Top LED Lumination: Capabilities

LED walls, displays, touchscreens, audio, lighting and crew for trade shows and live events across the US.

Call 1 (844) 283-1510 · **Email** events@tllrentals.com · **Web** www.tllrentals.com

Serving trade shows since 2015, with thousands of successful events. We stock our own LED walls, displays, audio, lighting and truss, and our crew runs the show. No prices here: every quote is customized, so call or email us.

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1. Services

Our people quote the job, draw it, plan it, build it, run the show and strike it. Here is what each part of the team takes on, in the order your project meets them.

Step 01: Our estimating team

They work with you from your first email to the final quote.

YOUR FIRST ASK

- Reply to your first email the same day, from a real person.
- Ask what changes the build, check it can work, and quote it with exclusions named up front.
- Check pitch, mounting, power, weight and content resolution with our techs, and test what is unknown rather than guess.

YOUR QUOTE

- Lay out options side by side where there is a real choice, with a separate quote for each separate scope.
- Number every new version, with a plain list of what changed.

Step 02: Our drawing department

They draw the build before anything ships.

DRAWINGS AND MAPS

- Draw structural and wiring plans in PDF and DWG, checked against your booth builder's CAD.
- Map how each wall is wired for data, with the power and load figures.
- Mark the real clearances on the drawings.
- Make the pixel map for your content team, with the zones a platform or structure will block marked.
- Supply engineer-stamped drawings for flown walls when the venue requires them.

Step 03: Our project managers

They plan the job, handle the paperwork and run it on site.

PLAN AND VENUE

- Walk the venue before build day, on request: power, rigging, access and sightlines.
- Plan power from the venue's supply to every device, checked against your electrical order.
- Work with the venue's rigger on flown walls.
- Handle show paperwork: contractor registration, insurance certificate, badges and dock access.
- At union venues, tell you what labor to order, and offer a supervisor to oversee the venue's crew.

CONTENT, CREW AND FREIGHT

- Give your content team the exact pixel size, templates and an artwork deadline.
- Assign your on-site lead and crew, confirm your setup date and plan crew travel.
- Plan the freight to the advance warehouse or straight to site.

SHOW AND WRAP

- One on-site lead runs your job, and you get their cell number.
- The lead checks for hazards every day and stops unsafe work.
- Need a change on the show floor? Email the request to your project manager, and our crew makes it right away.
- After strike, return any of your items that traveled with our gear.

Step 04: Our technicians

They build, run and strike your show.

BUILD AND RIG

- Build LED walls ground supported, hung, wall mounted or set into the booth.
- Build curved walls, LED rings, hanging spheres and LED counters.
- Build box truss and ground-support frames for LED walls.
- Mount TVs plumb and level, and set up touchscreens and kiosks.

VIDEO AND PLAYBACK

- Set up the LED processors and load your wall's pixel map before the gear ships.
- Drive very wide LED walls as one continuous picture.
- Switch presenter laptops, cameras and video for live events and keynotes.
- Set up playback, from a simple booth loop to live presenter sessions.

SOUND AND LIGHT

- Set up speakers, wireless mics and mixers, and can run the sound.
- Tune presenter mics against feedback, and scan wireless channels before each session.
- Hang, program and run stage lighting, and animate LED strip from a show computer.

RUNNING THE SHOW

- Test every screen with a test pattern. If a file will not play right, we can re-encode it.
- For big or rigged walls, we can add backup signal and spare gear.
- Troubleshoot data runs, LED modules, audio and signal, and swap failed modules on site.

Behind every job: TLL as a company

Gear, reach and the way we work.

GEAR AND REACH

- Our crew and gear travel to shows across the country, in our own trucks or by freight.
- We stock our own LED walls, displays, audio, lighting and truss, plus specialty LED.

RUNNING YOUR SHOW

- Our techs install the gear, run the show and strike it. At live events, they run video, audio and lighting from front of house.
- Choose your level of help: our crew for the full show, install and strike only, or phone support.
- Each order is prepped, scanned and checked before it ships. Pre-staging is available on request.

