

HELPING YOUR CUSTOMERS PICK THE RIGHT SIGN

A few key considerations will help you walk your clients through which Watchfire sign is right for them

- :: **Viewing distance and desired pixel pitch (resolution)**—the closer traffic will be to the sign and the sharper your customers want their images, the tighter their pixel pitch should be.
- :: **Color vs. Monochrome**—the environment calls for color when customers want to display images of their products and use animated graphics to grab attention and stand out in the crowd. Monochrome works best for primarily text messages or in strictly zoned areas.
- :: **Will your customers need video capability?** The XVS upgrade offers video speed and full-sign color-calibration for the sharpest, most lifelike images with no tiling effect.
- :: **Size**—what are the space and zoning constraints? Message content and budget are also factors.
- :: **Budget**—early in the sales process, make it comparable to an automobile loan. Quality, features and size will affect the price. Even break down the purchase price into an affordable monthly payment by offering our lease financing. Your customers should also understand they're buying an effective advertising tool, not just a sign, so suggest using budgeted money from other advertising media to make the purchase. Most customers soon find their Watchfire LED sign becomes their most cost-effective advertising tool!

Size matters

The first thing most people want to know is what size sign they need (our modular designs make creating the perfectly sized sign as simple as picking up the phone). This may be predicated on how much space they have, what they want to say on their sign, or even zoning and covenants. The farther away their viewers will be, the larger the type will have to be. By the same token, the closer people will be, the tighter the pixel pitch should be.

A layman's explanation: pixel pitch equals resolution

Pixel pitch is measured in millimeters (in our case, from 16mm to 35mm), meaning the center of one pixel (or grouping of LEDs) is a certain number of millimeters from the center of the next pixel. The tighter the pixel pitch (16mm is our tightest), the sharper the image. Of course, viewing distance and pixel pitch also go hand in hand so the closer viewers will be to a sign, the tighter the pixel pitch should be.

A good rule of thumb for viewing distance is that the pixels in a 16mm sign will blend seamlessly together from 16 meters away. In other words, one millimeter in pixel pitch for every meter away from your sign people will be.

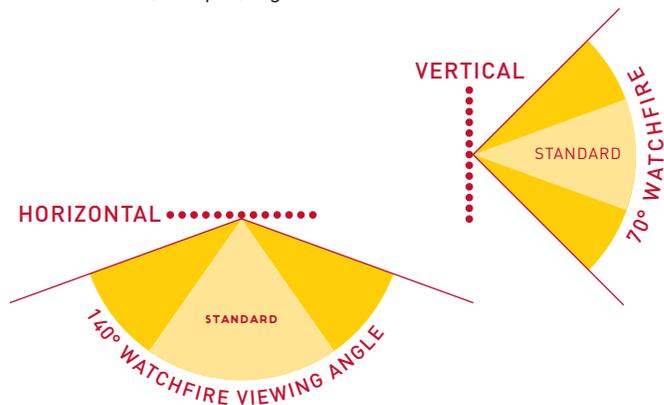
Does anyone really know what viewing angle means?

It's actually pretty simple. Viewing angle is the angle at which the LED's brightness is cut in half. An LED is at full brightness when you look at it straight on—or from dead center. If that level of brightness is cut in half by moving your position to a 35° angle from dead center, then the viewing angle is considered to be double that number—or 70°.

Reading angle is the angle at which people can adequately read your sign. While typically greater than the viewing angle, it varies depending on lighting circumstances and a sign's environment.

Watchfire XVS signs will give you a viewing angle of up to a 140° horizontal (off to either side) x 70° vertical (looking up or down at the sign), which is easily among the best in the industry. Just something to keep in mind when you consider how wide an audience your customer needs to reach.

Like we said, simple, right?



:: SELECTING THE RIGHT SIGN ::



	16mm	19mm	25mm	35mm	E-16mm
Letter Size	4.5" Minimum	5" Minimum	7" Minimum	10" Minimum	10.4" Minimum
Best Use	<ul style="list-style-type: none"> • Video • Pictures • Text 	All types of content	<ul style="list-style-type: none"> • Text on sm. signs • Logos on sm. signs • Videos on lrg. signs • Pictures on lrg. signs 	<ul style="list-style-type: none"> • Text • Logos • Pictures 	<ul style="list-style-type: none"> • Video • Pictures
Minimum Viewing Distance	50+ feet	60+ feet	80+ feet	110+ feet	120+ feet
Optimal Viewing Distance	120 - 150 feet	150 - 185 feet	200 - 245 feet	290 - 350 feet	175 feet & greater
Preferred Size	1' x 4' & larger	1' x 5' & larger	2' x 6' & larger	2' x 6' & larger	10' x 30' & larger
Ideal Application	Foot traffic	15+ mph	40 - 45 mph	50+ mph	Highway

Choosing a size

How fast will traffic be moving past your customers' sign? And from how far away? Once you know that, you can help decide how big the text needs to be and, in turn, how big the sign needs to be.

For example, if your customer wants someone traveling at 30mph to be able to read a message for 41 seconds, they'll need a sign large enough to accommodate 36-inch characters.

A good rule of thumb is that for every inch high the text is, it's legible from 50 feet away.

CHARACTER HEIGHT	MAXIMUM VIEWING RANGE	MAX VIEW TIME 30 M.P.H.	MAX VIEW TIME 55 M.P.H.
4.5"	225 ft.	4.5 seconds	3 seconds
5"	250 ft.	5 seconds	3 seconds
10"	500 ft.	11 seconds	6 seconds
12"	600 ft.	14 seconds	7 seconds
15"	750 ft.	17 seconds	9 seconds
18"	900 ft.	21 seconds	10 seconds
24"	1050 ft.	24 seconds	12 seconds
30"	1500 ft.	34 seconds	17 seconds
36"	1800 ft.	41 seconds	21 seconds

Per electronicsigns.com which states 1" text is readable to about 50 feet.