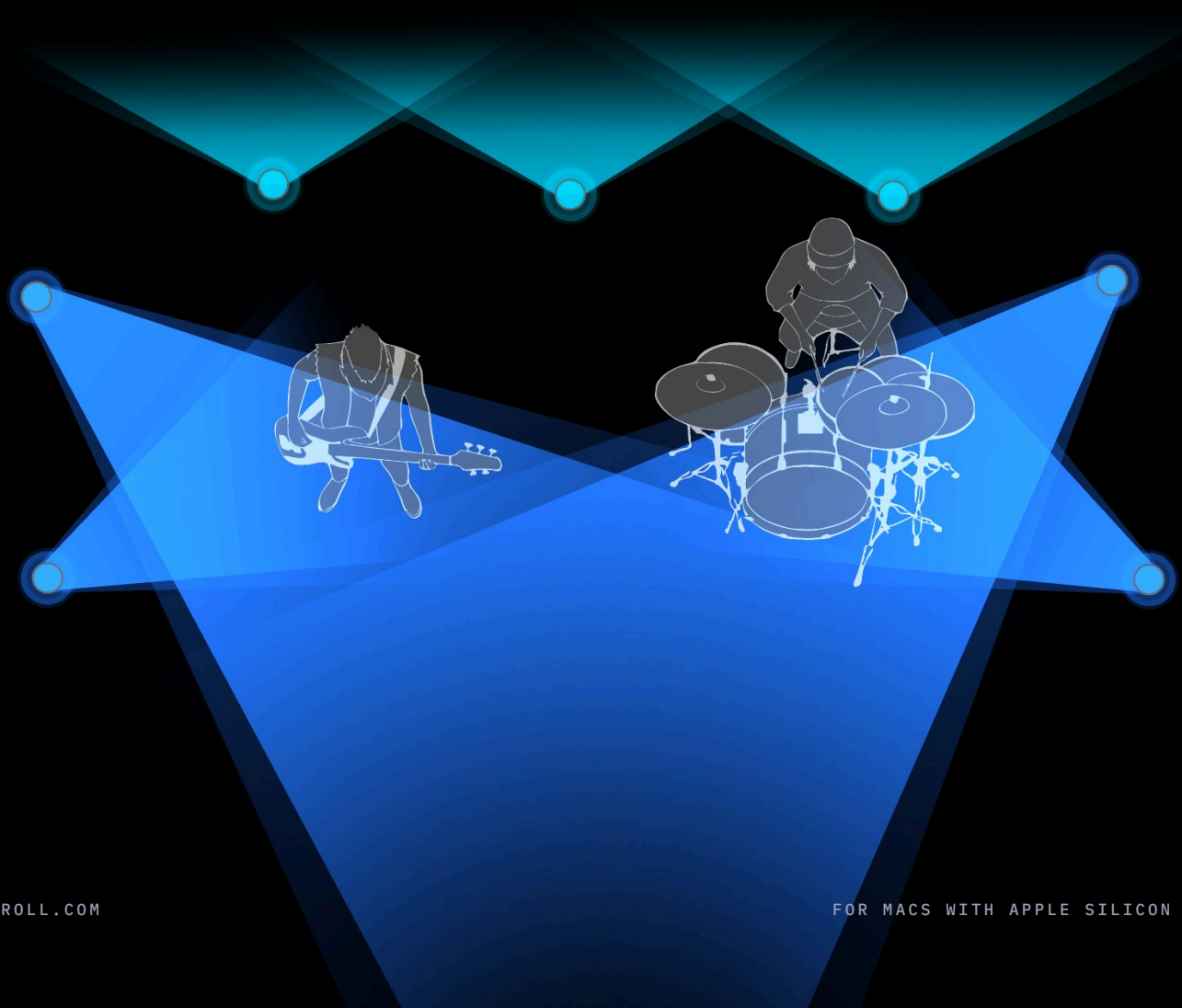
DMXRoll

USER GUIDE
FOR MACOS

STAGE LIGHTING TIMELINE BUILDER

Program your lights *like you program your music.*

The complete guide to DMXRoll — every workspace, tool, shortcut and setting, from your first block of color to a full show on stage.



DMXROLL.COM

FOR MACS WITH APPLE SILICON

WELCOME

Lighting, the way *musicians* think.

DMXRoll lets you program stage lights the way you arrange a song in a DAW. Every fixture gets its own track, and you paint colored blocks along a timeline measured in beats.

Press play and DMXRoll sends those colors to your lights — over the network with Art-Net or sACN, or through a USB DMX interface — locked to your music. Switch songs from a MIDI controller, rehearse the whole show on a virtual stage, and take a single file to every gig.

This guide walks through every feature: where to find it, how to use it and what to expect. Button and option names are written exactly as they appear in the app, like **Add Channel**.

HOW TO READ THIS GUIDE

⌘ Command	⌥ Option
⇧ Shift	⌫ Delete

The › sign walks through the app, so **Settings › Sound Settings** means the Sound Settings card on the Settings tab.

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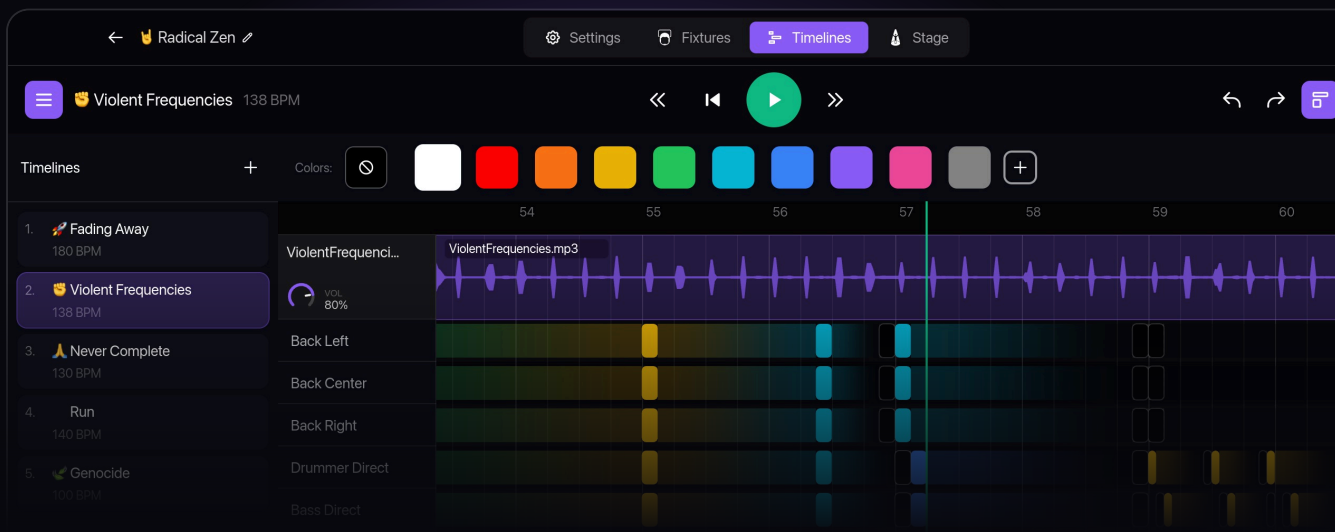


01 · GETTING STARTED

Core *concepts*

Nine words you'll meet everywhere in DMXRoll — and the four workspaces where you'll use them.

Project
A single `.dmxroll` file. It holds your fixtures, every timeline, palettes, DMX output, MIDI and sound settings, the stage layout — and the audio files themselves.

Timeline
One song or lighting sequence, with its own tempo (BPM), color palette, audio track and blocks.

Beat & bar
The units of time on a timeline. A bar is 4 beats; the numbers on the ruler are bar numbers. BPM sets how fast beats go by.

Block
A rectangle on a fixture's track: from beat X to beat Y the fixture shows one color, at the block's brightness.

Fixture
A light you control. It has channels (what each of its DMX channels does) and addresses (where it starts in DMX).

Channel
A single DMX value from 0 to 255 that controls one function of a fixture — red, intensity, a mode and so on.

Address & universe
A universe is a pool of 512 DMX channels. An address is a universe number plus the fixture's first channel (1–512).

Venue
An alternative set of addresses and channels for your fixtures — say, one per club you play. Timelines stay the same.

Palette
The colors available on a timeline. Blocks refer to palette colors, so changing a color updates every block that uses it.

Four workspaces

The tabs at the top of the window. Hover a tab to see its shortcut.

Q

Settings
How DMX leaves your computer, plus sound, MIDI and editor preferences.

W

Fixtures
Your lights: their channels, DMX addresses, venues and the DMX map.

E

Timelines
The show editor: songs, colors, blocks, audio and playback.

R

Stage
A top-down view of your stage that lights up with the show.