YOUR CONTENT

- Content help: templates, file checks and edits to fit the wall.
- See how your content looks on a wall or a sphere, whenever you need, in our online preview tools. No waiting on us. Your TLL rep gives you access.
  LED wall preview: www.tllrentals.com/led-wall-content-guide/
  LED sphere preview: www.tllrentals.com/led-sphere-content-guide/

PARTNERS AND CUSTOM WORK

- White-label behind exhibit houses and booth builders, under your name or ours.
- Custom LED shapes, like rings, curves and corners, with brackets we 3D print.
- Permanent LED walls, sold and installed for retail stores and churches.

CARE AND STANDARDS

- Show computers can run offline, and some go online when your show needs it. Either way, we wipe your files after the show.
- Our techs work to written TLL standards for cables, rigging, show computers and front of house.

2. LED tiles

Pick the pitch by how close people stand: a smaller pitch is finer up close. No maker names: we list what we carry.

Pitch	Cabinet	Pixels per cabinet	Type	Comfortable from	Best for
P1.5 1.5 mm	500 × 500 mm 19.7 × 19.7 in	320 × 320	Indoor, GOB, Curve, Flat	~8 ft ~2.5 m	Selfie walls, close-up interactive and tight camera shots.
P1.9 1.9 mm	500 × 500 mm 19.7 × 19.7 in	256 × 256	Indoor, GOB, Curve, Flat, Flexible, 90° corner	~11 ft ~3.5 m	Curved close-up walls, columns and wraps, down to a 5 ft curve diameter.
P2.3 2.3 mm	496 × 496 mm 19.5 × 19.5 in	208 × 208	Indoor, Flat, Flexible	~13 ft ~4 m	Curved booth and stage walls seen from normal room distance.
P2.6 2.6 mm	500 × 500 mm 19.7 × 19.7 in	192 × 192	Indoor, GOB, Curve, Flat, 90° corner	~15 ft ~4.5 m	Our default for keynote stages and most booth walls.
P2.8 2.8 mm	500 × 500 mm 19.7 × 19.7 in	176 × 176	Indoor, Curve, Flat	~16 ft ~5 m	Booth and stage walls at show-floor distance.
P2.9 2.9 mm	600 × 400 mm 23.6 × 15.7 in	204 × 136	Indoor, Flat	~16 ft ~5 m	Larger walls the audience sees from further back.
P3.9 3.9 mm	500 × 500 mm 19.7 × 19.7 in	128 × 128	Indoor, Curve, Flat	~22 ft ~6.5 m	Hanging signs, overhead banners and big walls seen across the room.
P4.8 4.8 mm	500 × 500 mm 19.7 × 19.7 in	104 × 104	Outdoor, Walkable floor	~27 ft ~8 m	Bright outdoor walls, and the walkable LED floor.
P3.9 × 7.8 3.9 × 7.8 mm	1000 × 500 mm 39.4 × 19.7 in	256 × 64	Indoor, Transparent mesh	~25 ft+ ~7.5 m+	See-through walls, window mounts and scenic.

GOB means the LED face is sealed under a protective coat, which suits walls people stand close to or touch. "Comfortable from" is a guide, not a limit. Plenty of clients view much closer, because event content is video and big graphics.

3. Specialty LED

Item	Pitch	Size	Detail
LED sphere	P1.8	5 ft (1.5 m) diameter	2,496 × 1,194 px. Plays all the way around. Floor pedestal or hoist.
LED sphere	P2.0	6.5 ft (2.0 m) diameter	2,688 × 1,298 px. Plays all the way around. Floor pedestal or hoist.
LED poster	P2.5	22 × 75 in screen	224 × 756 px. Freestanding with a weighted base. Several can run as one picture.
LED poster	P1.8	Ask us	Freestanding, black finish. Finer pitch for close viewing.
LED counter	P1.8	42 in or 66 in long (42 × 23 × 43 in, 66 × 23 × 43 in)	LED wraps the front and corners. Onboard player or HDMI. Lockable storage on the 66 in.
LED podium	P1.8	21 × 18 × 45 in	Curved LED front, 172 × 516 px. Plug and play.
LED tunnel	P1.5	Built to your space	A walk-through tunnel built from our fine-pitch tiles.
LED floor	P4.8	Built to your space, 500 × 500 mm tiles	Walkable LED floor with protective covers.

