OBJECTIVE

When you have hundreds of thousands of dollars worth of cutting-edge technology as your very own advertising medium, you want to capitalize on its capabilities. Effective content is absolutely critical for your digital display to powerfully impact the public.

We know the content of the message is very important; it must be relevant to the customer, brief, and to the point. But in addition to good content, the display message must be produced in an attractive and entertaining manner.

WHAT IS A DIGITAL BILLBOARD?

A digital billboard display, sometimes referred to as an LED digital outdoor advertising or a combination of these words, uses an array of light emitting diodes (LEDs) to show computer-programmed images and text, which are easily changed and updated using Vision® Display Management Solution.

WHAT IS DAY PARTING?

To achieve maximum advertising flexibility and return on investment, it’s best to day part your schedule. A day-parted schedule advertises time-sensitive promotions at the time they are valid and targets specific demographics at the time they see the billboard.

WHAT CONTENT IS BEST SUITED FOR DIGITAL DISPLAYS?

The content created for LED digital billboards should be approached differently than artwork created for print advertisements or television commercials. To be effective, content on a display must be vivid, use contrast properly and be brief. Traditional signage and advertising has one chance to convey all necessary information to customers. A digital billboard, on the other hand, can display multiple messages that appeal to and inform customers of specific products and services.

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SIMPLE. BOLD. LEGIBLE. BRIEF.

EFFECTIVE

• Placement of the car moves the eye naturally to the information.
• Excellent use of color contributes to the legibility.
• Fewer design elements clarify the message.
• Website encourages consumer to take action.

INEFFECTIVE

• Too many design elements compete for visual importance.
• Too much color confuses the customer.
• Poor car placement does not encourage the eye’s natural flow.
• The local, Miles, and national, Chevrolet, brands are buried in the text.

GRAPHIC DESIGNERS SOLVE VISUAL CREATIVE PROBLEMS USING THESE BASIC PRINCIPLES.

1. COMPOSITION
2. TYPOGRAPHY
3. COLOR

The information in this guide will help you understand the use of these three basic design principles for creating digital display content that wins the glance and entices your client’s customers.
COMPOSITION

DESIGN PRINCIPLE 1

VISUALLY PRIORITIZE YOUR MESSAGE

The most important principle for creating effective outdoor content is visual prioritization of the message, or hierarchy of communication. Prioritize each piece of the message in order of importance. The ABC levels represent the levels of importance by size. Using hierarchy of communication helps speed comprehension and increases retention of the message.

People read in chunks of information. They scan across, then down, and pick up information in logical sections. The more distinct those sections of information, the faster people interpret the meaning or the purpose of the message. Visual and written information that overlap too much cause the reader to pause and sort the two apart before understanding the message.

Use the levels as guidelines to first capture the viewer’s attention with a clear, single point of communication. Then give the viewer definition or detail that points back to the first level. Finally, give them the information they need to inspire an emotion, an action or a purchase.

LEVEL A A photo, logo, service, product image or price – it’s the most important piece of information.

LEVEL B Supporting information that gives definition or detail to support level A.

LEVEL C Relevant information that tells the customer where, how or who to contact for the information in levels A and B.

TIP: ASK YOUR AUDIENCE TO TAKE ACTION, SUCH AS “CALL TODAY”

DIGITAL ADVERTISING

VS. TRADITIONAL

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READABILITY

Select easy-to-read typefaces. Large, bold fonts make it easier for your audience to read and comprehend text from different viewing distances. Text using all capital letters is harder to read and may be perceived as “shouting.”

EXAMPLE:

This Text Is Easier to Read from Far Away

This Text Is Harder to Read From Far Away

It is good practice to vary the use of both upper and lowercase characters for longer messages. Limiting the amount of text used in your advertisements will always help viewer readability and comprehension.

Text with all caps should be limited to short messages. However, this can and sometimes must be disregarded when issues of corporate business branding arise. See the Diet Coke® example on the next page.

CHOOSE SIMPLE FONTS

Word choice is very important to enhance readability and comprehension of your message.

Keep in mind that readers scan across and then down, reading text in blocks and not letter by letter or word by word. So for quick comprehension, use a graphic and very limited text—no more than two or three elements.

If you use a serif font, bold it so the little strokes will be visible. Outlining the letters and using drop shadows also increase readability.
COLOR
DESIGN PRINCIPLE 3

Take full advantage of your display’s color capability by using rich, vibrant colors. Bright, saturated colors, with no white, have greater visual impact than pastel or low-contrast colors.