QUICK START

Your first show *in six steps*

From an empty project to lights moving with the music. Each step links to the chapter with the details.

01

Create a project

On the welcome screen click **New Project**, type a name and choose where to save the `.dmxroll` file.

→ Projects, p. 06

02

Choose your output

In **Settings › DMX Output Settings** pick how DMX leaves your Mac: **Art-Net** or **sACN** for network nodes, **USB Pro** or **Open DMX** for USB interfaces. A green dot in the status bar means the output is running.

→ Settings, p. 24

03

Add your fixtures

In **Fixtures** click **Add**, name the light and pick a template — **Generic RGB**, **RGBW** or **Single Color**. Then click **Add Address** and enter the universe and start channel set on the light itself.

→ Fixtures, p. 17

04

Create a timeline

In **Timelines** click **Create Timeline**, then click the empty audio lane to import your song. DMXRoll draws the waveform and suggests the tempo it detects.

→ Timelines, p. 08

05

Paint the light

Pick a color in the palette and drag along a fixture's track to draw a block. DMXRoll fades smoothly from one block to the next — draw a **Black** block wherever a light should go dark.

→ Drawing blocks, p. 11

06

Play — then save

Press Space: music and lights start together from the playhead. Watch it on **Stage › Live**, then press ⌘ S. DMXRoll never saves on its own.

→ Playback, p. 14

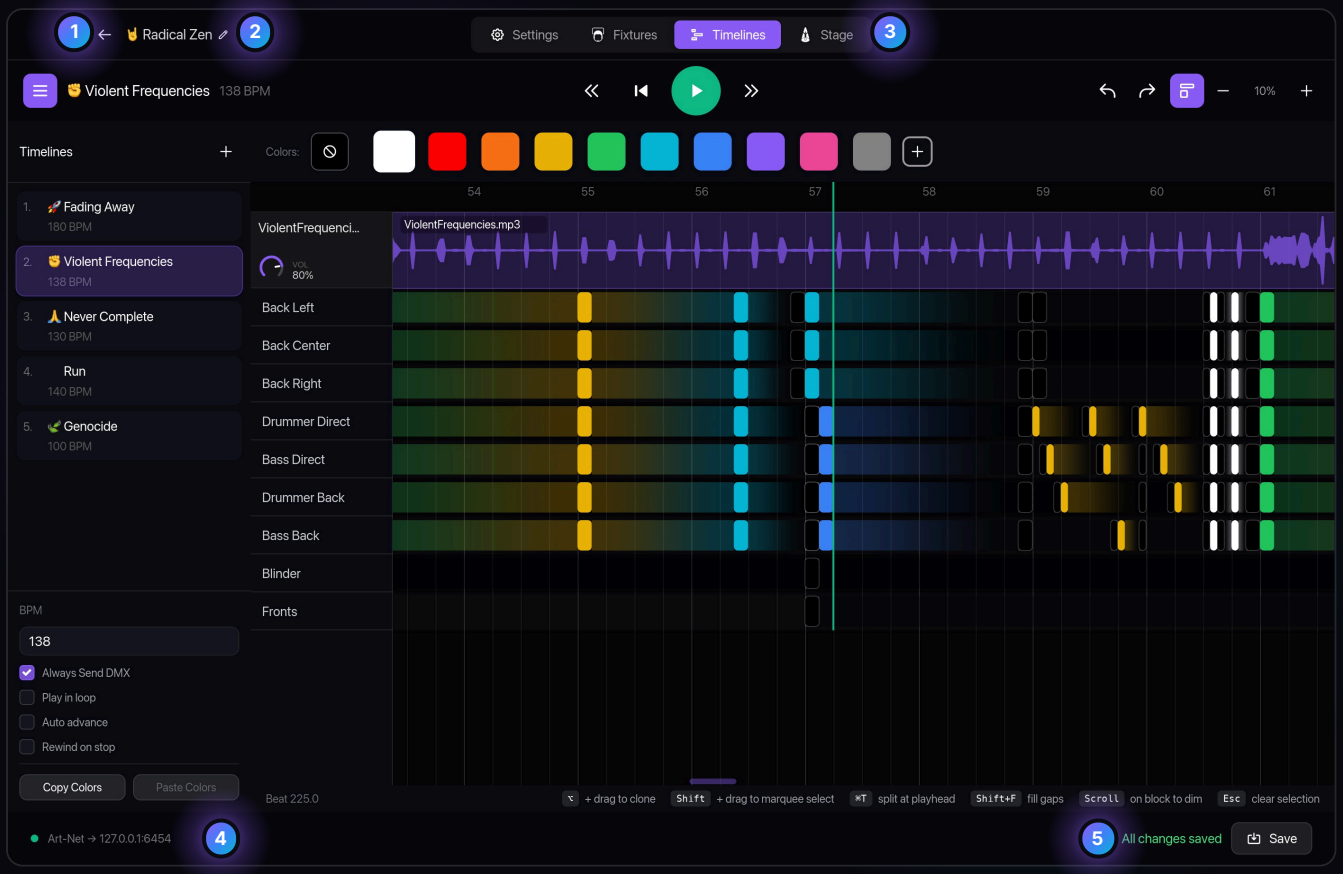
TIP

Press Q W E R to jump between Settings, Fixtures, Timelines and Stage — and Tab to move to the next song.

GETTING AROUND

The *window*

Once a project is open, the title bar and the status bar stay the same on every tab.



1 Back
Closes the project and returns to the welcome screen. If there are unsaved changes, DMXRoll asks first.

2 Project name
Click the pencil to rename it — **Enter** confirms, **Esc** cancels. A dot after the name means unsaved changes.

3 Workspace tabs
Settings, Fixtures, Timelines and Stage — or **Q** **W** **E** **R**. Hover a tab for its shortcut.

4 DMX output status
A colored dot and a description, such as `Art-Net → 192.168.1.50:6454`.

5 Save state
Unsaved changes or **All changes saved**, next to the **Save** button (**⌘** **S**).

Output at a glance

- **Green** — DMX output is running.
- **Red** — something's wrong; the text says what.
- **Grey** — output is off.

When something goes wrong

A red banner appears under the title bar — for example when the DMX output can't start. Close it with **×**. It also disappears by itself once the output is working again.

02 · PROJECTS

Projects

One file. The whole show.

Everything about a show lives in a single `.dmxroll` file — fixtures, timelines, palettes, settings, the stage layout and even the audio. Copy that one file to take a show to another Mac.

2.1

First launch

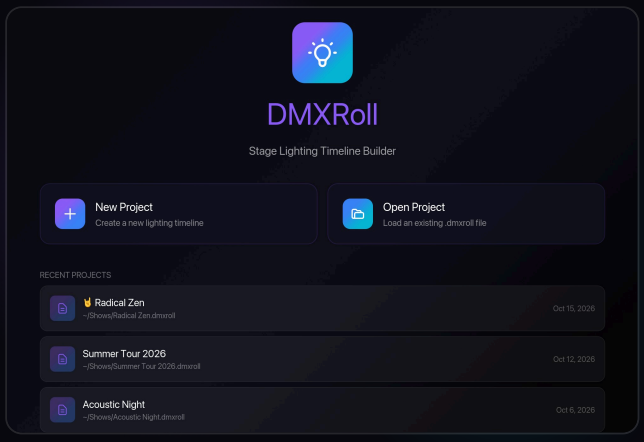
The first time you start DMXRoll, a welcome screen introduces the app and asks whether you'd like to "help improve DMXRoll by sending anonymous usage statistics". **Get Started** remembers your choice, and the screen won't appear again. ⌘ ⇧ P brings it back the next time you return to the start screen.

2.2

New project

1. Click **New Project** on the welcome screen.
2. Type a name and click **Create** (or press Enter). The button stays disabled until there's a name.
3. Choose where to save the `.dmxroll` file. Choosing an existing file replaces it with the new, empty project.

A new project starts empty — no fixtures, no timelines. Add fixtures first, then create a timeline.



The welcome screen. Start a new project, open one from disk, or pick up a recent show.

2.3

Opening a project

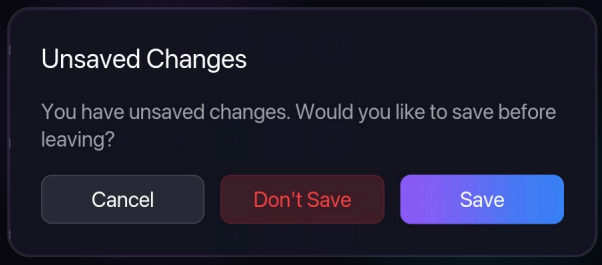
- **Open Project** — pick a `.dmxroll` file.
- **Recent Projects** — your three most recently opened shows, with the date. If a file has been moved or deleted, clicking it removes it from the list with a message.
- **⇧-click Open Project** to import a project template from a JSON file. DMXRoll asks for the JSON file, then where to save the new project.
- From Terminal: `DMXRoll.app/Contents/MacOS/DMXRoll show.dmxroll` opens a show directly.

