



AV Central

PLATFORM

Lighting Guide

The Lighting module (MOD-LX) — placing fixtures, patching DMX, positions, trusses and the lighting PDF.

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AV Central

Using the Lighting module (MOD-LX): placing fixtures, patching DMX, positions, and the lighting PDF. Everything here works the same on macOS and Windows — it is all in the browser.

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MOD-LX****APPLIES TO****macOS ·
Windows****WHAT'S INSIDE**

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1 The three views

The buttons above the canvas switch between them, and so do the keyboard shortcuts.

- Plan — the top-down stage plot. Georeferenced, so an imported DXF room and an imported MVR rig line up with each other instead of floating in unrelated spaces.
- Elevation — a front view by trim height, with a load profile drawn along each truss.
- Patch — the DMX patch sheet, plus console channels, universe utilization, power by circuit against each circuit's own rating, and fixture counts by position.

2 Placing fixtures

Pick a fixture in the library on the left, then click the plan. Hold Shift while clicking to keep placing the same type.

Search the library by name, mode, or manufacturer, and filter it by manufacturer, using the controls at the top of the panel.

3 Moving around

- Scroll to zoom at the pointer.
- Drag empty canvas to pan.
- F zooms to fit. Plus and minus zoom in and out.

On a tablet, one finger drags and two fingers pinch to zoom. Press and hold on empty canvas starts a selection box, which is how you multi-select without a Shift key; press and hold on a fixture opens duplicate, mirror, quick-patch and delete.

4 Selecting more than one

- Shift and drag on empty canvas draws a marquee and selects everything inside it.
- Shift and click adds or removes a single fixture from the selection.
- Command-A on macOS, or Ctrl-A on Windows, selects everything on the floor.
- Dragging any selected object moves the whole selection together, as one undo step.
- Arrow keys nudge the selection two inches. Hold Shift for one foot.

5 Patching DMX

- The lightning-bolt button auto-assigns addresses to every fixture, in name order, rolling over to the next universe at 512 channels.
- Select several fixtures and use Quick-patch to address just those, in left-to-right placement order, continuing after whatever is already patched so nothing existing is disturbed.
- Overlapping addresses are flagged in red on the plan and in the patch sheet as you work.
- Duplicating a fixture deliberately leaves the copy unpatched, so a duplicate can never silently collide with the original.

6 Console channel numbers

A DMX address says where a fixture listens. A console channel is the number an operator types. They are different things, and until now AV Central only tracked the first.

The patch sheet now has a Channel column beside Universe and Address, and the same number appears in a fixture's properties. It is optional — a fixture with no channel is not broken, it just cannot be patched by a channel-centric console.

Auto-number console channels numbers the rig in placement order. You choose the starting number and the increment, so numbering by tens or hundreds to leave room for later additions works the way an LD expects.

If any fixture already holds a channel inside the range about to be handed out, AV Central stops and asks: skip the numbers already taken, or renumber everything from the start. It will not silently overwrite a number somebody set on purpose, and it will not produce two fixtures on one channel. Duplicates that already exist are flagged in red, the same way overlapping addresses are.

7 Mirroring a symmetric rig

Select the fixtures you want mirrored and use the mirror tool. Enter the centreline in feet and inches. Copies appear mirrored about that line, and you can have their addresses assigned in the same action. Without that, they arrive unpatched.

8 Beam angles

Each fixture has a beam angle field, pre-filled from GDTF data when an MVR import carried it, and always editable. With a beam angle and a trim height set, the plan draws the beam footprint on the floor.

This is a straight-down cone based on trim height and angle. Focus and tilt are not modelled, because there is no focus data behind it.

9 Gels

Assign a gel from the built-in Rosco, Lee and Apollo reference list. The fixture's colour on the plan and elevation follows the gel, and the gel appears on the lighting PDF.

The swatches are visual approximations for identifying a filter at a glance. They are not spectral data, and should not be used for colour matching.

10 Positions and trusses

Place a truss or pipe with the truss tool, then set its length, angle and trim height.

A fixture is counted against the nearest truss within one foot six inches of that truss's span. This is derived from geometry, not a stored link — move either one and the grouping re-derives on its own. The elevation view draws cumulative hanging weight along each truss so you can see where the load actually sits.

11 Trim heights

Trim is shown and entered in feet and inches. It is stored internally in metres so that DXF and MVR import maths stay correct. Any of these are accepted:

20' 6" 20'6 20ft 6in 20.5' 20.5 246"

12 Importing

- DXF brings in room outline and plot linework as a plan template. DWG is rejected on purpose — export to DXF, ASCII.
- MVR brings in a rig with fixture positions and patch intact. The reader is pragmatic: no geometry, focus points, or nested group transforms, so review imported fixtures before trusting them.
- GDTF brings in a single fixture type and adds it to the library — its name, manufacturer, DMX modes and channel counts, and its beam angle when the file carries one. This is one fixture definition, not a rig; use MVR for a whole plot.

GDTF files vary a lot between manufacturers. If AV Central cannot read a file's DMX modes it refuses the import and says so, rather than adding a fixture with no modes that would quietly patch as one channel. If it reads some modes and not others, it imports the good ones and tells you how many it skipped.

13 Exporting a patch to an ETC Eos console

The Eos patch button on the patch sheet produces a tab-delimited text file with Channel, Address, Type, Fixture Type, Position, Purpose, Gel, Wattage and Mode.

Import it into Eos as a tab-delimited text file and map the columns when prompted. Do not import it as CSV. Eos's CSV import is designed to round-trip Eos's own exports, and it replaces the active show data — cues, palettes and submasters included. That is why AV Central does not offer a CSV version of this export at all.

Before importing, set Eos's DMX format preference to numeric, so addresses read 2/23 rather than B/23. If that preference is wrong, every address is silently mangled on the way in.

Fixtures with no console channel are still exported, with the channel cell blank — never dropped, and never given a number they did not have. AV Central tells you how many after the download, along with any duplicate channel numbers it found.

This exporter has not been tested against a real Eos console. It is built from ETC's published import documentation and a reputable secondary source, not from a verified round trip. Check the first import on a scratch show file, not on a Sunday.

grandMA export is not built. The format is XML, but the schema is not documented publicly in enough detail to write blind, and a guess produces a file the console rejects or half-imports.

14 The lighting PDF

The Lighting PDF button in the properties panel exports a lighting-only document: the full DMX patch, positions with focus notes, truss loading, power by circuit, and universe utilization. It covers the current floor and does not require the full project export.

The sheet is honest about what it does not know. A fixture with no recorded DMX footprint shows its range as "start-?" rather than guessing a width, and the conflict count tells you how many fixtures could not be checked instead of printing a

bare "no conflicts." A fixture with no recorded power draw is still listed and counted — it appears with its power marked unknown rather than being dropped from the sheet.

15 Power by circuit

Each circuit is judged against its own rating, not a one-size figure — a wall on 30 A circuits is measured against 30 A. Where the app had to assume a rating because none was recorded, the number is marked "assumed" so you know which figures to trust and which to verify at the panel. Truss loading counts recorded fixture weight only; motors, cable, drape and anything else on the pipe are not in the figure, and video wall weight — although the app records it — is not yet included in truss loading either, so treat that figure as a lighting-only floor, not a total.

Every text colour on the printed sheets meets the print readability floor, so a photocopied or dim-light copy still reads.