



WHY YOUR LED SIGN ISN'T WORKING

The LED Sign Performance Guide





START WITH THE SIGN

Your sign is on. Why isn't it working?

An LED sign can be bright, active and expensive - and still fail to earn attention. Usually, the problem is not one dramatic defect. It is a mismatch between the message, the viewer and the display.

This guide helps you diagnose six common performance problems. Some can be corrected today with better content. Others point to brightness loss, aging hardware, the wrong resolution or a system that no longer supports the job you need it to do.

SIX REASONS YOUR SIGN MAY BE UNDERPERFORMING	
1	It is trying to say too much.
2	The message is difficult to read.
3	Messages change too quickly.
4	Brightness is working against you.
5	Your messages have become easy to ignore.
6	The display may be limiting the message.

Start with the message. If the sign improves when the content improves, you may not need new hardware. If the same problems remain, the scorecard on page 8 will help you decide what to evaluate next.

REASON 1

Your sign is trying to say too much.

1

One glance cannot carry a paragraph.

Drivers are moving, watching traffic and making decisions. When a slide contains several ideas, long sentences or too many details, the main point disappears.

Use the 3-Second Sign Test as a quick content check:

1

Show one message for three seconds.

2

Hide it.

3

Ask: What was the main message? Who was it for? What should I do next?

If someone cannot repeat the idea, simplify it. Keep one message, one visual hierarchy and one useful next step. Move dates, disclaimers and extra details to the website or next slide.



A SHORT, USEFUL MESSAGE - The display gives a passing viewer one immediate benefit to remember.

Important: This test checks brief-glance comprehension. It is not a universal rule that every slide should display for only three seconds.

Can people read it - and understand it?

2
The message is difficult to read.

Small type, decorative fonts, weak contrast and crowded layouts make the eye work too hard. Roadside content needs bold letterforms, strong color separation and open space.

3
Messages change too quickly.

A clear slide still fails when it disappears before the viewer can finish it. Longer copy needs more time; fast sequences reduce the chance that any one viewer sees the complete thought.



READABILITY: Large, high-contrast words create a clear entry point.



TIMING: A focused offer is easier to finish before the next slide.

Try this from the road: Watch the sign from the normal approach, at the normal travel speed. Can you recognize the subject, read the words and understand the action before the slide changes? If not, shorten the copy or extend its time onscreen.

REASON 4

Brightness is working against you.

4

A sign can be too dim by day and too harsh at night.

Direct sun can wash out an underpowered or aging display. At night, excessive brightness creates glare and softens letter edges. Automatic dimming should adapt the display to changing ambient light.



NIGHT PERFORMANCE - Brightness should preserve contrast and crisp edges without overpowering the message.

Brightness also changes over the life of an LED display. As diodes age, output declines. That loss may appear as a generally dim image, uneven color or a sign that no longer holds its own in daylight.

Check performance in three conditions:

- **Full daylight:** Does the message retain contrast in direct sun?
- **Dusk:** Does automatic dimming respond smoothly as ambient light drops?
- **Night:** Are letters crisp, or does glare make the message bloom?

Clean the sign face, confirm the light sensor is unobstructed and review brightness settings before assuming the modules need replacement.

REASON 5

Your messages have become easy to ignore.

5

A working screen is not the same as useful communication.

Repeated generic slides become background scenery. Specific, timely messages earn attention because they answer a question, solve a problem or give the viewer a reason to act now.



CONTENT WITH A JOB - A specific offer and an immediate benefit give the viewer a reason to notice.

Build a simple content rotation around what matters to your audience:

- **Useful now:** hours, availability, schedules, directions and service changes
- **Worth acting on:** one offer, event, deadline or featured product
- **Worth remembering:** a community message, proof point or distinctive benefit

Refresh the rotation before regular viewers stop noticing it. Templates can preserve brand consistency, but the information inside them should change with the business, season and audience.

REASON 6

The display may be limiting the message.