A project reopens where you left it at the last save — the active timeline, the playhead and the open tab. DMX output, MIDI and the audio device start right away with the project's settings.

2.4

Saving

- ⌘ S or **Save** in the status bar saves the project — even while you're typing in a text field.
- **DMXRoll never saves automatically.** Until you save, changes live only in memory.
- Imported audio is written into the project file right away, but removed or replaced audio is only cleaned up when you save — so closing without saving never damages the project.
- The project also remembers the active timeline, the playhead position and the open tab.



Unsaved Changes appears whenever you'd otherwise lose work.

2.5

Closing

If you close the project (the back arrow) or the window with unsaved changes, DMXRoll asks what to do:

Save	Saves, then closes.
Don't Save	Closes and discards the changes.
Cancel	Takes you back to work.

When a project closes, the DMX output sends a blackout and stops.

2.6

Updates

The installed app checks for a new version when it starts. When one is available, a card appears in the corner of the window with a download button, a progress bar and an install button. Installing replaces the app and restarts it.

No internet? No problem — the check just fails, and everything else works as usual.

Moving a show to another Mac

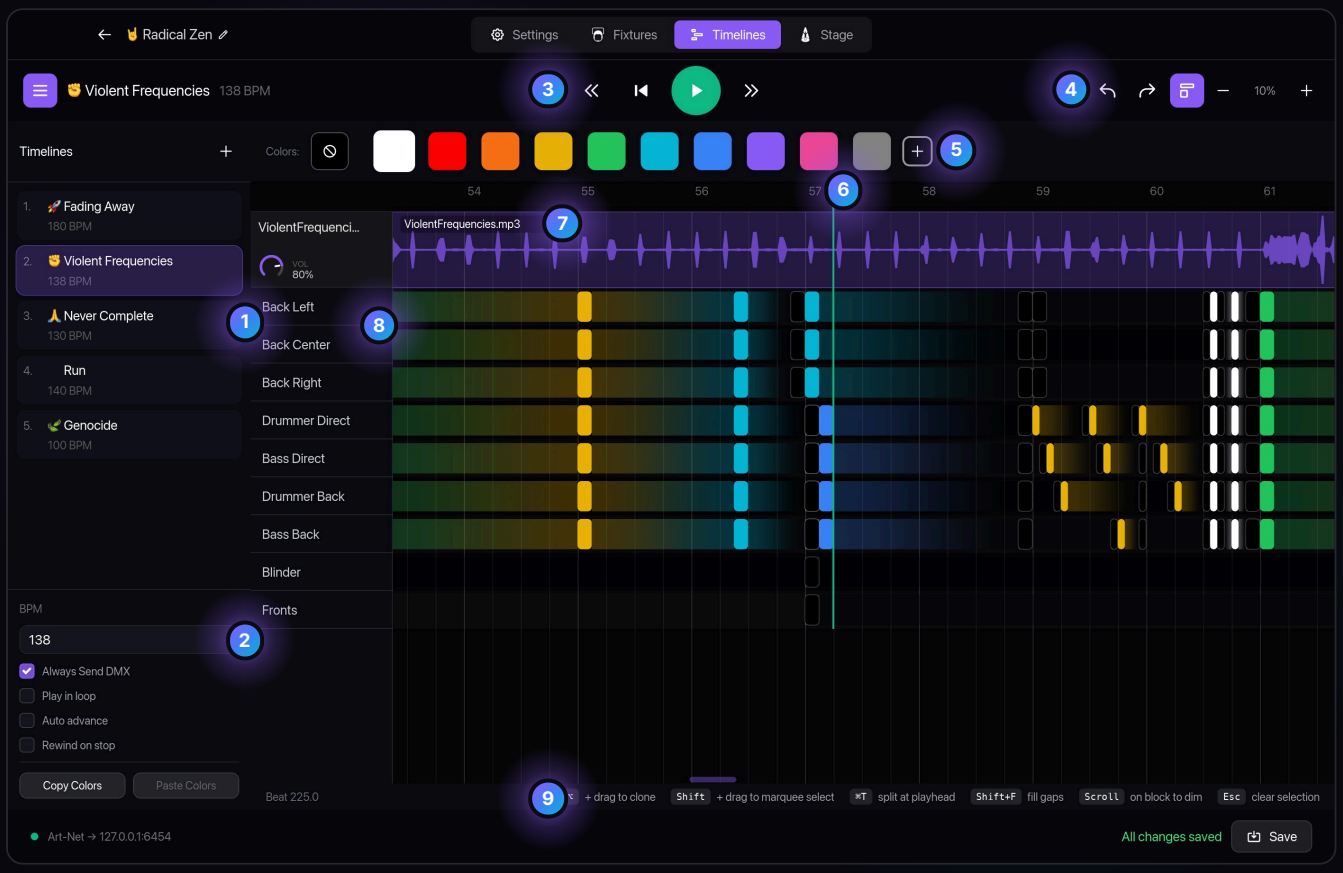
Copy the `.dmxroll` file — that's all. Audio, fixtures, venues, MIDI mappings and the stage travel with it.

03 · TIMELINES

Timelines

Paint light in time.

This is where the show happens. Each timeline is one song: the audio on top, one track per fixture below, and colored blocks that say what every light does, beat by beat.



1. **Timeline list**
   Your songs, in show order. p. 09
2. **Timeline options**
   Tempo, looping, auto advance. p. 09
3. **Transport**
   Previous, back to start, play, next. p. 10
4. **Undo · Snap · Zoom**
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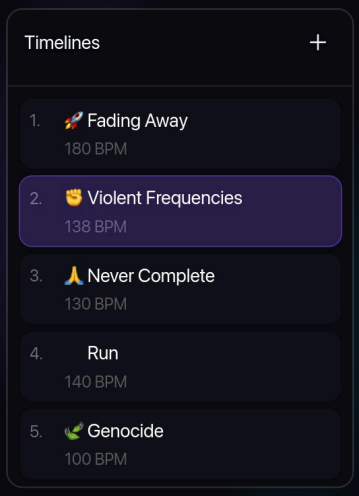
5. **Color palette**
   The colors you paint with. p. 10
6. **Ruler & playhead**
   Bars, and where playback starts. p. 14
7. **Audio track**
   The song's waveform. p. 14
8. **Fixture tracks**
   One per light, with its blocks. p. 11
9. **Hint bar**
   The current beat and the handiest gestures.

No timeline yet? The tab shows **“No timeline selected”** and a **Create Timeline** button.



The timeline list. The active timeline is highlighted.

3.1

The timeline list

- **+** next to **Timelines** adds "Timeline N" at 120 BPM, with a copy of the current timeline's palette. You can have up to 127 timelines.
- Click a timeline to switch to it. The playhead returns to the start; if the show was playing, the new timeline starts playing from the top.
- Each entry shows its number, name and tempo, plus **Auto** (auto advance) and **Loop** badges.
- Hover an entry for a pencil (rename — Enter confirms, Esc cancels) and an **×** (delete).
- Deleting is immediate — there's no confirmation and ⌘ Z can't bring it back. The last timeline can't be deleted. Until you save, closing the project without saving undoes it.
- Drag entries up or down to reorder. The order drives Tab / ⇧ Tab, Auto advance and the MIDI **Set Timeline** action.
- The menu button (three lines) at the left of the toolbar hides and shows the list.
- Tab / ⇧ Tab — next / previous timeline. After the last one comes the first.

3.2

Timeline options

Under the list, for the active timeline.

BPM	Tempo in beats per minute, 20–300. Press Enter to apply. Blocks are stored in beats, so a new tempo speeds up or slows down the whole show without moving anything.
Always Send DMX	**On:** while stopped, your lights follow whatever is under the playhead — every edit, ruler click or fixture change goes straight to the lights. **Off:** these previews aren't sent. Either way, after you stop playback the lights hold the state where you stopped.
Play in loop	At the end, jump back to the start and keep playing forever — audio included, without losing the beat. Unavailable while Auto advance is on.
Auto advance	At the end, switch to the next timeline in the list. Unavailable while Play in loop is on. Does nothing on the last timeline.
Auto play next	Appears with Auto advance: the next timeline starts playing straight away.
Rewind on stop	When you stop, the playhead returns to beat 0.
Copy Colors / Paste Colors	Copy this timeline's palette and paste it onto another, replacing its palette. Blocks whose color isn't in the new palette turn grey and stay dark.

IMPORTANT

A timeline ends where its **last block** ends — not where the song ends. Playback and audio stop there, and the lights go dark. A timeline with no blocks plays forever.