Stay away from the center rings
Use colors from the outer rings

Tint
Hue + white

Hue
The pure color

Shade
Hue + black

COLOR AND EMOTIONS

Certain colors tend to evoke specific emotions or ideas, so choose carefully when supporting products and ideas.

RED
Evokes excitement

GREEN
Evokes refreshment

BLUE
Evokes constancy

COLOR EMOTIONS EVOKED

Red
Stimulating, exciting, provocative, dynamic

Red Orange
Domination, aggression, action

Orange
Friendly, vital, playful, energizing, inviting

Yellow Orange
Illumination, wisdom, and wealth

Yellow
Sunny, warm, cheerful

Yellow Green
Freshness, fertility, sickness, discord, jealousy

Green
Soothing, nature, refreshing, healing, fresh

Blue Green
Emotional healing and protection

Blue
Cool, quiet, serene, restful

Blue Violet
Uniqueness, loyalty, association

Violet
Creativeness, regal, spiritual, mysterious

Red Violet
Energetic, happy, warm, romantic, youthful

Black
Strong, classic, elegant, mysterious
To check for tonal contrast, simply open your advertisement using your preferred compositing software, such as Adobe® Photoshop®. Then convert it to grayscale. You can now easily measure the advertisement’s tonal contrast.

TIP: CHECK FOR TONAL CONTRAST

After creating your content turn it to grayscale. Is your advertisement still readable? Do all of your elements stand out? If so, your content piece has good tonal contrast.

Good Contrast

Bad Contrast

Select colors that provide good contrast to make your content more appealing and easier to read. Achieve effective contrast by using colors with different values, which is how bright or dark a color is.

Use the chart below to guide your design. Yellow is a bright color with a very light value. Purple, on the other hand, is a dark color with a black value. Therefore, using yellow and purple together provides good contrast.

CONTRASTING COLORS

GOOD TONAL CONTRAST IS VITAL FOR READABILITY

Using contrast is vital to your design. It helps the viewer distinguish between design elements. For best contrast, use tonal contrast, also called value difference, instead of only color difference.

The full-color examples were turned to grayscale value to show the difference in contrast between the color chosen for the ‘Exit 37’ and the green background on each advertisement. Note that as you move from left to right, the contrast between the ‘Exit 37’ and the background gets less.

Grayscale reveals contrast.
RGB 
COLORS

GET CREATIVE WITH RGB COLORS
Not sure where to start? Get creative with any of the RGB (red, green and blue) colors listed below. Choose these colors when building digital content/artwork/advertisements to take advantage of the full-color capabilities of your cutting-edge Daktronics digital billboard. As you become more familiar with your LED display, you’ll discover other colors that look great, too. Instead of a solid background, enhance interest in your messages by using texture and gradients.

TRUE COLORS:
Red
Orange
Yellow
Green
Blue
Purple
White

OTHER COLORS:

Digital mediums use three primary colors (also referred to as additive colors): red, green and blue. Computer monitors, TVs and LED displays emit color as RGB light. LED displays are built on the RGB platform.

Print mediums typically use ink of four colors (also referred to as subtractive colors): cyan, magenta, yellow, and black. Also known as process colors, CMYK uses a series of dots in the four colors to create images and colors. LED displays do not support this platform.

A WORD ABOUT WHITE
Avoid white backgrounds. With LED technology, the use of emitted light, white or very light colors may repel the eye— not the desired response in advertising. A grave concern in most regulatory environments is an offensive use of light or white content. Even though Daktronics digital displays are fully capable of producing white and pastel colors, it is not recommended. Taking advantage of the color capabilities is thoughtful, and in general, more pleasing to the eye. If white or pastels must be used, the content should only be scheduled for daytime viewing.

For digital billboards, black is the absence of color. Black is created with the use of less light. While it is the blending of all colors and the use of more light in digital billboards.

WHY RGB?
Start with a red, green, and blue color space, also known as RGB, the standard in digital technology. This is the same mode as your TV or computer. Cyan, magenta, yellow and black, also known as CMYK, unlike RGB, are used for high-resolution printing. When creating content for digital signage, images MUST be created in RGB.
Digital advertising needs to be created differently than traditional print magazine/newspaper advertising because of the unique capabilities of the medium. Print advertising has one chance to convey all necessary information to customers, whereas digital advertising can show several messages in a series of rotations.

Daktronics control system enables multiple clients to advertise separately on a digital billboard. The web-based software easily updates and automatically rotates through a series of individual clients’ digital advertisement slots.

