

EDID Editor user guide

EDID Editor is a browser EDID editor for event video. Build an EDID from a resolution and a refresh rate, or edit every field by hand, then see which processors will actually take it, and in which mode.

Nothing's uploaded. There's no backend to upload it to.

WHAT THE DISPLAY SHOULD SAY IT IS

EDID name - 13 characters, shown in every input menu

UHD-2160p60

Preset

8192x1080 @60

Width - active px

8192

Height - active lines

1080

Refresh - Hz

60

☐ Interlaced

☐ Fractional (+1.001)

Timing standard

Auto - CTA VIC, then DMT, then CVT-RB v2

Calculate

SIGNAL

Colour format

RGB 4:4:4

Bit depth - per component

8-bit

☐ DSC (Display Stream Compression)

☐ Variable refresh (VRR / VFR)

WHAT WAS BUILT

No standard timing matched; used CVT reduced blanking v2 as the cheapest legal raster.

This mode cannot be a detailed timing descriptor: 8192 active pixels exceeds the descriptor's 12-bit field (4096 max). It is carried in a DisplayID Type VII block instead, whose fields are wide enough, and descriptor 1 is left empty.

SIGNAL COST AND REQUIRED INTERFACE

PIXEL CLOCK

551.41 MHz

RASTER

8272 x 1111

LINE RATE

66.66 kHz

REFRESH

60.000 Hz

BITS PER PIXEL

24

PAYLOAD

13.23 Gbps

Minimum interface version

HDMI

HDMI 2.0

DISPLAYPORT (4 LANE)

HBR2 (5.4G) - DP 1.2

DISPLAYPORT (2 LANE)

UHBR10 - DP 2.0

DVI

beyond dual link

TMDs character rate 551.41 MHz - 92% of that version's ceiling.

Above 340 MHz the link must be scrambled and the sink must expose SCDD - an HDMI 1.4 cable will not do it.

DisplayPort figures are the raw link budget after line coding. Real capacity is a little lower because the stream is packed into transfer units with per-line overhead, so treat anything above 96% as marginal rather than a pass. HDMI TMDS is a clock ceiling and is exact.

HARDWARE SUPPORT

All vendors

Analog Way

Barco

PixelHue

Brompton

NovaStar

disguise

Green Hippo

13 YES · 2 CONDITIONAL · 5 NO

Every row is paperwork - vendor manuals and spec sheets, cited per claim. Nothing here has been tried against the hardware. "Conditional" means it fits only in a mode you have to go and configure, and the column says which.

DEVICE	TAKES IT	REQUIRED MODE	WHAT TO WATCH
Accender 16 / 32 / 48 Analog Way - LiveCore	No	needs 551.4 MHz of TMDS character rate, ceiling is 165.0 MHz	Notes & sources · documented
NoItage 9 / 16 Analog Way - LiveCore	No	needs 551.4 MHz of TMDS character rate, ceiling is 165.0 MHz	Notes & sources · documented
SmartMatrix Ultra Analog Way - LiveCore	No	needs 551.4 MHz of TMDS character rate, ceiling is 165.0 MHz	Notes & sources · documented
Aquilion RS / C (HDMI 2.0 input card) Analog Way - LivePremier	Yes	4x HDMI 2.0 via HDMI 2.0	Notes & sources · documented
Aquilion RS / C (DisplayPort input card) Analog Way - LivePremier	Yes	4x DisplayPort 1.2 via DisplayPort 1.2	Notes & sources · documented
Elkos 4K / QuickMatrix 4K / QuickVu 4K / Pulse 4K Analog Way - Midra 4K	Yes	Standard via HDMI 2.0	Notes & sources · documented
Pulse2 / Elkos2 / Saphyr / SmartMatrix2 / QuickMatrix / QuickVu Analog Way - Midra (previous generation)	No	needs 551.4 MHz of TMDS character rate, ceiling is 165.0 MHz	Notes & sources · documented
Zenith 100 / Zenith 200 (Alta 4K series) Analog Way - Alta 4K	Yes	Standard via HDMI 2.0	Notes & sources · documented

EDID BYTES - 256 BYTES, 2 BLOCKS

Offset dump

Flat hex

C array

Copy

Save text

Download .bin

Open an EDID... bin or a hex dump copied from a purchase - vendor-edid-decode - vrf - a PC header

Before you rely on this: the timing engine is checked against published VESA DMT values, and the DisplayID layout against the Linux kernel's own parser.

The hardware table is vendor paperwork, cited per claim, and has not been tried against any hardware. No hardware has ever been fed an EDID this tool produced. Treat a verdict as a shortlist.

Mosaic mode's macOS widths are the widest other people have reported, not limits anyone has found. **Nobody has shown a Mac bonding a plug wider than 6144**, though the editor will build one.

Built with AI assistance, directed and reviewed by a human author.