3.3

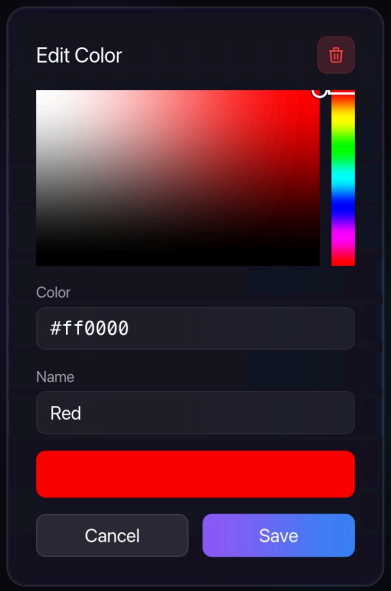
The toolbar

Name & BPM	The active timeline and its tempo.
Previous timeline	Double arrow left — same as ⇧ Tab.
Back to start	Moves the playhead to beat 0.
Play / Stop	Starts and stops playback (Space). Playback starts at the playhead, with the audio in sync.
Next timeline	Double arrow right — same as Tab.
Undo / Redo	⌘ Z / ⌘ ⇧ Z or ⌘ Y.
Snap to grid	The magnet (G). Purple when it's on.
– 10% +	Zoom out, the current zoom, zoom in — ⌘ -, ⌘ +, and ⌘ 0 to reset.

3.4

The color palette

- **Click** a color to draw with it. If blocks are selected, they take that color right away (undoable).
- Keys 0 – 9 pick colors by position: 0 is Black, 1 the first color after it, and so on. Hover a color to see its number.
- **Black** — the crossed-out circle — means "no light": a black block switches the fixture off. It's drawn with diagonal stripes and can't be edited, moved or deleted.
- **Double-click** a color to open **Edit Color**: a saturation/brightness square, a hue strip, a hex field (`#rrggbb`), a name and a preview. **Save** applies it — every block in that color changes at once. The trash icon deletes the color.
- **+** at the end of the palette opens **Add Color** (red to start with). A color needs a name and a valid hex value.
- Deleting a color that blocks use asks first: **Delete Color?** shows how many blocks will go with it (**Delete Color & Blocks**). Undoable.
- Drag colors to reorder them (all except Black).
- A new timeline with no palette to copy starts with Black, White, Red, Orange, Yellow, Green, Cyan, Blue, Purple and Pink.



Edit Color — double-click any swatch.

3.5

Ruler, grid and zoom

- The ruler shows bar numbers (1 bar = 4 beats). Grid lines get denser as you zoom in.
- The timeline always reaches 8 bars past the end of the last block or the end of the audio, whichever comes later — at least 32 bars.
- **Zoom** with the **+** / **−** buttons, ⌘ + / ⌘ − (about 15% per step), **⌘-scroll** or a **trackpad pinch** — zooming centers on the pointer. ⌘ 0 returns to the default, fully zoomed-out view.
- **Scroll** with the wheel or trackpad over empty space, vertically and horizontally. **⇧-scroll** scrolls horizontally, even over blocks. You can also drag the scrollbars at the bottom and right.
- **Snap** (G) rounds block positions, lengths and ruler clicks to a step that depends on zoom: ½ beat at the default zoom, ¼ at 2×, ⅛ at 4× and beyond. With snap off, nothing is rounded.

3.6

Drawing blocks

Whether dragging on an empty track draws or selects is up to you — see **Settings › Timeline Editor** p. 26. With the default, **Click to draw**, a drag draws and a ⇧-drag selects; **Click to select** swaps them. The pointer tells you which: a **pen** when a drag will draw, a **crosshair** when it will select.

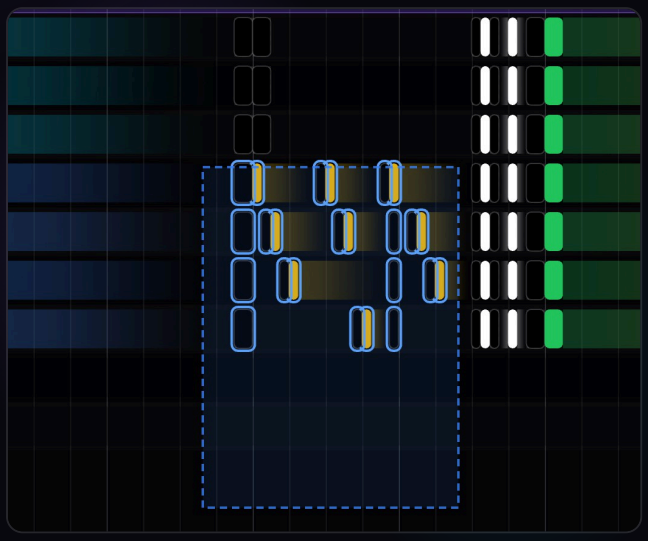
Drawing in progress. The dashed outline previews the new block on the "Fronts" track.

1. Pick a color in the palette.
2. On an empty part of a fixture's track, press and drag left or right — a dashed preview shows the block.
3. Release. The block is created and selected.

- A single click makes a short block — at least one grid step, and wide enough to grab.
- A new block **overwrites** what's underneath, just like in a DAW: overlapping parts of other blocks are cut away, so a block below may be shortened or split in two.
- Click a fixture's name at the left of its track to jump to it in Fixtures.

3.7

Selecting



Drag a marquee...

...and every block it touches is selected.

- **Click** a block to select it (white outline). Its color becomes the drawing color.
- ⇧**-click** adds a block to the selection, or takes it out.
- **Marquee:** in Click to draw mode, ⇧-drag across empty space (or the ruler, or the audio lane); in Click to select mode, simply drag. Every block the rectangle touches is selected. Hold ⌘ to add to the current selection.
- ⌘ A selects every block on the timeline. Esc clears the selection.
- Clicking empty space clears the selection — in Click to draw mode it also starts drawing a new block.

3.8

Moving, copying and resizing

- **Drag** a block to move it in time (snapped to the grid) and/or onto another fixture's track. If it's part of a selection, the whole selection moves.
- Hold ⌥ while dragging to **copy** instead — the original stays put and the copy becomes the selection.
- **Resize:** hover the left or right edge of a block — bright handles appear on blocks at least 24 px wide — and drag. The shortest block is ⅛ beat.
- Moved, copied or resized blocks overwrite whatever they land on, just like drawing.
- Drag near the left or right edge and the view scrolls along.

POINTER HINTS

The pointer always shows what a drag will do: an open hand over a block (move), arrows at its edges (resize), a copy cursor with ⌥, a pen or a crosshair over empty tracks.

3.9

Block brightness

- **Scroll over a block** — wheel or trackpad — to set its brightness from 0 to 100%. The view doesn't move. If the block is selected, every selected block changes together.
- A scroll gesture sticks to what it started on: start scrolling the view and a block sliding under the pointer won't grab it; start dimming and it keeps dimming even after the pointer leaves the block. After a short pause (about ¼ second) the next gesture picks its target afresh.
- A tooltip over the block shows the percentage, and the bar under the tracks shows it too.
- Dimmer blocks are drawn darker. Between blocks, brightness fades smoothly — see chapter 4.
- Black blocks can't be dimmed.
- A whole brightness change counts as one undo step, recorded once you've stopped scrolling for about 0.3 seconds.

3.10

Clipboard and selection tools

⌘ C	Copy the selected blocks to DMXRoll's clipboard — they flash briefly. The clipboard works across all timelines of the project.
⌘ V	Paste at the playhead, keeping the spacing between blocks and their fixtures, and overwriting what's underneath. Pasted blocks are selected.
⌘ D	Duplicate the selection right after itself — the copy starts where the selection ends.
⌘ T	Split the selected blocks under the playhead into two, at the playhead.
⇧ F	**Fill gaps.** Within the time span of the selection, and on every track from the topmost to the bottommost selected fixture, each empty stretch gets the current color. The new blocks are selected.
Delete ⌫	Delete the selected blocks — or the selected audio track.

The hint bar under the tracks keeps the handiest gestures in view.

3.11

The audio track

Each timeline can hold one audio file, shown as a waveform above the fixture tracks.

Import	Click the empty audio lane (“Drop audio file here or click to import”) or drag a file onto the window while Timelines is open. MP3, WAV, M4A, AAC, FLAC, OGG and AIFF all work. A new file replaces the old one.
Tempo	DMXRoll analyzes the file (“Loading...”), draws the waveform and tries to detect the tempo (40–240 BPM). If it finds one, **Tempo Detected** suggests it — adjust the value if you like, then click **Apply Tempo** or **No, Thanks**. Detection sometimes lands on double or half the real tempo (200 instead of 100, say) — just type the right one.
Offset	Drag the waveform left or right. Moving it right delays the music; moving it left trims its start. Undoable.
Volume	Drag the **VOL** knob up or down. Double-click resets it to 80%. Each timeline has its own volume.
Lane height	Drag the bottom edge of the audio header (40–400 px).
Remove	Click the waveform to select it, then press Delete. Undoable.

