LEX — Operator Manual

Version 1.0.0 · October 2026 · Lumengrid (lumengrid.shop) · Vision Mix LLC

LEX is a cue-sheet show editor: build a show as scenes on a playlist, lay cues on tracks, then run it live from one screen while phones and laptops on your network watch the same live view.

Contents

1. What LEX does
2. Installing (Ubuntu)
3. First launch: the sample show
4. Free and licensed features
5. Entering a license key
6. Quick start: editing with the sample clips
7. The Conductor remote view (phones, tablets, laptops)
8. Menu reference
9. Keyboard shortcuts
10. Settings and where they are saved
11. Troubleshooting
12. Glossary

---

1. What LEX does

LEX organises a live show the way a director thinks about it:

- **Scenes on a playlist** — songs, segments, acts. Each scene has its own tracks.
- **Tracks hold cues** — switcher shots, camera notes, lyrics, triggers (OSC/Art-Net/MIDI), comments, plus audio and video clips.
- **One timeline per scene** — a waterfall of upcoming cues with countdowns; drag cues, stretch them, zoom in and out.
- **Live mode** — a big-clock live view for running the show.
- **Conductor** — everything the editor sees is mirrored on your local network. Viewers open a web page; nothing to install. Phones get a portrait view with a per-camera shot panel.
- **OSC control** — `:7014` UDP accepts `/transport/play`, `/transport/pause`, `/transport/stop`, `/transport/seek` and live commands from control surfaces.
- **Print** — shot lists, lyrics sheets and cue sheets as PDF.

LEX is free to use forever. A paid subscription key — **$19/month or $149/year** on lumengrid.shop — unlocks four features (§4). There is no trial countdown.

Platform.

Platform	Current download on lumengrid.shop
Linux x86_64, Ubuntu 24.04 or newer	`lex_1.0.0_amd64.deb` or `LEX-1.0.0-x86_64.AppImage`

Not supported: Windows (planned), editing from the remote view (view-only by design).

---

2. Installing

Download from **lumengrid.shop** (LEX page). Your viewers' devices must be on the **same local network** as this computer (same wired network or WiFi; not a guest WiFi, not mobile data).

Ubuntu .deb (24.04 or newer)

```
sudo apt install ./lex_1.0.0_amd64.deb
```

This installs LEX to `/usr/share/lex`, adds a desktop entry (**Activities → LEX**) and pulls in `ffmpeg` (used to read media files and draw waveforms).

Check the version from a terminal:

```
lex --version
```

AppImage (Ubuntu 24.04 or newer)

Make the file executable, then run it:

```
chmod +x LEX-1.0.0-x86_64.AppImage
./LEX-1.0.0-x86_64.AppImage
```

The AppImage uses the system `ffmpeg` for media import and waveforms. Ubuntu ships it; if you removed it: `sudo apt install ffmpeg`.

`--version` works the same way:

```
./LEX-1.0.0-x86_64.AppImage --version
```

Removing. `sudo apt remove lex` (deb) or delete the AppImage file. Your show data lives in your home folder (§10) and is never touched by uninstalling.

---

3. First launch: the sample show

The first time LEX starts it installs a small **Sample Show** so you land on a populated timeline instead of an empty screen:

- one playlist (**Main**) with three scenes — *Opening*, *Feature Segment*, *Closing*;
- switcher, camera, lyrics, trigger and comment cues, like a real show;
- a media pool with six bundled items: colour bars, a countdown, a test pattern, two stills and a tone. All of it is generated test material — nothing copyrighted.

To get the sample back at any time: **LEX → Open Sample Show…**. You are asked first, because it replaces the current show.

The sample stays inside the free limits, so it works without a licence.

---

4. Free and licensed features

LEX is **free forever** — not a trial, and nothing stops working after 30 days. Four things need a licence key:

Feature	Free	Licensed
Editor, timeline, cues, media, print	✔	✔
Timecode output (MTC)	✔	✔
Conductor editor sync	✔	✔
Web browser view (§7 — the page phones open)	—	✔
External timecode input (MTC input, LTC chase)	—	✔
Scenes	up to 5	unlimited
Playlists	1	unlimited

Rules the limits follow:

- Limits are checked only when you **create, open or enable** something. A running show is never interrupted: clearing a key does not stop a viewer that is already open or an LTC chase that is already on.
- Without a licence you can open the first playlist only.
- Prices and plans are on lumengrid.shop; the app never shows prices and never goes online for licensing.

---

5. Entering a licence key

1. Subscribe on lumengrid.shop: **$19/month** or **$149/year**, paid with Stripe. You receive a license key by email; keys start with `LEX1.`.
2. In LEX: **Help → License…**, paste the key, click **Activate**.
3. The dialog shows the plan and the valid-until date. If the web browser view was blocked, it starts immediately after activation — no restart.

- Keys are verified **offline** against a public key bundled with the app; the app does not phone home, and there is no shop account or login.
- The key is stored only on this computer (§10) with user-only permissions.
- **Clear key** removes it. Everything you built stays; only the four licensed features close again.
- A bad, expired or mistyped key is simply refused — the app stays usable as free.

---

6. Quick start: editing with the sample clips

Start from the Sample Show (§3) and try the loop an operator uses daily:

1. **Pick a scene** — the scene selector in the top bar, or the sidebar's playlist and scene panes. Scene duration follows its cues.
2. **Play through it** — click ▶ in the transport bar (or press `Space`). The red playhead runs; cue countdowns tick; the program monitor shows the media cue under the playhead.
3. **Inspect a cue** — click any cue block on the timeline. The inspector (right) shows its details; double-click opens it for editing.