4. TVs

Size	Resolution	Brands
32 in	Ask us	Samsung, TCL, VIZIO
40 in	Ask us	Samsung, VIZIO
43 in	4K	Samsung, TCL
50 in	4K	Samsung
55 in	4K	Samsung, TCL
60 in	4K	Samsung, Philips
65 in	4K and 8K	Samsung, TCL, VIZIO
70 in	4K	Samsung
75 in	4K	Samsung, TCL
82 in	4K	Samsung
85 in	4K	Samsung, TCL
98 in	4K	Samsung, TCL
100 in	4K	Hisense

Floor stands, tabletop stands and wall mounts to match.

5. LCD video walls

3.5 mm bezel per panel, about 7 mm where two meet. Built into video-wall grids; a 2 × 2 is true 4K.

Panel	Resolution per panel	Brightness	Viewing angle	Orientation
46 in ultra-slim bezel LCD	**1920 × 1080 (Full HD)**	**500 nit max (typical)**	**178 / 178 (H/V)**	**Landscape or portrait**

Grid	Size	Resolution
2 × 2	80 × 45 in 6.7 × 3.8 ft	3840 × 2160 True 4K
3 × 2	121 × 45 in 10.1 × 3.8 ft	5760 × 2160
4 × 2	161 × 45 in 13.4 × 3.8 ft	7680 × 2160
3 × 3	121 × 68 in 10.1 × 5.7 ft	5760 × 3240
5 × 2	201 × 45 in 16.8 × 3.8 ft	9600 × 2160
6 × 2	241 × 45 in 20.1 × 3.8 ft	11520 × 2160

6. Touchscreens and kiosks

Our touchscreens use PCAP (projected capacitive), the same fast multi-touch as a phone.

Item	Size	Touch	Resolution	Notes
PCAP touchscreen	43 in	Projected capacitive (PCAP), multi-touch	1080p or 4K	HDMI in, USB touch. Optional built-in PC. IPS panel, carry handle built in. 39 lb (4K) to 53 lb (1080p).
PCAP touchscreen	55 in	Projected capacitive (PCAP), multi-touch	1080p or 4K	HDMI in, USB touch. Optional built-in PC. IPS panel, carry handle built in. 77 lb.
PCAP touchscreen	65 in	Projected capacitive (PCAP), multi-touch	4K	HDMI in, USB touch. Optional built-in PC. IPS panel, carry handle built in. 59.4 × 34.8 in, just over 3 in deep, 102 lb.

Item	Size	Touch	Resolution	Notes
PCAP kiosk	43 in or 55 in	Projected capacitive (PCAP), multi-touch	1080p or 4K	Built-in player, or your source over HDMI. Portrait, floor-standing. Also built from our loose touchscreens on a kiosk stand.
Touch overlay	32, 43, 50, 55, 65, 75, 82 and 85 in	Touch overlay frame	Matches the display	Fits over a TV or monitor and adds touch. Comes off clean. A 4 × 2.5 m overlay makes an LED wall touch-ready.
Giga-Tab	43 in or 55 in	Touch directly on the large screen	Ask us	A giant touchscreen that runs your iOS apps.

Floor stand or wall mount, VESA 400 × 400 brackets.

7. Touch and interactive builds

Build	What it is
Touchscreen LED sphere	A 360 degree LED sphere guests spin and explore by touch.
Touchscreen LED wall	A giant LED wall guests walk up and touch, run with content built around your brand.
AI selfie mosaic wall	Guests take a photo, pick a look, and their portrait joins a mosaic on the LED wall.
Immersive selfie wall	Fine-pitch curved LED for photo and selfie moments on the floor.

8. Lighting

Moving heads, washes, spots and effects, plus the consoles that run them. "TLL in-house" is our own stock, listed without a maker name.