Audio plays on the device chosen in **Settings › Sound Settings**.

3.12

Playback and the playhead

- Space starts and stops playback. Lights and music start together from the playhead.
- **Click the ruler** to place the playhead (snapped to the grid); **drag along the ruler** to scrub smoothly. With Always Send DMX on, the lights follow the playhead instantly.
- The current beat is shown under the tracks — for example “Beat 25.5”.
- During playback the view pages along: as the playhead nears the right edge, the view jumps so the playhead sits about 30% in from the left.
- You can edit while the show plays. Changes reach the lights immediately, and changing the BPM doesn't interrupt playback.

3.13

Undo

Each timeline has its own undo history of up to 200 steps. The stage keeps a separate one.

Can be undone

- Drawing, deleting, moving, copying, resizing and dimming blocks
- Paste, duplicate, split and fill gaps
- Recoloring blocks
- Adding, editing and deleting palette colors
- Moving and removing audio

Can't be undone

- Tempo changes and timeline options
- Adding, deleting, renaming and reordering timelines
- Palette order and **Paste Colors**
- Audio volume and lane height
- Fixture changes and settings

While you're typing in a text field, ⌘ Z undoes typing in that field, not changes on the timeline.

3.14

For power users: Block Debug Data

⌘ ⇧ D on the Timelines tab opens **Block Debug Data** — the active timeline's blocks as JSON. Edit the text and click **Apply Changes**; invalid JSON shows an error and changes nothing. Handy for bulk fixes — you won't need it day to day.

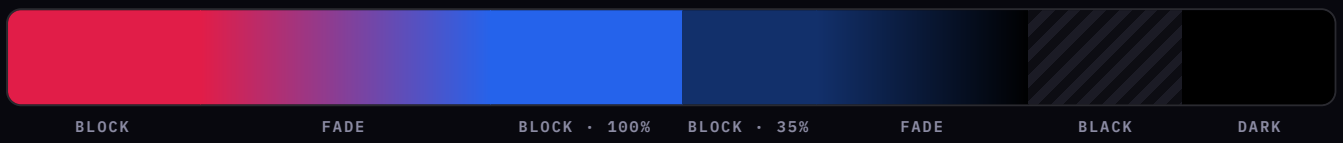
Blocks and fades up close. Solid blocks hold a color; the softer gradients between them are fades DMXRoll calculates for you. The next chapter explains exactly how.

04 · UNDER THE HOOD

How color reaches *your lights*

Exactly which value each fixture receives at any moment.

Color over time



- Inside a block, the fixture shows the block's color multiplied by its brightness.
- In a gap between two blocks, color and brightness **fade smoothly** from the end of one block to the start of the next — you'll see a translucent gradient on the track. To make a light go dark in a gap, put a Black block there.
- Before the first block and after the last one, the fixture is dark.
- If blocks on one track overlap (in older imported data, for example), the block that starts first wins.

Color to channels

CHANNEL TYPE	DMX VALUE (0–255)
Color – R / G / B	The red, green or blue part of the color.
Color – W (white)	The smallest of R, G and B `W = min(R, G, B)` — pure colors such as red give W = 0, white gives W = 255.
Color – A (amber)	The smaller of R and G `A = min(R, G)` — only warm colors light it.
Intensity	The color's brightness (luminance). Single-color fixtures turn the block color into the brightness of their own color.
Constant	Always the value you set — regardless of blocks and Dim. Perfect for a mode channel or a master dimmer.

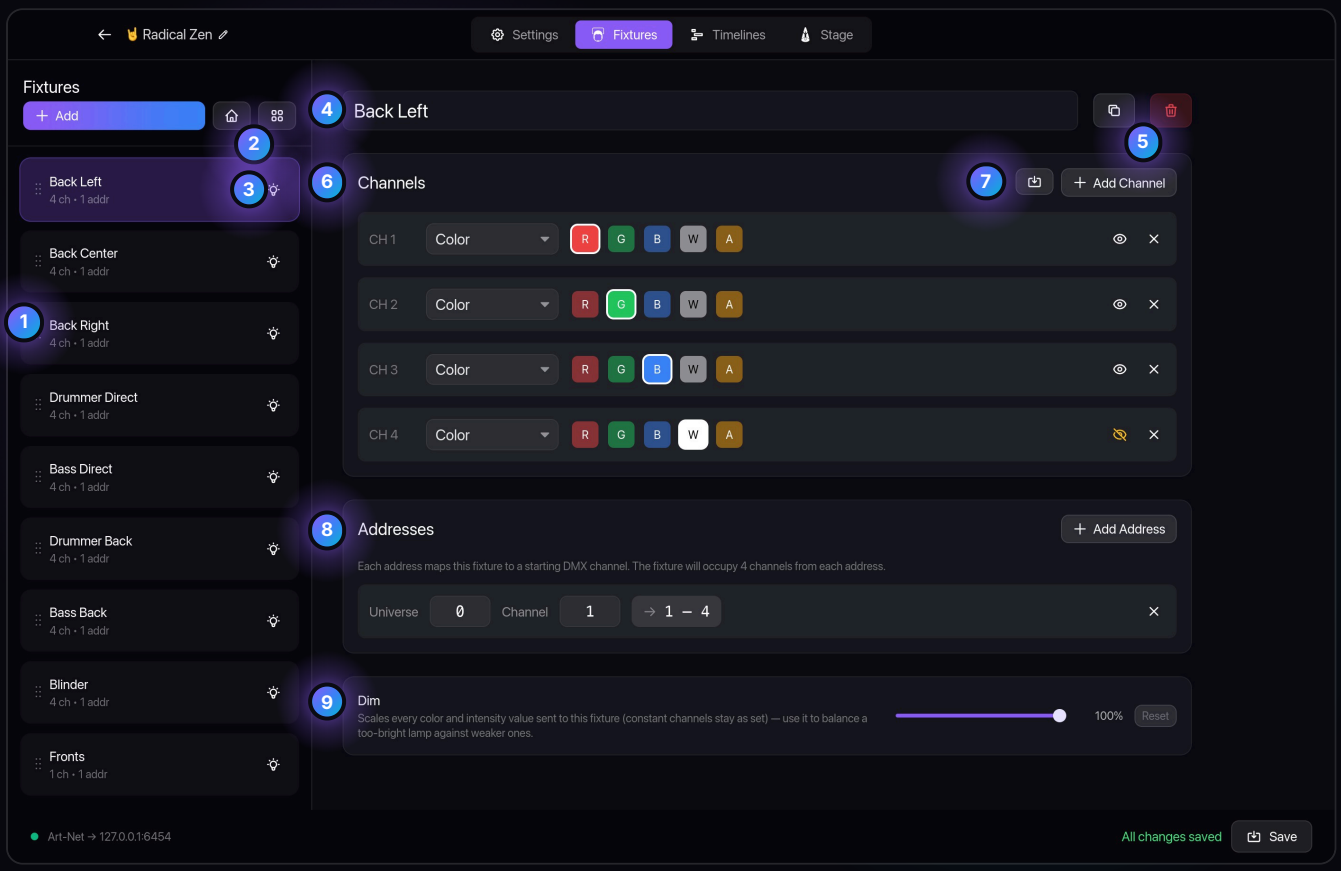
- A fixture's **Dim** (0–100%) scales its Color and Intensity channels. Constant channels are left alone.
- A **disabled channel** (crossed-out eye) sends nothing, but keeps its slot — the channels after it don't shift.
- A fixture with an address conflict, or without an address, sends nothing p. 20. A fixture with several addresses sends the same values to each.
- During playback, values are sent at the rate set in **Settings › DMX Output Rate** (30 frames per second by default). While stopped, the output repeats the last state now and then, so devices never lose the signal.

05 · FIXTURES

Fixtures

Introduce your lights.

A fixture is any light you control — a PAR, an LED bar, a blinder. Describe its channels (what each DMX channel does) and its address (where it lives in DMX), and DMXRoll does the math.