4. **Move things** — drag a cue along its lane; drag its right edge to change the duration; cues never slide past their neighbours.
5. **Add a switcher shot** — press `1`–`9` to cut a shot on that camera at the playhead. Rename or annotate it in the inspector.
6. **Add media** — the media pool (sidebar) lists the sample clips. **Import** adds your own audio/video/stills; drag a pool item onto an empty timeline lane to place it. Each clip gets its own lane and a waveform.
7. **Add a scene** — **+ Scene** in the sidebar. Scenes up to 5 are free; a sixth asks for a licence.
8. **Print** — `Ctrl+P` opens the print dialog: shot list, lyric sheet or cue sheet, as PDF or paper.

Everything saves as you edit — there is no save button. Backups of the show file are kept automatically (§10).

---

7. The Conductor remote view (phones, tablets, laptops)

Anything on your network can watch the live view in a web browser — nothing to install. This is the **web browser view** feature: it needs a licence (§4).

Open it

1. Find this computer's LAN address. With a licence active, click **Share QR** in LEX — it shows a QR code of the exact URL. (Or run `ip a` and look for `192.168.x.x`.)
2. On the viewer device, open `http://<lan-ip>:8112/viewer` — for example `http://192.168.1.131:8112/viewer`.
3. The page connects and shows the live waterfall immediately — the same scene, track and playhead as the editor.

Phones (portrait)

On a phone in portrait you get the compact live view plus a **camera focus panel**:

- Tap **Camera: Off** at the top and choose a camera.
- The panel expands to half the screen: every upcoming shot on that camera with **on air** / **in** countdowns, and what's next.
- The track buttons (SW, LYRICS, NOTES) at the bottom switch which track the waterfall shows. Works in Safari and Chrome on iOS and Android.

Good to know

- The editor and the viewers must be on the same network. Guest WiFi with "client isolation" blocks it.
- The viewer follows the track **selected in the editor**; each viewer can pick its own with the track buttons.
- Viewers are read-only by design — nobody can change the show from a phone.
- If the page says *Connecting to LEX…* forever: the licence is missing (the page will not even load), the devices are on different networks, or a firewall blocks ports 8111/8112 (§11).
- Without a licence the address refuses to connect — that is the gate, not a fault.

---

8. Menu reference

Menu	Item	What it does
LEX	Open Sample Show…	Replace the current show with the bundled sample (asks first)
LEX	Preferences… `Ctrl+,`	Timecode setup: MTC input device, MTC output (input needs a licence)
LEX	Quit	Quit LEX
Edit	—	Standard cut/copy/paste for text fields
View	—	Reload / Dev Tools (debugging)
Help	License…	Licence status, paste a key, clear it (§5)

Context menus (right-click): timeline lanes, track heads, cues and the ruler each have their own — including **New Timecode Chase Point** on the ruler.

---

9. Keyboard shortcuts

Key	Action
`Space`	Play / pause
`1`–`9`	Insert a switcher shot on that camera at the playhead
`/`	Collapse / expand the timeline lanes
`Delete`	Delete the selected cue
`Ctrl` `+` / `−` / `0`	Zoom the timeline in / out / reset (also `Ctrl` +wheel)
`Ctrl+P`	Print / Create PDF
`Ctrl+,`	Preferences

---

10. Settings and where they are saved

Everything lives under `~/.config/LEX/`:

File / folder	Contents
`project.json`	Your show (project, playlists, scenes, cues). Saved on every change
`license.json`	Your licence key, user-only permissions (`0600`)
`media-library.json`	The media pool index
`Sample Media/`	Copies of the bundled sample clips
`Waveforms Cache/`	Drawn waveforms for media cues

Backups of `project.json` are written automatically (retention: hourly for a day, then thinner). Removing and reinstalling LEX never deletes this folder.

The Conductor (editor sync) listens on TCP **8111**; the remote-view web page on TCP **8112**; OSC on UDP **7014**. All bind to all interfaces so LAN devices can reach them.

---

11. Troubleshooting

The remote view will not load. `http://<lan-ip>:8112/viewer` refuses to connect → no licence (§5), or LEX is not running. Loads but stays on *Connecting…* → the viewer device cannot reach port 8111; check the firewall:

```
sudo ufw allow 8111/tcp 8112/tcp
```

Media import does nothing / no waveforms. `ffmpeg` is missing (AppImage on a stripped system). `sudo apt install ffmpeg`.

"No ffprobe" at first launch. The sample show needs ffmpeg to index media; without it you still get the show with the sample cues, just no media pool entries. Install ffmpeg and use **LEX → Open Sample Show…** to seed again.

Timecode input is greyed out. External timecode input (MTC in, LTC chase) is a licensed feature (§4). Timecode **output** is free.

A sixth scene / second playlist is refused. Free limits (§4). The show itself is never blocked — only the addition is.

The app feels stuck after the computer slept. Restart LEX. The show file was saved on every change; nothing is lost.

Reporting a problem. Note what you did, attach `~/.config/LEX/` (minus `license.json`) and the version from `lex --version`.

---

12. Glossary

Scene — one song/segment: a set of tracks on one timeline. **Playlist** — the running order of scenes. **Track / lane** — a row of cues of one type (switcher, camera, lyrics, trigger, comment, audio, video). **Cue** — something that happens at a time: a shot, a lyric line, an OSC trigger. **Waterfall** — the live timeline view: upcoming cues stacked as rows with countdowns. **Conductor** — the local-network sync between LEX and its viewers. **LTC chase** — locking the transport to incoming LTC timecode (licensed). **MTC** — MIDI timecode, in (licensed) or out (free). **LEX1** — the licence key format (`LEX1.…`), verified offline.