Item	Brand	Key spec
CONSOLES AND CONTROL		
Tiger Touch II and Quartz style consoles	TLL in-house	Full-size and compact touchscreen desks; DMX outputs and Art-Net
Compact console and USB interface	ChamSys MagicQ MQ50, MagicDMX	6 universes with 4 DMX outputs; USB to DMX for a laptop
Small consoles for smaller projects	TLL in-house	12 to 192 channels; the larger ones store scenes and chases
Wireless DMX	City Theatrical Multiverse SHoW Baby	Wireless DMX transceivers; each one sends or receives a full universe on 2.4 GHz
DMX splitters	TLL in-house	1 in, 8 out signal amplifiers
MOVING HEADS		
Beam / Spot / Wash Moving Head, 371W	TLL in-house	Beam, spot and wash in one; 371 W lamp
Beam / Spot / Wash Moving Head, 600W	TLL in-house	Beam 0 to 2.2°, spot 1.6 to 15°, wash 4 to 21°
Profile Moving Head with Framing, 35,000+ lm	TLL in-house	Beam, logo, wash and framing shutters; zoom 8 to 50°
Wash Moving Head, 800W	TLL in-house	19 × 40 W RGBW LEDs; 2500 to 8000 K
Wash Moving Head, 710W	TLL in-house	Zoom 4 to 60°; DMX and Art-Net
Wash Moving Head, 300W	TLL in-house	300 W wash
WASHES, PARS AND UPLIGHTS		
LED Wash / Par with Zoom, 190W	TLL in-house	190 W; 2700 to 8000 K; electronic zoom
Outdoor LED Par, 12 × 12W	TLL in-house	12 × 12 W RGBWA+UV; 25 or 40° beam; IP65

Item	Brand	Key spec
LED uplights and wash bars	TLL in-house	36 W RGB uplights; 120 W bars, RGB plus warm and cool white; 15 W mini COB pars
SPOTS AND FOLLOW SPOTS		
LED Profile Spot, 200W COB	TLL in-house	200 W COB; 26° fixed; 5600 K; CRI 90+
LED Fresnel Spot, 380W	TLL in-house	5600 K; zoom 15 to 60°; barn doors
Manual Follow Spot, 80 m Throw	TLL in-house	350 W; 10 to 15° beam; throws up to 80 m
EFFECTS		
LED Strobe, 1250W	TLL in-house	10 strobe sections plus 40 backlight sections; DMX, Art-Net, sACN
Outdoor Logo / Gobo Projector	TLL in-house	Projects a logo or pattern; 160 W LED; IP67
LED STRIP		
Addressable LED pixel strip	TLL in-house	Addressable LEDs, controlled pixel by pixel over Art-Net, in 5 m reels
Pixel-mapping controllers	Advatek PixLite A4-S Mk3, E16-S Mk3	4 and 16 outputs for pixel strip, up to 24 or 96 universes

9. Audio

Consoles, speakers, a line array, mics and crew comms. "TLL in-house" is our own stock, listed without a maker name.

Item	Brand	Key spec
CONSOLES AND RECORDING		
Digital consoles	Behringer X32, X32 Compact, X32 Rack; Midas M32R	40 input channels with 16 or 32 mic preamps; the rack version runs from a tablet
Touchscreen digital console	Yamaha DM3 Standard	22 mixing channels, 16 mic and line inputs, 9 in touchscreen
Analog mixers	Yamaha MG06X, MG10XUF, MG12XU; Mackie ProFX10v3	6 to 12 inputs with built-in effects; USB audio on the 10 and 12 input models
Podcast and recording	RØDE RØDECaster Pro II; Zoom R20	4-mic podcast console with multitrack USB recording; 16-track recorder
SPEAKERS AND MONITORS		
Compact speakers	Meyer Sound UPM-1P, MM-4XP	Self-powered dual 5 in; 4 in miniatures in black or white
8 in powered speaker	QSC CP8	Two-way, 1000 W peak; doubles as a floor monitor
10 in powered speakers	QSC K10.2; Electro-Voice ELX200-10P	Two-way; 2000 W peak, or 1200 W in white
12 in powered speakers	QSC K12.2, CP12	Two-way; 2000 W or 1000 W peak
15 in coaxial speaker	TLL in-house	Full-range coaxial
Subwoofers	TLL in-house	12 in at 1000 W and 18 in at 2400 W
Line array	TLL in-house	10 in array boxes and dual 15 in array subs; flown or ground-stacked, with amp and processor racks
In-ear and studio monitors	Shure PSM300; KRK Rokit 5	Wireless stereo in-ears; 5 in powered studio monitors
Ceiling and install speakers	JBL Professional CSS8018, CSS-1S/T, Control 1 Pro	8 in ceiling speakers; compact two-way, 70 V, 100 V or 8 ohm
MICROPHONES		
Digital wireless handhelds	Shure QLX-D, ULX-D, SLX-D	SM58 heads; digital UHF; single and dual-channel receivers

