Front-Lit Channel Letters

Section 1:	Front-Lit Channel Letters Bright, durable LED channel letters for storefronts, façades, and high-rise signage. Front-lit channel letters are the most widely used type of illuminated letter signs. LEDs are installed inside the letter body and shine through the acrylic face, creating clear, direct, and highly visible brand signage for both close-view and long-distance applications. DIKA SIGN custom manufactures aluminum and stainless steel front-lit channel letters with painted, electroplated, brushed, or mirror finishes. Faces can be made with solid-color acrylic or white acrylic with translucent vinyl for accurate brand color control. **Applications** • Storefront signs and shopfront branding • Retail streets and shopping mall façades • High-rise building and exterior wall signage • Hotel, restaurant, and chain store signs • Corporate, factory, and office building signage

Key Advantages

图标+ **High Visibility** Direct front illumination gives strong readability for both storefront and high-position facade signage.	图标+ **Flexible Material Options** Aluminum or stainless steel letter bodies can be combined with solid acrylic or translucent vinyl faces.	图标+ **Wide Application Range** From storefront signs to high-rise façade letters, front-lit channel letters support both close-view and long-distance brand visibility.

Section 4: Project Challenges & DIKA SIGN ® Solutions

Product Challenge 01 Day & Night Brand Color Difference A front-lit letter must look correct in daylight and remain accurate when illuminated at night. ✘ Solid colored acrylic may shift visually after LED illumination ✘ Brand color may look different between day and night ✘ Low-grade face materials can fade under UV exposure ✘ Uneven light makes premium brands look unstable 	**DIKA SIGN ® Solution** ✓ Select solid acrylic or white acrylic + translucent vinyl based on brand color requirements ✓ Use 3M / Avery Dennison translucent film when precise color control is required ✓ Confirm face material during drawing stage according to size, brightness, and viewing distance ✓ Optimize LED spacing to reduce hot spots and dark areas **Solution Value** ✓ More accurate brand color output ✓ Consistent appearance from day to night ✓ Better outdoor UV stability ✓ Cleaner visual quality for storefront and facade signage
Product Challenge 02 Structure, Weight & Installation Risk Front-lit letters are often installed on glass, aluminum panels, stone, steel frames, or high building facades. ✘ Heavy letters increase lifting and fixing difficulty ✘ Weak returns may deform during transport or installation ✘ High-position signage needs safer mounting logic ✘ Site conditions often change after drawings are approved 	**DIKA SIGN ® Solution** ✓ Use aluminum returns for lighter structures and stainless steel when premium metal strength is required ✓ Engineer steel support, fixing points, and letter structure as one system ✓ Add reinforcement, drain holes, and access logic according to size and location ✓ Provide mounting recommendations and tolerance notes based on approved drawings **Solution Value** ✓ Lower installation load and site risk ✓ Better stability for high-position signage ✓ Reduced deformation during delivery and installation ✓ Clearer coordination for contractors and sign companies

Product Challenge 03 Outdoor Durability & Electrical Reliability Outdoor LED letters must resist rain, UV exposure, heat, dust, and long operating hours. ✘ Water accumulation can damage LEDs and wiring ✘ Poor heat management shortens LED service life ✘ Uncontrolled wiring creates safety and maintenance issues ✘ Unstable coating leads to fading, peeling, or corrosion 	**DIKA SIGN ® Solution** ✓ Use IP-rated waterproof LED modules and project-specific LED layout ✓ Apply UL-compliant wiring as the default internal standard ✓ Coordinate wire exits, connectors, power load, and access points with mounting method ✓ Use outdoor-grade paint, fluorocarbon coating, or stainless steel finish based on exposure **Solution Value** ✓ More stable illumination performance ✓ Lower maintenance frequency ✓ Safer electrical execution for overseas projects ✓ Longer-lasting outdoor appearance

Custom Front-Lit Channel Letter Options

Front-lit letters can be customized by body material, surface finish, face solution, and application scenario. DIKA SIGN recommends the right configuration based on letter size, viewing distance, brand image, installation height, and outdoor exposure.

Option	Core Configuration	Best Application	Key Value
Aluminum Body	Painted aluminum letter body	Large storefronts, building façades, high-position signs	Lightweight, durable, and easier to install for large outdoor signage
Stainless Steel Body	Stainless steel body with painted, brushed, or mirror finish	Premium retail, hotels, restaurants, and corporate branding	Stronger metal texture and refined edge quality
Painted Finish	Aluminum or stainless steel with custom paint finish	Chain stores, commercial façades, standard brand signage	Flexible color matching with cost-effective outdoor performance
Electroplated Finish	Stainless steel with electroplated metal finish	Luxury brands, hotels, feature walls, and high-	Premium metallic appearance with stronger

Option	Core Configuration	Best Application	Key Value
		end retail	visual impact
Solid Acrylic Face	Solid-color acrylic front face	Standard illuminated colors and budget-controlled projects	Simple, direct, and cost-effective front illumination
Translucent Vinyl Face	White acrylic face with translucent vinyl	Projects requiring accurate brand color and day/night consistency	Better color control and more stable visual output

Section 6: Why Choose DIKA SIGN ®?