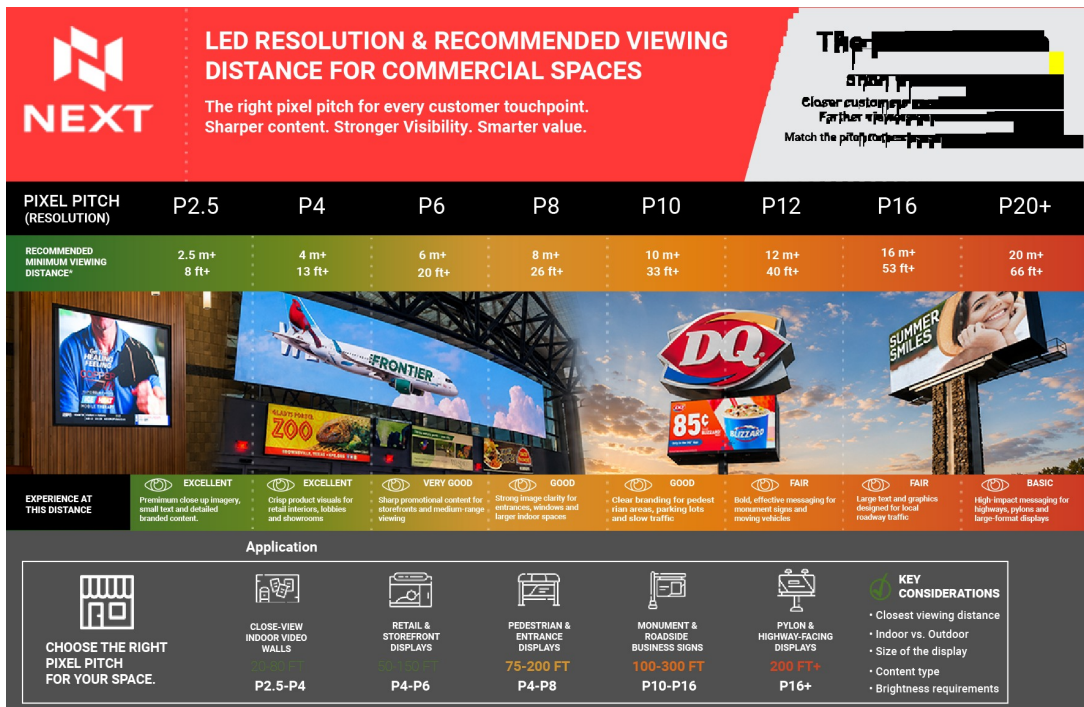
6

Better content cannot correct every performance problem.

Pixel pitch, module age, power stability, refresh rate, color calibration, control software and network reliability all affect what the display can reproduce and how consistently it operates.

Look for patterns, not just one bad slide:

SYMPTOM	WHAT TO CHECK FIRST
Text looks coarse at the normal viewing distance	Pixel pitch, sign dimensions and content detail
Colors or brightness look uneven	Module age, calibration, power and diode depreciation
Photos band or flicker on camera	Refresh rate and controller configuration
Slides fail, freeze or update inconsistently	Player, network, scheduling software and control system



COMMERCIAL VIEWING GUIDE - The full guide connects pixel pitch, closest viewing distance, image detail and common applications.

If the message is simple, well timed and properly formatted but the result is still weak, schedule a performance review before replacing parts or redesigning the entire content program.

What kind of fix does your sign need?

Rate each statement from 0 to 2. Use 0 for no, 1 for sometimes and 2 for yes.

CHECK	0-2
A viewer can repeat the main idea after the 3-Second Sign Test.	
The message uses large type, strong contrast and one clear hierarchy.	
A normal roadside viewer can finish the slide before it changes.	
The display stays readable in daylight without harsh glare at night.	
The content is current, specific and useful to the intended audience.	
Brightness and color look even across the entire display.	
The sign updates reliably without freezing, missing slides or connection failures.	
Pixel pitch and display size suit the normal viewing distance.	
TOTAL	

CONTENT FIX	PERFORMANCE REVIEW	HARDWARE EVALUATION
13-16 points Start with content cleanup, testing and a fresher schedule.	8-12 points Review brightness, timing, calibration and system settings.	0-7 points Assess modules, controls, resolution, power and replacement options.

**READY FOR A
SECOND
LOOK?**

Send NEXT LED Signs a short video of the display, the normal viewing distance and examples of the content you run. We can help separate a content problem from a performance or hardware problem.

888-359-9558 | nextledsigns.com/contact

Sources used: NEXT LED Signs articles on visibility best practices, nit depreciation, commercial pixel pitch, refresh rate, engagement, professional content, readability and content management; FHWA guidance informed the general principles of concise messages and adequate viewing time. The 3-Second Sign Test is a NEXT LED Signs self-assessment, not a universal slide-duration standard.