Item	Brand	Key spec
Complete wireless mic kits	Shure QLX-D, ULX-D	Receiver, SM58 handheld, bodypack, lavalier and headset in one case, one mic live per receiver; dual-receiver kits too
Wireless lavaliers and headsets	Shure QLX-D and ULX-D bodypacks; Shure TwinPlex TH53	Lavalier, dual-ear and omni headset mics
Wired mics	Shure SM7B, MX412D/C	Broadcast mic with boom arms; 12 in gooseneck podium mic
Antennas and RF	Shure UA874, UA844+SWB; RF Venue Distro4	Active directional antennas; antenna and power distribution
PLAYBACK AND DI		
DI boxes	Radial Engineering ProAV1, ProAV2, USB-Pro, BT-Pro v2	Mono, stereo, USB and Bluetooth into XLR
Interfaces and processing	Focusrite Scarlett 4i4; dbx AFS2; ART HeadAmp 6	USB audio, 4 in and 4 out; 2-channel feedback suppressor; 6-way headphone amp
Headphones	Audio-Technica ATH-M50x, ATH-M20xBT; Shure SRH840A; Sony RF400	Closed-back studio headphones; Bluetooth and RF wireless sets
CREW COMMS		
Wireless crew intercom	Hollyland Solidcom M1	DECT, full duplex; kits of 8 beltpacks with single-ear headsets
Wireless crew intercom	ikan Livecom 1000	DECT, full duplex; a base station with 4 beltpacks and headsets
Two-way radios	Midland and TLL in-house	Walkie-talkies with earpieces

10. Video switching and processing

LED processors and senders, live switchers, converters, recorders and playback. "TLL in-house" is our own stock, listed without a maker name.

Item	Brand	Key spec
LED PROCESSING AND CONTROL		
Wide-wall LED processor	Magnimage LED-W4000	One canvas up to 8192 px wide from 4 outputs; genlock
LED processor, 4 outputs	Magnimage LED-780H	Up to 8 inputs; 4 outputs into one wall, up to 8 million pixels
LED scalers	TLL in-house	Up to 3840 × 1920 on the main scalers; picture in picture
All-in-one LED controllers	NovaStar VX4S, VX6s, VX600	Scaler and sender in one box; 4 or 6 Gigabit outputs
LED sending controllers	NovaStar MCTRL4K, MCTRL600, MCTRL660, MCTRL300	2 to 16 Gigabit outputs; the MCTRL4K takes 4K60 and runs up to 7680 px wide
Fiber converter	NovaStar CVT4K-S	Carries a 4K controller's 16 outputs over 10G fiber for long runs
LIVE EVENT SWITCHING AND MONITORING		
4K event switchers	Magnimage MIG-EC90, MIG-EC80	8 inputs at 4K60, up to 12 with expansion cards; canvas up to 8704 × 2176 (EC90) or 4352 × 2176 (EC80); genlock
Live production switcher	Blackmagic Design ATEM SDI Extreme ISO	8 SDI inputs at 1080p60; records every input; streams
Compact live switchers	Blackmagic Design ATEM Mini Pro, Mini Pro ISO	4 HDMI inputs at 1080p60; streams over Ethernet; records to USB-C
HDMI video mixer	TLL in-house	4 HDMI inputs with a built-in touchscreen; USB streaming out
Multiviewers	Blackmagic Design MultiView 16, MultiView 4	16 or 4 SDI sources on one monitor