图标+ **Made Light · Built to Last** Lighter structures and durable finishes help reduce installation load, site risk, and long-term maintenance. **Aluminum or Stainless Steel?**	图标+ **Project-Ready Manufacturing** From drawings to packaging, every detail is coordinated for smoother production, installation, and delivery. **See How We Deliver Projects**	图标+ **30 Years of Signage Expertise** Experience in complex signage projects helps control engineering, fabrication, quality, and delivery risks. **About DIKA SIGN ®**	图标+ **OEM / ODM Partner Only** We support sign companies and design firms with OEM / ODM manufacturing, engineering coordination, and project delivery — without competing for end clients. **Partner With DIKA SIGN ®**

FAQ

Q1: What are front-lit channel letters?

Front-lit channel letters are LED illuminated letters that shine through the front acrylic face. They are widely used for storefront signs, building façades, high-rise signage, hotels, restaurants, and retail brands.

Q2: Should I choose aluminum or stainless steel letters?

Aluminum is lighter and better for large outdoor or high-position signs. Stainless steel offers stronger metal texture, refined edges, and a more premium brand appearance.

Q3: Which face material is better: solid acrylic or translucent vinyl?

Solid acrylic is suitable for standard colors and cost-controlled projects. White acrylic with translucent vinyl is better for accurate brand color and day/night visual consistency.

Q4: Can front-lit letters be used for high-rise building signage?

Yes. DIKA SIGN evaluates letter size, wind load, support structure, LED brightness, wiring exits, and mounting method before production.

Q5: How do you avoid uneven lighting or visible LED spots?

LED spacing is designed based on letter depth, stroke width, face material, brightness requirements, and viewing distance to create more uniform illumination.

Q6: What files are needed to start a project?

Vector files such as AI, EPS, PDF, or CAD are preferred. Reference images, dimensions, and façade drawings can also be used for preliminary review.

正面发光字

第 1 节：	**正面发光字** 适用于店面、建筑立面和高位标识的耐用 LED 发光字。 正面发光字是最广泛使用的发光标识类型之一。LED 光源安装在字壳内部，通过亚克力面板正面发光，形成清晰、直接、醒目的品牌识别效果，适合近距离店招和远距离建筑标识。 DIKA SIGN 可定制铝制和不锈钢正面发光字，并提供烤漆、电镀、拉丝、镜面等表面效果。面板可采用纯色亚克力，或白色亚克力加透光膜，以满足品牌色控制需求。 应用场景 • 店面门头与商铺招牌 • 商业街与购物中心立面 • 高位建筑字与外墙标识 • 酒店、餐饮与连锁门店标识 • 企业、工厂与办公楼品牌标识

核心优势

图标+ **高识别度** 正面直发光，在店面招牌和高位立面标识中都具备清晰可读性。	图标+ **材质选择灵活** 铝制或不锈钢字壳，可搭配纯色亚克力或透光膜面板。	**图标+** **适用范围广** 从店面招牌到高位建筑发光字，兼顾近距离和远距离品牌识别。

第 4 节：项目挑战与 DIKA SIGN ® 解决方案

项目挑战 01 昼夜品牌色差 正面发光字需要白天颜色准确，夜间点亮后仍保持品牌色稳定。 ✘ 纯色亚克力点亮后可能产生视觉偏色 ✘ 品牌色在白天与夜晚可能不一致 ✘ 低等级面板材料在户外紫外线下容易褪色 ✘ 发光不均会降低高端品牌的视觉质感	**DIKA SIGN ® 解决方案** ✓ 根据品牌色要求选择纯色亚克力或白色亚克力 + 透光膜 ✓ 精准控色项目可采用 3M / Avery Dennison 透光膜 ✓ 在深化图阶段根据尺寸、亮度和观看距离确认面板方案 ✓ 优化 LED 间距，减少灯点和暗区 **方案价值** ✓ 品牌色输出更准确 ✓ 昼夜视觉表现更一致 ✓ 户外抗 UV 稳定性更好 ✓ 店招和建筑立面视觉更干净
项目挑战 02 结构、重量与安装风险 正面发光字常安装在玻璃、铝板、石材、钢结构或高位建筑立面上。 ✘ 字体过重会增加吊装和固定难度 ✘ 字壳强度不足，运输或安装时容易变形 ✘ 高位标识对安装结构和固定逻辑要求更高 ✘ 现场条件可能在图纸确认后发生变化	**DIKA SIGN ® 解决方案** ✓ 大尺寸项目优先采用轻量化铝制字壳，高端金属质感项目可选不锈钢 ✓ 将钢结构、固定点和字壳结构作为整体系统设计 ✓ 根据尺寸和位置增加加强、排水孔和检修逻辑 ✓ 基于确认图纸提供安装建议和公差说明 **方案价值** ✓ 降低安装荷载和现场风险 ✓ 提升高位标识的结构稳定性 ✓ 减少运输和安装过程中的变形 ✓ 便于承包商和标识公司现场协调