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3. **Identify**
   Flash a light to find it on stage. p. 18
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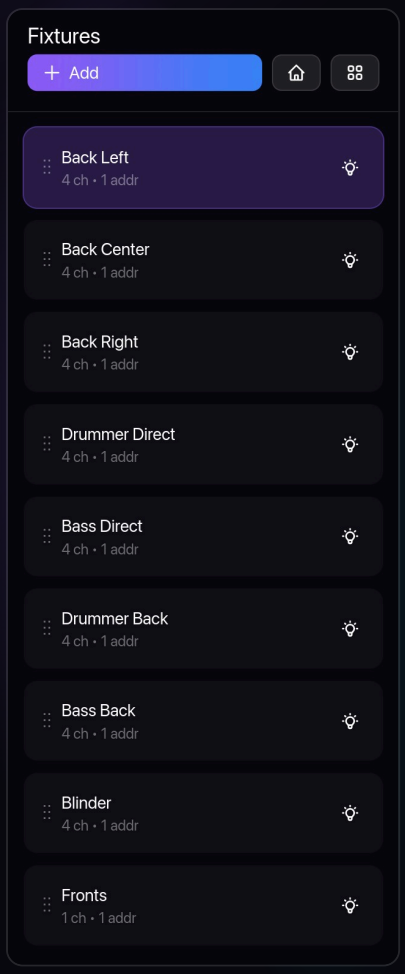
   Universe and start channel. p. 20
9. **Dim**
   Tame a light that's too bright. p. 20



The fixture list, with Add, venues and the DMX map on top.

5.1

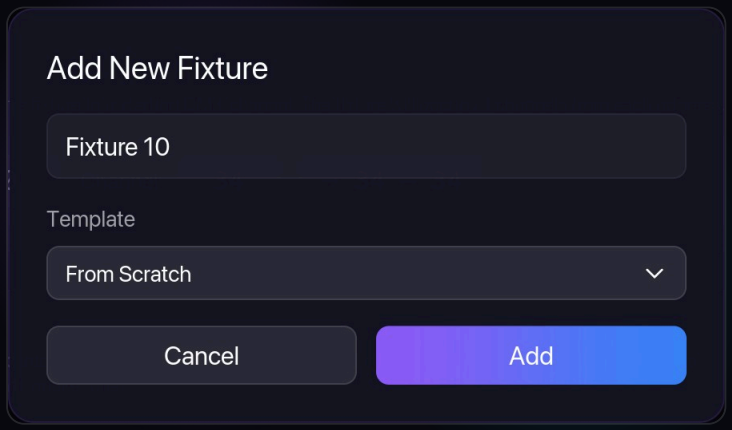
The fixture list

- Each entry shows the fixture's name and its channel and address counts — "4 ch • 1 addr". An **orange** address count means the fixture has no address yet and sends nothing.
- A **red frame** and a warning icon mean an address conflict p. 20.
- Drag fixtures to reorder them. Timeline tracks follow the same order.
- The bulb — **Identify** — flashes the fixture white for 5 seconds, twice a second, so you can spot it on stage. Click again to stop. Works while playback is stopped.
- **Add** creates a fixture; the house icon opens venues and the grid icon the DMX map p. 21.

5.2

Adding, cloning and deleting

- **Add** opens **Add New Fixture**: a name ("Fixture N" to start with) and a channel template. Built in: **Generic RGB**, **Generic RGBW** and **Generic Single Color** — plus any templates you've saved. **From Scratch** starts with no channels.
- New fixtures have no address yet — add one in the editor p. 20.
- Remove a saved template from the dropdown with its ×, then click the ✓ that appears to confirm.
- **Clone** (the two-pages icon next to the name) copies the fixture with its channels and settings, but without addresses, so the copy can't conflict. DMXRoll asks for a name.
- **Delete** (the red trash) asks for confirmation. The fixture's blocks disappear from every timeline. This can't be undone — except by closing the project without saving.
- Rename a fixture in the field at the top of the editor.

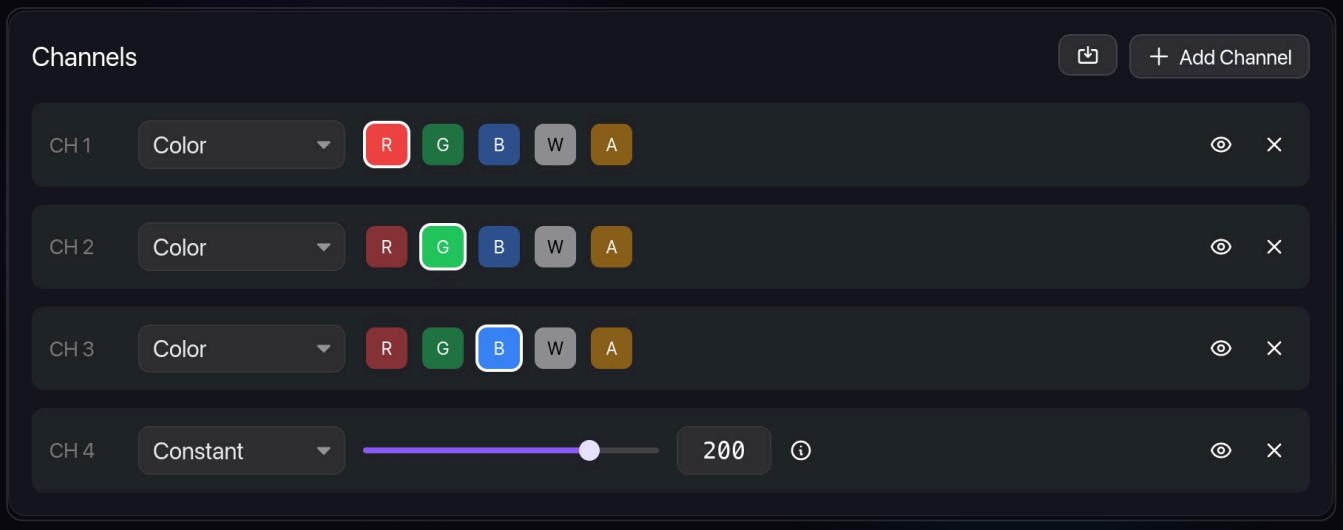


Add New Fixture — name it, pick a template, done.

5.3

Channels

Channels map to the fixture's consecutive DMX channels, counted from its start address: CH 1 is the address itself, CH 2 is the address + 1, and so on. Set them up to match the fixture's manual — the DMX mode the light is in.



Three Color channels and a Constant. This fixture always receives 200 on channel 4, whatever the show does.

Color

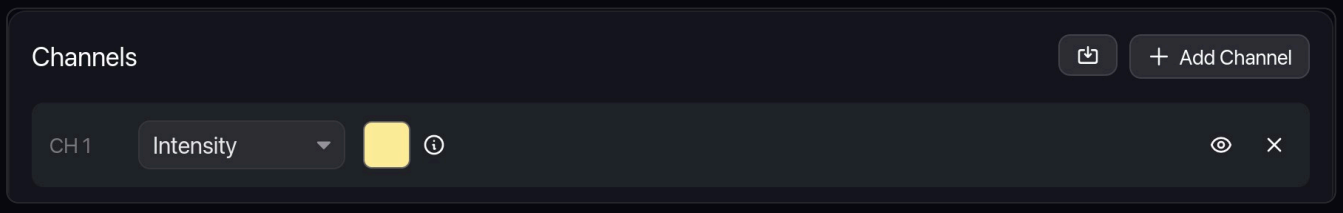
Pick the component: **R**, **G**, **B**, **W** (white) or **A** (amber). How each is calculated: chapter 4.

Intensity

A brightness channel. The swatch next to it sets the fixture's color for previews in DMXRoll — it doesn't change DMX values.

Constant

A slider and a 0–255 field. This value is always sent, and changes reach the fixture immediately.



An Intensity channel with its preview color.

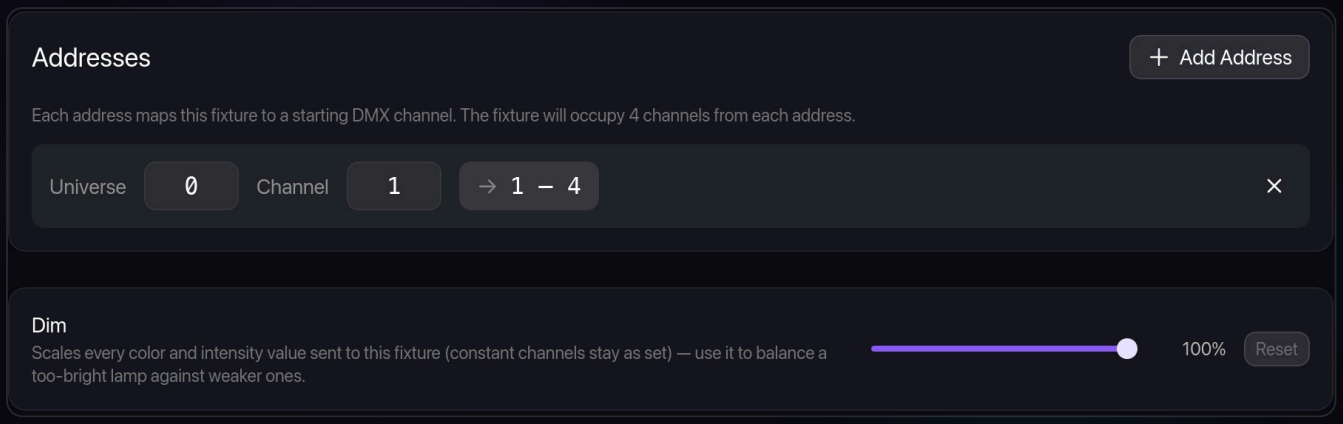
- **Type** (the dropdown) — Color, Intensity or Constant.
- The **eye** disables or enables a channel. A disabled channel sends nothing, but keeps its slot.
- **×** removes the channel — the channels after it move up by one.
- **Add Channel** adds a channel at the end (Color, red).
- The save icon — **Save as Template** — keeps the channel layout as a template for new fixtures.

