SPLICE MANAGER · BETA V0.1.0 · AUGUST 2026

The Splice Manager *Layout View*

A complete guide to every button and option on the live splice canvas — where cables, cassettes, modules and splitters live in one workspace, and you splice by dragging fibers instead of editing spreadsheets.

Drag-to-splice | Live fiber tracing | Color-coded fibers | Bulk splice

---

One source of truth from route → fiber → splice → diagram.
Part of FiberQ Designer · **fiberq.net**

For years, splice work has lived in spreadsheets, hand sketches and printed PDFs. The Layout View brings it onto a single live canvas where every fiber, cassette and module is visible at once. Cables sit on the left sized to their tube and fiber count; cassettes, modules, patch panels and splitters sit in the centre and right; you drag fibers between them to splice. This guide explains every control on that canvas, grouped by where it lives.

1. The element header bar

Selecting a splice point (ODF, closure, OTB…) loads it onto the canvas. The header shows the element's identity and live tally — e.g. `ODF 1 · 1 cable · 0 connections · 24 free / 24 fibers` — followed by the view switches and the primary action.

VIEW SWITCHES

- **Show on Map** — jump to this element's geographic location on the Map tab.
- **Layout** — the visual splice canvas (this view).
- **Table** — the same splices as a sortable, filterable list.
- **Terminations** — how fibers terminate/park on this element.
- **Modules** — the "Module X-Ray" view: every cassette, ODF module, splitter and patch panel with live port occupancy and end-to-end tracing.
- **Connectors** — connectorised links on the element.
- **Devices** — active and passive devices.

PRIMARY ACTION (CONTEXT-DEPENDENT)

- **+ Splice** — on closures, OTBs and junctions: open the Bulk Splice dialog to create fiber-to-fiber splices (see section 7).
- **+ Park / Terminate** — on an ODF: terminate or park fibers onto the ODF's modules and ports.

2. Left panel — Splice Points

- **Splice Points counter** (e.g. `8/8`) and a **Filter by name, ID, or type** box to find any element fast in a large project.
- **Grouped list** — **Backbone** (ODF) and **Distribution / Splice Points** (closures, OTBs), each row showing quick counts (cables, connections, free fibers).
- **Status badges** — every element reads **Valid** or **Warning** at a glance, so problem points surface before you open them.
- **Project default** — the active fiber color standard (e.g. **TIA-598-C**) with its 12-color swatch sequence used throughout the canvas.

VALIDATION

- **Run Check** — validate the whole project on demand; **Clear** removes the results. A summary line shows e.g. *"No errors found · 2 warnings"* with a "last checked" timestamp.

- **All / Warnings tabs** list each issue with a code and plain-language detail — for example `UNCONNECTED_ELEMENT` ("Closure 4 has no fiber connections") or `UNPARKED_FIBER_AT_CASSETTE_HOST` ("Closure 1 L: 2 fibres not assigned").

3. The Splice Canvas toolbar

- **Canvas summary** — a live count of what's on the canvas: `cables · connections · equipment`.
- **+ Equipment (dropdown)** — add internal equipment in one click (see section 4).
- **EQ zoom — 80% / 100% / 125% / 150%** — scale the canvas: zoom out for wide multi-cassette layouts, in for dense 48-fiber closures.
- **History — Undo / Redo** — every action on the canvas is reversible, with a redo counter.

4. + Equipment menu

Adds an internal element to the selected splice point. Two categories:

MODULES

- **+ Module** — a generic ODF/equipment module with ports.
- **+ Patch Panel** — a patch panel for port-to-port patching.
- **+ Splitter (1:8)** — an optical splitter (PLC); split ratio configurable.
- **+ Cassette / Tray** — a splice-tray cassette, the default home for fiber-to-fiber splices.

DEVICES

- **+ Active Device** — powered equipment (e.g. an OLT/ONT class device).
- **+ Passive Device** — unpowered equipment.

5. Working on the canvas

CABLE CARDS (LEFT)

- Each cable is sized to its **tube × fiber** count and labelled by **direction** — **IN**, **OUT**, **WEST**, **EAST** — so a passthrough reads as one physical cable with two ends (a **PASS** marker links the halves) instead of two disconnected entries.
- The card header shows the route it carries, e.g. `[ODF 1] → Closure 1 L · Backbone · 2×12 · 59 m`.
- Tubes are listed by color (**T1 · Blue**, **T2 · Orange** …), each expandable to its individual fibers (F1–F12) shown in true catalog colors.