The slots belonging to one advertiser may also have unique digital content showing each rotation. This provides a better chance to attract the attention of different demographics and promotes campaigns of ads with small amounts of text instead of a single, text-heavy advertisement.

1. **TAKE A TRADITIONAL PRINT ADVERTISING DESIGN...**

Print advertising has one chance to convey all necessary information to customers, as in the traditional ad above.

Traditional ad above:
- Ineffective design
- Too many design elements
- Text heavy

2. **CREATE A TEMPLATE FOR CONSISTENCY...**

To keep consistency in the campaign, start with a template that contains similar design characteristics that will be used in all of the new digital ads.

Example template above:
- Textured background with a gradient, color may vary
- Placement of animal photo to the left, with drop shadow
- Logo on right with graphic element
- Select an easy-to-read, large, bold typeface.

3. **USE INFORMATION POINTS FROM THE PRINT AD...**

Digital advertising can show several messages in a series of rotations. Take information from the print advertisement and break them into separate ads for each information point. Ads with smaller amounts of information are easier to see and comprehend.

4. **EYE-CATCHING, CONSISTENT, EASILY READ DIGITAL ADS**

With the template and your information points, create a set of eye-catching digital ads like the set to the right. A digital campaign will provide a better chance for viewers to see and comprehend the message and attract the attention of different demographics.
SETTING UP YOUR FILES

Use the following tips to create files that work best for digital signage:

- Start with RGB color space.
  - Do not create with CMYK color space.
- Build content in its native measurement [pixel by pixel]. Example: 888 W x 260 H.
- Save files as JPEGs.
- The technology displays images at 72 ppi. For best results, build the content using high-resolution images and follow the instructions at the right for setting up your files.

SETTING UP A FILE

- **File ➤ New**
- **Set the pixel units of your display.** (ex: 180 pixels high x 450 pixels wide)
- **Color Mode:** RGB
- **Set the Raster Effects to Screen (72 ppi).**
  - **NOTE:** You can also create your content with Raster Effects set to High (300 ppi) but change it at export so the final file is the correct pixel size.

EXPORTING YOUR COMPLETED FILE

- **File ➤ Export**
- **Save as Type:** JPEG (* .jpg)
- **Select the Use Artboards checkbox.**
- **Click Save.**
- **In the JPEG Options Dialog Box, please use the following settings:**
  - **Color Mode: RGB**
  - **Quality:** 10/Maximum
  - **Resolution:** Screen 72 ppi

- **File ➤ Save As**
- **Format:** JPEG (* .jpg)
- **Click Save.**
- **In the JPEG Options Dialog Box Select:**
  - **Image Quality:** 12/Maximum
  - **Format Options:** Baseline ("Standard")

CHECKING THE PROPERTIES OF YOUR FILE

- **Right click on the file.**
- **Select Properties.**
- **Click on the Details Tab.**
- **Verify the Dimensions and Resolution.**

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- **Click on the Details Tab.**
- **Verify the Dimensions and Resolution.**
**IMAGES**

**IMPORTABLE IMAGE FILES**
- Choose photos to import that don’t contain too much detail and have a smooth gradation, which is a gradual change from one color to another.
- You may need to change the size of an image to fit your display and then crop it so it will look its best.
- For the most attractive images, use those in raster format (.jpg, .png, .gif, .bmp, and .tif) and set them at 72 ppi.
- Logos appearing on a black or colored background will be more pleasing than logos on a white background.

**EXAMPLES OF DYNAMIC CONTENT**

Dynamic Content is defined as the ability to automatically update data within a creative template utilizing an RSS feed.

Interact with audiences by displaying interactive content, such as time and temperature, hospital ER wait times, and live feeds. Talk to your Daktronics representative about our dynamic content options.

**CREATIVE SERVICES**

Effective, compelling, digital billboard ads are essential to the success of any outdoor operation. Commercial Creative Services is our award-winning team of professionals that teach your team how to be successful with your digital content creation, specifically for digital billboards.

Contact us at commercialcreativeservices@daktronics.com or 888-325-7446 to get started.

Daktronics Commercial Creative Services, has been honored every year at the annual Communicator Awards since we started to submit our work. The Communicator Awards receive thousands of entries worldwide and is the largest, most competitive program honoring creative excellence for communication professionals.

2014
- Four Award of Excellence
- Nineteen Award of Distinction

2013
- Two Awards of Excellence (Gold)
- Seven Awards of Distinction (Silver)

2012
- Two Awards of Distinction (Silver)

2011
- Four Awards of Distinction (Silver)

2010
- One Awards of Excellence (Gold)
- Two Awards of Distinction (Silver)