SINGLE-COLOR FIXTURES

When every light-producing channel of a fixture is Intensity — a single-color PAR, for example — the fixture gets the brightness of the block's color as seen through its own color. Constant channels don't change this.

5.4

Addresses



- Each address is a **Universe** (0–32767) and a **Channel** (1–512). Next to it you'll see the range it occupies, such as → 1 – 4.
- **Add Address** adds an address in universe 0, on the first channel after everything already in use.
- Several addresses send the same values to several places — two identical fixtures driven together, for example.
- **×** removes an address.

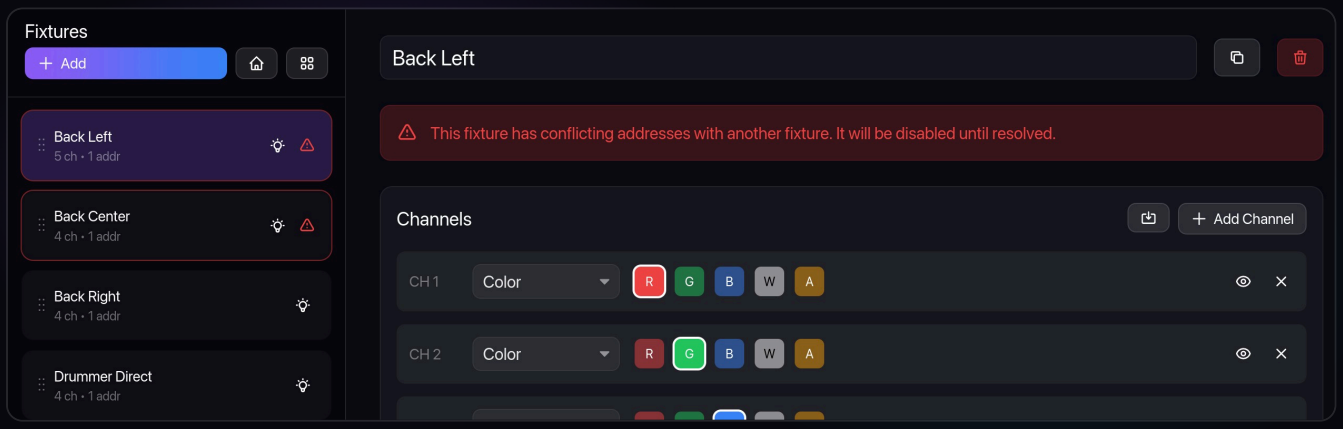
5.5

Dim

The **Dim** slider (0–100%) limits the whole fixture's brightness — handy when one light outshines the rest. 100% means no change; **Reset** returns to 100%. Constant channels aren't affected.

5.6

Address conflicts



A conflict. After a fifth channel was added, "Back Left" reaches into "Back Center"'s channels — both turn red and go quiet until it's fixed.

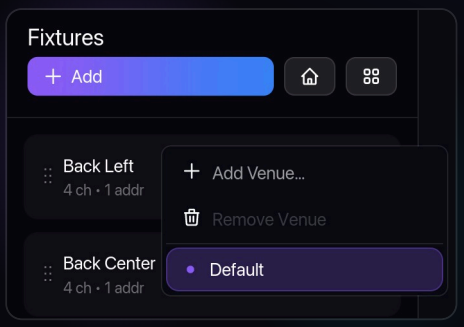
- A conflict happens when two fixtures use the same channels in the same universe, or when one fixture's own addresses overlap.
- Conflicting fixtures are marked red — in the list, on their timeline track and in the editor, with a message — and send nothing until the conflict is resolved.
- Conflicts are checked separately for each venue.

5.7

Venues — different clubs, different addresses

A venue is a separate set of addresses, channels and Dim for all your fixtures. Your timelines don't change — so you can play the same show in a club where the lights are patched differently.

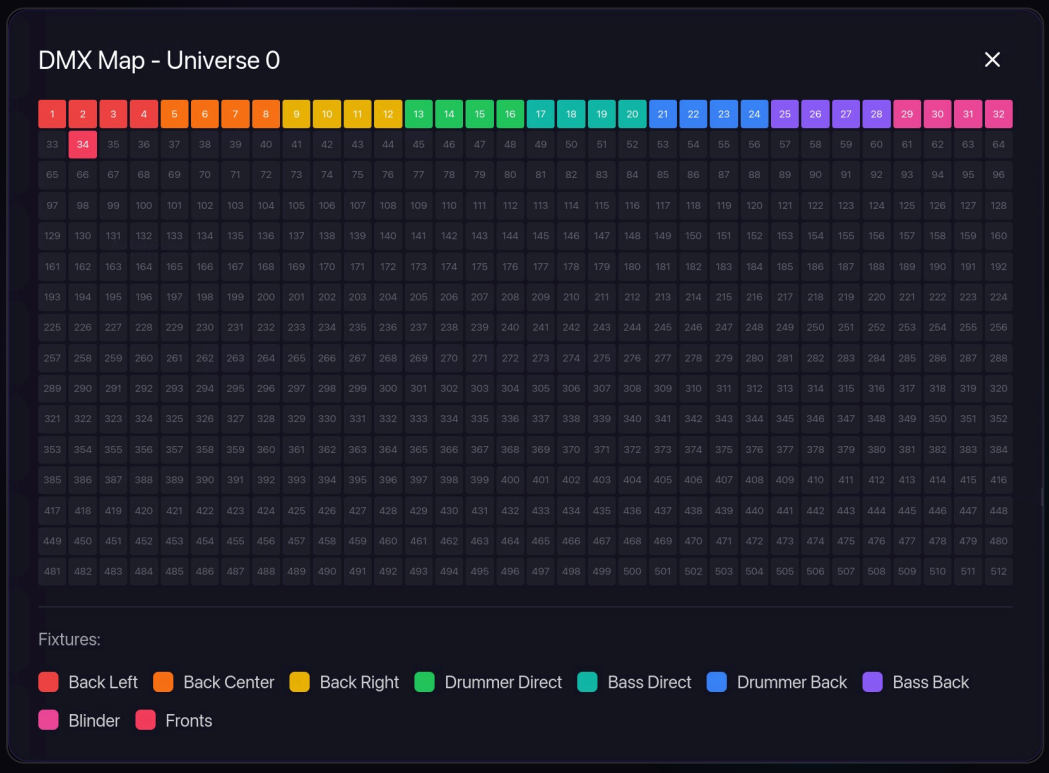
- The **house** icon opens the menu: **Add Venue...**, **Remove Venue** and the list of venues — the active one is marked with a dot.
- **Add Venue...** copies the current venue's settings under a new name and switches to it.
- While a venue other than **Default** is active, its name appears under the Fixtures heading, and changes to addresses, channels and Dim apply only to it. Fixture names, adding and deleting fixtures are shared by all venues.
- **Remove Venue** (not available for Default) deletes the venue after confirmation and returns to Default. The fixtures stay.
- The chosen venue is saved in the project and switches the DMX output immediately.



The venue menu.

5.8

The DMX map



The grid icon opens **DMX Map**: all 512 channels of a universe, in rows of 32. Used channels take their fixture's color, a red outline marks a conflict, and hovering a channel shows the channel, fixture and fixture channel — for example "Ch 5: Back Center (ch 1)". When you use several universes, buttons at the top switch between them. A legend of fixtures sits below the grid.

06 · STAGE

Stage

See it before the gig.

The Stage tab shows your stage from above. Place the band and the lights once, and DMXRoll lights it up with the show — perfect for programming at home, far from the real rig.