Three modes

Simple. Type a resolution and a refresh rate, name it, press Calculate. You get a complete, valid EDID 1.4: the mode as a detailed timing, a range-limits descriptor **sized to it**, the name where every input menu will read it, and a CTA-861 extension carrying the VIC when the mode has one.

Advanced. Every field. Identity, video input definition, chromaticity, established and standard timings, all four descriptors, the CTA-861 extension (video and audio descriptors, HDMI and HDMI Forum vendor blocks, HDR static metadata, colorimetry, 4:2:0 maps) and a DisplayID 2.0 extension.

Mosaic. For frame-synced output from a Mac across several plugs. Give the whole canvas, the grid (**2 × 1** or **2 × 2**) and the rate. You get **one EDID per plug**: load `left.bin` on the input the Mac's left-hand output feeds and `right.bin` on the other (for 2 × 2, `tile_r1_c1.bin` is the top left). Each carries a DisplayID Tiled Display Topology block. A Mac that finds matching blocks on its outputs joins them into **one display**, drives them together, and the seams don't tear. If the Mac lists the plugs as separate displays, they haven't bonded and aren't in sync.

- Up to **6144 wide** at 50 or 60 Hz bonds on any recent macOS. Before macOS 27, **7680** has been reported at **30 Hz** on M2 to M4 Max (which chips manage it is inferred from who reported it).
- On **macOS 27** the reference files bonded two 6144 plugs, **12288** wide. That was the Barco E3's ceiling in the test, not macOS's, so nobody knows yet how far 27 goes.
- **6144** is the widest plug anyone has shown bonding. The editor builds wider ones with a warning, so you can try a 2 × 8192, but don't promise it to anyone until you have. Three or four across never bonds on a Mac.
- The editor warns when a plug's pixel clock goes past **600 MHz**, the most the copied range-limits descriptor allows (12288 × 2160 at 60 needs 840 MHz a plug), and when its line rate goes past **255 kHz**, the same descriptor's other ceiling (3840 × 4320 plugs at 60 Hz). Whether a Mac minds either is untested.
- A second mosaic on the same Mac needs a different **mosaic number**, because the Mac groups plugs by it.

The layout copies, byte for byte, reference files that have bonded on macOS 26 and 27. The editor hasn't loaded its own files into a Mac. The one exception is a plug taller than 4095 lines: the reference's fallback mode in the base block wraps there, so the editor halves its height instead.

All three modes name the EDID, and all three show the same two answers on the right.

The two answers

What the mode costs, and the smallest interface that carries it. Pixel clock, raster, line rate and payload, then the minimum HDMI version (1.0–1.2, 1.3/1.4, 2.0, or which FRL rate), the minimum DisplayPort rate at 4 and 2 lanes, and whether DVI needs one link or two.

Which hardware takes it. Twenty-three models across the major event-video vendors, each answering **yes / conditional / no**, and **where the answer is conditional, the capacity mode you have to configure to get it:**

- A **LiveCore dual-link input costs you the neighbouring input.**
- A **Barco E2 Gen 1** does 4K60 only across two cables.
- A **Barco E2 Gen 2 quad card** is four WQXGA inputs **or** two UHD60 ones.
- An **Aquilon DisplayPort card** is four DP 1.2 ports **or** two DP 1.4 ports, and **DP 1.4 preempts ports 2 and 4.**

Every device carries its sources, quoted, with the date they were read. That's what to check before a purchase decision rests on a row.

DSC and variable refresh

Both are toggles, and **both are real:** they change the bandwidth arithmetic, they change which interface version is required, and they're written into the EDID.

Turning DSC on correctly makes every HDMI 2.0 and earlier input say no, because DSC travels only over a fixed-rate link. That's just how DSC works.

Import

Open a `.bin`, or paste a hex dump from anywhere: `xrandr`, `edid-decode`, `xxd`, a C header, a bare hex string.

A bad checksum is reported, not refused. The dump off a misbehaving device is the one you most need to look at, and a tool that won't open it is no use at the one moment it matters.

If something is unexpected

Symptom	Cause
Every HDMI input says no after I enabled DSC	Correct. DSC needs a fixed-rate link.
A device says "conditional"	It takes the mode only in a particular capacity mode — the answer names which. Or, on the Aquilon cards, the mode fits the port's clock but isn't one of the formats Analog Way names, so it may not be accepted.
An imported EDID has a checksum error	Reported deliberately rather than refused. Look at it.
A verdict disagrees with a manufacturer	Every row carries its source and the date it was read. Check it — the table is paperwork, not measurement.
The processor rejected an EDID this built	Possible, and untested — no hardware has ever been fed one of these.

Not affiliated with Analog Way, Barco, PixelHue, Brompton, NovaStar, disguise or Green Hippo. Product names appear only to state compatibility.

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