EQUIPMENT CARDS (CENTRE / RIGHT)

- **Cassettes, modules, splitters and patch panels** appear under **Internal Equipment**. Empty rows read *"Drop fibers here to splice."*

- Each equipment card carries a small toolbar: a **collapse/expand** chevron, a **settings** gear (rename, capacity, options), a **sort/reorder** control, and a **clear-splices** action to unsplice the element.
- Modules and splitters expose their **ports** (Port 1–12; splitter **Input** / **Output 1–N**, tagged **IN** / **OUT**).

SPLICING INTERACTIONS

- **Drag a fiber** onto a cassette row, port or another fiber to create a splice.
- **Drag an empty area** to rectangle-select multiple fibers at once.
- **Shift + click** adds to the selection; **Delete** removes the selected splices.

6. Port context menu (right-click)

Right-clicking a module, patch-panel or splitter port (e.g. `Module 1 · Port 2`) opens a quick menu for managing that single port:

CONNECTIONS

- **Disconnect rear** — drop the rear (splice-side) connection, naming the cable/fiber it's tied to, e.g. `Cable T4F2`.
- **No front connection** — shows the front (patch-side) state; greyed out when nothing is patched in front.
- **Start patch from here** — begin a patch lead from this port to another port.

LABEL

- A free-text **label** field (e.g. a circuit or customer ID) with **Save**.

PORT STATE

- **Planned**, **Reserved**, **Faulty**, **Inactive** — set the port's administrative state, each color-coded so the panel reads at a glance.

SIGNAL

- **Good (OK)**, **Warning (degraded)**, **Fault (no light)**, **Loss of signal** — record a measured optical signal status on the port, with **Clear measurement** to reset it.

7. Tracing & color

- **Per-port destination tracking** — every port shows where its downstream fiber lands, with hop count: `Port 2 → ODF 1 · 2 hops`. No cross-checking three documents to confirm a route.
- **Color-coded routing** — every connection line follows the TIA / IEC / custom catalog colors, so you trace a fiber by eye instead of by spreadsheet lookup.
- **Half-done splices are flagged** — e.g. "A-side spliced — B-side waiting for partner" — so incomplete work never hides.

8. Bulk Splice dialog

The big time-saver: create dozens of fiber-to-fiber splices between two cables in one step at any closure, manhole or junction. Pick the source, pick the destination, set the range, hit **Splice All**.

- **Source cable (A)** and **Destination cable (B)** — choose from the cables present at the element; each shows its `tubes × fibers` and totals.
- **Tube mapping** — **A-side tubes** (from–to), a **B-side starting tube**, and an **All tubes** shortcut to map every tube A→B from tube 1.
- **Reverse tube order** — for cables entering the tray from opposite sides ($A\ T_{start} \rightarrow B\ T_{start}$, $A\ T{+}1 \rightarrow B\ T{-}1$, …).
- **Fiber range within each tube** — splice all fibers or any subset (e.g. F2–F6).
- **Skip fibers already spliced** — protects existing work from being overwritten.
- **Auto-assign fiber colors** — colors follow the cable's TIA/EIA-598 (or custom) standard.
- **Automatic splice-tray routing** — splices are routed through a cassette automatically, and a new tray is created when the current one fills.
- **Passthrough support** — the same cable can be source and destination when its west half splices to its east half.
- **Live preview** — a table lists every planned splice (A-side → B-side) color-coded, with a **"ready"** status and an **"N to create"** count, before you commit.
- **Built-in guardrails** — picking the same cable for both sides (when not a passthrough) shows a clear error and disables **Splice All** until fixed.
- **Splice All / Cancel** — commit all previewed splices at once, or back out.

For wiring a cable into a splitter, ODF module or patch panel, use Layout → + Equipment → a Bulk Terminate flow (coming next).

9. Related views (one click away)

- **Table** — every splice as a list you can sort and filter by fiber, tube or cable.
- **Modules (Module X-Ray)** — open any ODF, OTB, TB or patch panel: full equipment inventory, live port occupancy, real fiber colors A-side/B-side, and end-to-end tracing with hop counts.
- **Terminations / Connectors / Devices** — termination/parking, connectorised links, and active/passive devices.
- **Diagrams** — the Fiber Network Diagram is auto-generated from the same splice plan: ODF modules, cassettes, patch cables, tubes and fiber colors, with no manual drawing.

> The Splice Manager is one source of truth from route to fiber to splice to diagram — plan once, see it everywhere (map, splice canvas, diagrams, BOM). FiberQ Designer is in active development, with a v0.1.0 beta targeted for August 2026. Learn more at **fiberq.net**.