"/90	9'5"/9'2"/105	10'8"/10'5"/120	12'0"/11'9"/135	13'3"/13'0"/150	14'7"/14'4"/165	15'11"/15'8"/180	17'2"/16'11"/195	18'6"/18'3"/210	19'9"/19'6"/225	21'1"/20'10"/240	22'5"/22'2"/255	23'8"/23'5"/270	25'0"/24'9"/285	26'3"/26'0"/300
1'7"	1'1"	12																	
2'7"	2'1"	24																	
3'8"	3'2"	36																	
4'8"	4'2"	48																	
5'9"	5'3"	60																	
6'9"	6'3"	72																	

DISPLAY HEIGHT

cabinet	active	matrix	5'9"	7'0"	8'4"	9'8"	10'11"	12'3"	13'6"	14'10"	16'2"	17'5"	18'9"	20'0"	21'4"	22'8"	23'11"	25'3"	26'6"
7'10"	7'4"	84																	
8'10"	8'4"	96																	
9'11"	9'5"	108																	
10'11"	10'5"	120																	
12'0"	11'6"	132																	
13'0"	12'6"	144																	
14'1"	13'7"	156																	
15'1"	14'7"	168																	
16'2"	15'8"	180																	
17'2"	16'8"	192																	
18'3"	17'9"	204																	
19'3"	18'9"	216																	

SMD PRODUCT DESIGN

RELBLTY | FINCG | CMR SVC | INSTALL | CRV SVC | LED | COMM | DF | FL | CC | ECCB | VCS | COMM | GS6 15 | GS6 19 | GS6 26 | DVX | DVNMC | CSTM

Rock-solid reliability—proprietary silicone encapsulant, developed by a leading petrochemical company specifically for Daktronics, fully seals module front and back.

SMD video displays include a 281-trillion color capability, feature low power consumption, and exceptional reliability. SMD video displays also provide your customers with outstanding graphics, easy control, and a competitive price.

DVX FEATURE SET

› Sealed components prevent corrosion.

› Signal redundancy minimizes message disruption.

› High-contrast louver design deflects light away from intended audience producing rich colors.

› Daktronics offers a field calibration service to maximize performance over the life of the display.

DVNMC FEATURE SET

› Very tight resolutions for foot traffic under 20 feet.

› Non-ventilated design for simple intallation.

› Single-section cabinets for fast installation.

SERIES TECHNICAL SPECIFICATIONS

Estimated LED Lifetime	100,000+ hours	
Contrast Enhancement	DVX:	Non-reflective black louvers and module face grooves disperse light
Cabinet Configuration	DVX:	Rear-ventilated multi-section cabinet
	DVNMC:	Non-ventilated single-section cabinet
Content Capability	DVX:	Text, graphics, full or live video, and data integration
	DVNMC:	Text, graphics, pre-recorded video, and data integration
Control Software	Venus® Control Suite	
Power	120/240 VAC single phase	
Display Dimming	DVX:	256 levels (automatic, scheduled or manual)
	DVNMC:	256 levels (scheduled or manual)
Communication Options	DVX:	Ethernet Fiber Optic, Ethernet Bridge Radio, Ethernet CAT5
	DVNMC:	Ethernet Fiber Optic, Ethernet CAT5
Operating Temperature	DVX:	-40°F to 122°F with 99% RH non-condensing
	DVNMC:	-40°F to 95°F
Compliance Information	ETL Listed, FCC compliance	
Warranty Coverage	5 Years	
Product Support	Parts support for 10 years, see page 6 for details	

Resort Quest Destin, Florida
180 lines x 288 columns 10 mm
DVX series

Downtown Chatham Centre Chatham, Ontario, Canada
252 lines x 468 columns 10 mm
DVX series

Westfield Old Orchard Shopping Center Skokie, Illinois
540 lines x 390 columns 10 mm
DVX series

OUTDOOR
DVX 10 мм

Heritage Green Greenville, South Carolina
392 lines x 168 columns 10 mm
DVX series

MODEL NUMBER GUIDE

DVX - 1801 - 10 MN - 120 x 168

| Outdoor Series | Outdoor SMD | Line Spacing | Matrix Nontoggled | Lines High | Columns Wide |

TECHNICAL SPECIFICATIONS

Character Height	2.8" (7 pixel font)
Line Spacing	10.16 mm (0.4")
Pixel Configuration	3-in-1 SMD
Maximum Brightness	6,000 nits
Color Capability	281 trillion colors
Optimal Viewing Angle	160 degrees horizontal 70 degrees vertical
Min Viewing Distance	21'