项目挑战 03 户外耐久性与电气可靠性 户外 LED 发光字需要长期应对雨水、紫外线、高温、灰尘和长时间运行。 ✘ 积水可能损坏 LED 和线路 ✘ 散热不良会缩短 LED 寿命 ✘ 布线不规范会带来安全和维护问题 ✘ 表面处理不稳定容易褪色、脱漆或腐蚀	**DIKA SIGN ® 解决方案** ✓ 采用防水等级 LED 模组和项目定制 LED 布局 ✓ 默认按 UL 或同等电气安全标准进行内部布线 ✓ 根据安装方式协调出线口、连接件、电源负载和检修点 ✓ 根据户外暴露环境选择户外级烤漆、氟碳涂层或不锈钢表面 **方案价值** ✓ 发光性能更稳定 ✓ 降低后期维护频率 ✓ 更适合海外项目的安全电气执行 ✓ 户外外观更持久

正面发光字定制配置选项

正面发光字可根据主体材质、表面工艺、面板方案和应用场景进行定制。DIKA SIGN 会根据字体尺寸、观看距离、品牌形象、安装高度和户外环境，推荐更合适的配置方案。

配置选项	核心配置	适合应用	关键价值
铝制主体	烤漆铝制字壳	大型店招、建筑立面、高位标识	轻量、耐用，更便于大型户外标识安装
不锈钢主体	不锈钢字壳，可做烤漆、拉丝或镜面效果	高端零售、酒店、餐饮和企业品牌	金属质感更强，边缘更精致
烤漆表面	铝制或不锈钢主体 + 定制烤漆	连锁门店、商业立面、标准品牌招牌	颜色匹配灵活，户外性价比高
电镀表面	不锈钢主体 + 电镀金属饰面	奢侈品牌、酒店、特色墙和高端零售	金属外观更高级，视觉冲击力更强

配置选项	核心配置	适合应用	关键价值
纯色亚克力面板	纯色亚克力正发光面板	标准发光颜色和预算控制型项目	简单、直接，前部发光成本更可控
透光膜面板	白色亚克力面板 + 透光贴膜	需要精准品牌色和昼夜一致性的项目	色彩控制更准确，视觉输出更稳定

第 6 节：为什么选择 DIKA SIGN ®?

图标+ **更轻 · 更耐久** 更轻的结构和耐久表面处理，有助于降低安装荷载、现场风险和长期维护。 **铝制还是不锈钢?**	**图标+** **项目化制造** 从图纸到包装，每个细节都为更顺畅的生产、安装和交付而协同。 **查看我们的项目交付方式**	**图标+** **30 年标识项目经验** 复杂标识项目经验，有助于控制深化、制造、质量和交付风险。 **关于 DIKA SIGN ®**	**图标+** **OEM / ODM 合作伙伴** 我们为标识公司和设计公司提供 OEM / ODM 制造、工程协同和项目交付支持，不与客户争夺终端项目。 **与 DIKA SIGN ® 合作**

FAQ

Q1：什么是正面发光字?

正面发光字是 LED 光源通过前部亚克力面板发光的立体发光字，广泛用于店面招牌、建筑立面、高位标识、酒店、餐饮和零售品牌。

Q2：应该选择铝制还是不锈钢发光字?

铝制更轻，更适合大型户外或高位标识；不锈钢金属质感更强、边缘更精致，更适合高端品牌展示。

Q3：纯色亚克力和透光膜面板怎么选?

纯色亚克力适合标准颜色和预算控制型项目；白色亚克力加透光膜更适合精准品牌色和昼夜视觉一致性要求。

Q4：正面发光字可以用于高层建筑标识吗？

可以。DIKA SIGN 会在生产前评估字体尺寸、风荷载、支撑结构、LED 亮度、出线方式和安装方法。

Q5：如何避免发光不均或明显灯点？

我们会根据字深、笔画宽度、面板材料、亮度要求和观看距离设计 LED 间距，以实现更均匀的发光效果。

Q6：项目启动需要提供哪些文件？

建议提供 AI、EPS、PDF 或 CAD 等矢量文件，也可先提供参考图片、尺寸和建筑立面图用于初步评估。