Item	Brand	Key spec
CONVERSION AND DISTRIBUTION		
SDI and HDMI converters	Blackmagic Design Micro Converter BiDirectional 12G, Mini Converter UpDownCross HD; Decimator MD-HX	HDMI to SDI and back up to 2160p60; up, down and cross conversion; scaling
Audio embedder	Blackmagic Design Teranex Mini Audio to SDI 12G	Adds 2 analog or 4 AES audio channels to the SDI feed
HDMI switchers and splitters	TLL in-house	8K and 4K60 switchers with 2 to 5 inputs, a 3 × 2 matrix, splitters to 2, 4, 8 or 16 screens
HDMI extenders	TLL in-house	Over Cat cable to 100 or 200 ft; 1080p to 400 ft
CAPTURE, STREAMING AND RECORDING		
USB capture	AVerMedia and TLL in-house	HDMI or SDI at 1080p60; HDMI 2.1 at 4K60
Streaming encoder	Blackmagic Design Web Presenter 4K	12G-SDI in; streams up to 2160p60
Recorders	Blackmagic Design HyperDeck Studio 4K Pro, Video Assist 7 in 12G HDR	Records up to 2160p60 to SD cards or a USB-C drive; 7 in monitor-recorder
PLAYBACK		
Media servers	TLL in-house	High-resolution playback, up to eight 4K outputs, high-end CPUs
Signage players	BrightSign XC4055, XC2055, XT1145, XD1035, LS445	8K players with 2 or 4 outputs; 4K and compact single-output players
Streaming and loop players	Apple TV 4K, NVIDIA Shield, TLL in-house	4K output
CAMERAS		
PTZ cameras	TLL in-house	SDI pan, tilt and zoom cameras with a joystick controller
Action cams and webcams	GoPro; TLL in-house webcams	Action cameras; 4K USB webcams

The figures above are per unit. Higher resolutions and bigger canvases are possible with custom processing setups, so ask us about large walls.

11. Live events

Yes. Product launches, expo main stages, conference general sessions, galas and press events. We bring the LED, lighting and audio, and the techs who run the show live.

Event	Type, city and year	What we built
Hyundai Santa Fe World Premiere	Product launch · Santa Fe, NM · 2023	A site survey, three LED walls, lighting, audio and live show control for an outdoor vehicle reveal, built and struck by our crew.
Taiwan Expo USA main stage	Expo main stage · Dallas, TX · 2025	Main stage and entrance LED walls, stage lighting, audio, and a crew that ran the show all three days. Our second Taiwan Expo, after Washington, DC in 2022.
Dominican Republic Tourism Showcase	Press event and party · Miami, FL · 2025	A stage wall, five towers and a round bar in LED, playing one underwater scene, plus audio and video switching for the press program and the DJ set.
Corporate general session and gala	Corporate conference · San Diego, CA · 2022	A P3.9 LED stage wall with our techs on site, for the general session and the gala dinner the next night.
Regional conference and gala	Corporate conference · Las Vegas, NV · 2026	A P2.6 LED wall on ground support, a 52 ft stage, line-array audio, lighting, confidence monitors and show control, crewed from install through rehearsal, show days and strike.

Event	Type, city and year	What we built
Product launch evening	Product launch · Las Vegas, NV · 2023	An LED wall, audio, lighting, staging and live production. Our crew installed it, ran the three-hour show live and struck it overnight.

More on live events: www.tllrentals.com/live-events

12. Recent projects

Project	Show	What we built
LexJet at Printing United	Printing United · Orlando, FL · 2025	Two LED rings rigged back to back, four flown walls, a floating LED sphere and an LED counter, all on one synchronized 360° canvas.
Whirlpool at KBIS	KBIS · Orlando, FL · 2026	Five LED systems for four brands in one booth, from a P1.5 walk-through tunnel to curved P1.9 walls, plus audio, network and crew.
TCL at CES	CES · Las Vegas, NV · 2026	Five hanging P2.6 LED walls over the entrance, about 121 ft end to end and playing as one picture, plus a live-production stage.
Taiwan Expo USA	Taiwan Expo USA · Dallas, TX · 2025	A main-stage LED wall, stage lighting and a crew that ran the show for all three days.

Full case studies: www.tllrentals.com/projects

13. Contact

Call	1 (844) 283-1510
Email	events@tllrentals.com
Web	www.tllrentals.com
Where we work	Anywhere in the US
Full capabilities page	www.tllrentals.com/capabilities/
Quotes	Send us the show, the dates and what you have in mind. We spec it and send your customized quote. Pre-staging available on request.