DISPLAY WIDTH

cabinet dimensions			5'2"	64"	7'7"	8'9"	10'0"	11'2"	124"	13'7"	14'9"	16'0"	17'2"	184"	19'7"
	active area dimensions		4'10"	6'0"	7'3"	8'5"	9'8"	10'10"	12'0"	13'3"	14'5"	15'8"	16'10"	18'0"	19'3"
		matrix	144	180	216	252	288	324	360	396	432	468	504	540	576
2'9"	2'5"	72													
4'0"	3'8"	108													
5'2"	4'10"	144													
6'4"	6'0"	180													
7'7"	7'3"	216													
8'9"	8'5"	252													
10'0"	9'8"	288													
11'2"	10'10"	324													
12'4"	12'0"	360													
13'7"	13'3"	396													
14'9"	14'5"	432													
16'0"	15'8"	468													
17'2"	16'10"	504													
18'4"	18'0"	540													

DISPLAY HEIGHT

DVNMC

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INDOOR
DVNMC
6 мм & 10 мм

Suggested Indoor Installation
96 lines x 240 columns 6 mm
DVNMC series

MODEL NUMBER GUIDE

DVNMC - 601 - 120 x 168 - 10 - RGB - SF

Indoor Series	Indoor SMD	Lines High	Columns Wide	Line Spacing	LED Color	Single Face

DISPLAY WIDTH

cabinet dimensions			4'0"	6'0"	8'0"	10'0"	14'0"
	active area dimensions		3'1"	5'2"	7'3"	9'4"	13'6"
		matrix	144	240	336	432	624
3'0"	2'1"	96	■	■	■	■	■
4'0"	3'1"	144	■	■	■	■	■
5'0"	4'2"	192			■	■	■
6'0"	5'2"	240			■	■	■
6'6"	6'3"	288			■	■	■

(DISPLAY HEIGHT)

TECHNICAL SPECIFICATIONS

Character Height	1.8" (7 pixel font)
Line Spacing	6.6 mm (0.26")
Pixel Configuration	3-in-1 SMD
Maximum Brightness	2,000 nits
Color Capability	281 trillion colors
Optimal Viewing Angle	170 degrees horizontal +60 degrees vertical -80 degrees vertical
Min Viewing Distance	15'

DISPLAY WIDTH

cabinet dimensions			4'0"	6'0"	8'0"	10'0"	14'0"
	active area dimensions		3'1"	5'2"	7'3"	9'4"	13'6"
		matrix	96	160	224	228	416
3'0"	2'1"	64	■	■	■	■	■
4'0"	3'1"	96	■	■			
5'0"	4'2"	128			■	■	■
6'0"	5'2"	160			■	■	■
6'6"	6'3"	192			■	■	■

(DISPLAY HEIGHT)

TECHNICAL SPECIFICATIONS

Character Height	2.8" (7 pixel font)
Line Spacing	9.9 mm (0.39")
Pixel Configuration	3-in-1 SMD
Maximum Brightness	2,000 nits
Color Capability	281 trillion colors
Optimal Viewing Angle	170 degrees horizontal +60 degrees vertical -80 degrees vertical
Min Viewing Distance	22'

Vertical side tabs: RELBLTY | FINCG | CMR SVC | INSTALL | CRV SVC | LED | COMM | DF | FL | CC | ECCB | VCS | COMM | GS6 15 | GS6 19 | GS6 26 | DVX | DVNMC | CSTM

Sunglass Hut Times Square New York, New York
88 lines x 3872 columns 16 mm
DVX Series

GGP Water Tower Place Chicago, Illinois
816 lines x 544 columns 4 mm
DBN Series

The Mall at Millenia Orlando, Florida
378 stick elements 62 mm
PSX Series

Azalea Shopping Center Los Angeles, California
240 lines x 192 columns 6 mm
Street Furniture

THE
RIGHT PRODUCT
INDOORS AND OUT

Daktronics is comfortable stepping outside the box and we're ready to help you successfully complete your video project. After all, we dedicate millions of dollars annually to research and development to stay on the industry's cutting edge. Our experience includes years of working with complex systems and large video display installations throughout the world.

OUTDOOR LED VIDEO
› 360-degree sealed module and power supply weather protection
› Efficient installation with sectional cabinet design
› Blacker display for higher contrast resulting in sharper images
› Wider viewing angles and premium brightness
› Mix of pixel pitches to fit any application

INDOOR LED VIDEO
› Module-based design allows any display size
› Powerful processing for simultaneous standard definition, HD, and computer graphics feeds
› Multiple windows per screen of live video, advertising, and real-time information
› SMD LED for up-close viewing, superior color blending, and amazing viewing angles

PROPIXEL® FREEFORM VIDEO ELEMENTS
› Stick or puck video elements mount to any surface or structure
› See-through applications to mount externally on windows
› Advanced color matching to blend product with the background color
› Pixel mapping to maintain image integrity across uneven and curved surfaces

DIGITAL STREET FURNITURE DISPLAYS
› Eye-level digital advertising and timely information in outdoor public spaces
› Reaching slow-moving vehicular and pedestrian traffic
› Sleek design complements surrounding architecture
› Variety of sizes and resolutions accommodate any region or application