Setup [

Place the musicians and your lights, aim the beams and fine-tune their properties. Beams are white here — a preview of their shape. p. 23

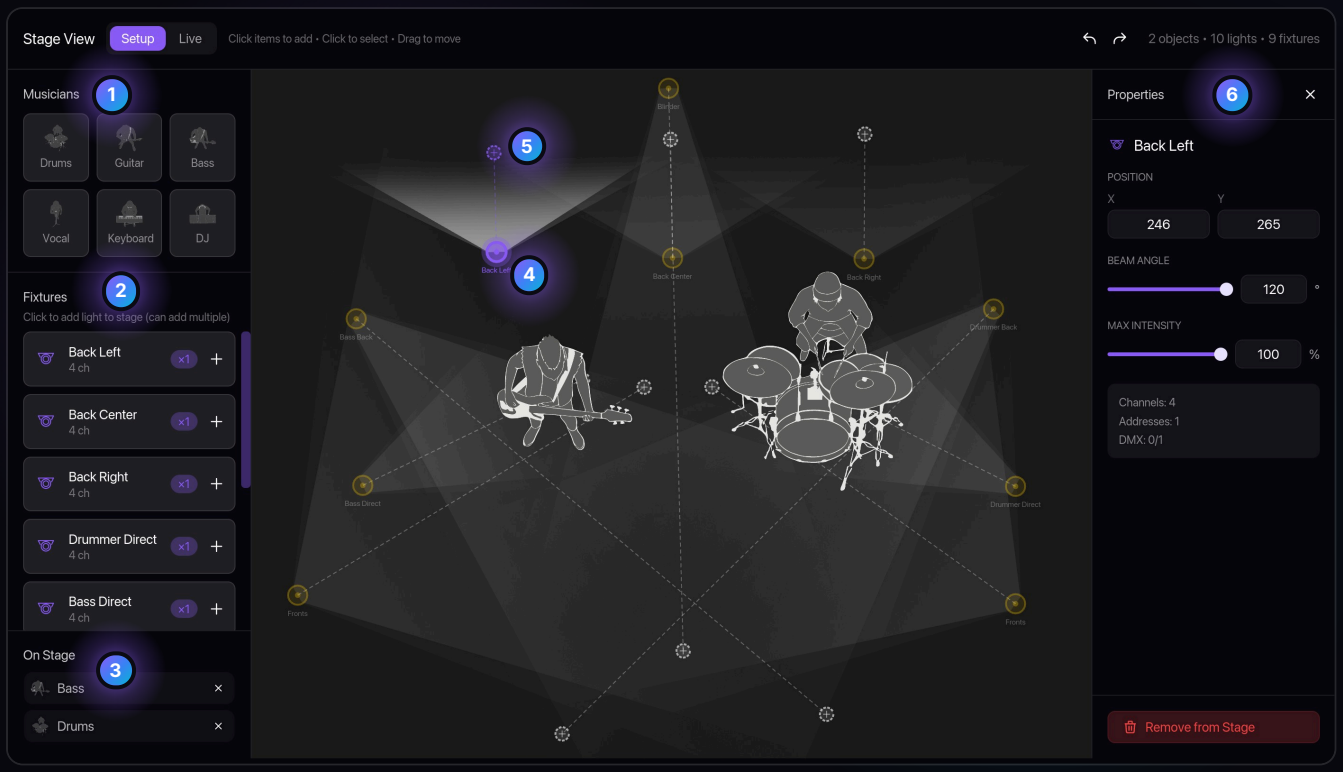
Live]

The stage goes dark and each beam shines in the color its fixture is sending right now — Dim included, as bright as the color and the light's Max Intensity allow. Musicians inside a beam light up. It runs smoothly during playback and shows the state under the playhead when stopped.

Switch modes with the **Setup** / **Live** buttons or [and]; the mode is saved in the project. In Live, the toolbar shows the playback controls from Timelines and the side panels are hidden. The right end of the toolbar counts objects, lights on stage and fixtures in the project.

6.1

Setup — building your stage



1. **Musicians**
   Drums, Guitar, Bass, Vocal, Keyboard, DJ. Click to add one near the center of the stage (slightly randomized), or drag it into place.
2. **Fixtures**
   The lights in your project. Click to add one at the top edge of the stage, or drag it into place. Place a fixture as often as you like (“×N”) — all copies shine alike.
3. **On Stage**
   The musicians on stage. Click to select, **×** to remove.
4. **Light base**
   The yellow circle with the fixture's name. Moving it moves the target too.
5. **Beam target**
   The dashed circle. Drag it to aim the beam.
6. **Properties**
   Fine-tune the selected object (below).

- Click to select, drag to move (within the stage); click empty space to deselect. Hovering a light dims the others so it's easy to pick out.
- **Delete** removes the selected object. **⌘** **Z** / **⌘** **⇧** **Z** undo and redo stage changes — a separate history, with buttons in the toolbar too.

Musician	Position X / Y (0–1000), Rotation (−180…180°), Size (25–300%).
Light	Position X / Y, Beam Angle — beam width (5–120°), Max Intensity — beam brightness in the preview (10–100%), plus its channels, addresses and first DMX address.

Slider changes are undoable; numbers typed into X / Y aren't. **Remove from Stage** takes the object off the stage (the fixture stays in the project); **×** in the panel header deselects.

07 · SETTINGS

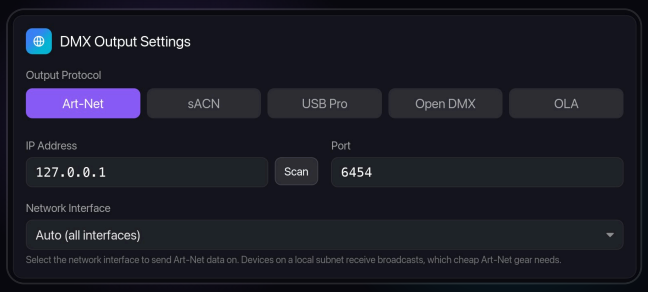
Settings
Wire it up.

07

Everything on this tab is saved in the project, so each show can have its own DMX output, audio device and MIDI mappings. Device lists refresh when you open the tab, and with the refresh button.

7.1

DMX Output Settings



Output Protocol chooses how DMXRoll sends DMX. Changes apply immediately.

Art-Net	Network nodes and DMX-over-Ethernet gear.
sACN	E1.31 streaming ACN, multicast or unicast.
USB Pro	Enttec DMX USB Pro and compatibles.
Open DMX	Simple FTDI-based USB cables.
OLA	A fallback for unusual USB devices.

Art-Net

NETWORK

- **IP Address** and **Port** (6454 by default) of your Art-Net node. If the address is on the same subnet as one of your Mac's network interfaces, DMXRoll broadcasts to that subnet — many affordable nodes need this. For 127.0.0.1 and addresses outside your local subnets, it sends straight to the address.
- **Network Interface** — which interface to send through (automatic by default).
- **Scan** sends an ArtPoll and listens for about 1.5 s. Nodes that reply are listed — click one to use its address. If nothing replies, DMXRoll suggests the usual suspects: no interface on the same subnet (common with 2.x.x.x addresses), a different VLAN, or a firewall.
- DMXRoll universe N is Art-Net universe N (universe 0 = 0:0:0).

sACN (E1.31)

NETWORK

- Multicast by default: each universe goes to its own group address, `239.255.x.y`. DMXRoll universe 0 is sACN universe 1, and so on.
- **Priority** 0–200 (100 by default) — with several sources, receivers follow the highest priority.
- **Unicast IP** — optional: send straight to one address instead of multicast.
- **Network Interface** — in automatic mode DMXRoll sends through every interface at once.

USB Pro

USB

- For the Enttec DMX USB Pro and compatible interfaces — DMXking ultraDMX and many clones.
- **USB Interface** — the interface's serial port, or **Auto-detect**. Devices that look like DMX interfaces are listed first; the refresh button searches again.
- **Universe** — which DMXRoll universe goes out through this interface. A USB interface carries one universe.
- **Detect interface type** asks the device whether it speaks the USB Pro protocol, and switches to USB Pro or Open DMX for you.

Open DMX

USB

- For simple FTDI-based adapters — Enttec Open DMX and most affordable "USB to DMX" cables. Same settings as USB Pro.
- Your Mac generates the DMX signal itself, about 40 times a second.

OLA

FALLBACK

- Open Lighting Architecture — for unusual USB devices DMXRoll doesn't drive directly.
- Choose it and DMXRoll starts its built-in OLA server (the card shows its status; startup takes a few seconds). It stops when you quit.
- **Open OLA Configuration** opens OLA's web panel at `localhost:9090`, where you set up the device and assign its universe.

When DMX output doesn't work

It keeps trying

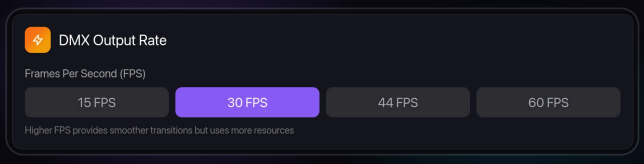
Errors show in the red banner at the top and in the status bar. DMXRoll retries every 2 seconds — plug the USB interface back in and the output resumes by itself.

Local Network access

The first time DMXRoll sends DMX over the network, macOS asks for Local Network access — allow it. If it's blocked, DMXRoll tells you: "macOS blocked network access. Allow DMXRoll in System Settings › Privacy & Security › Local Network."

7.2

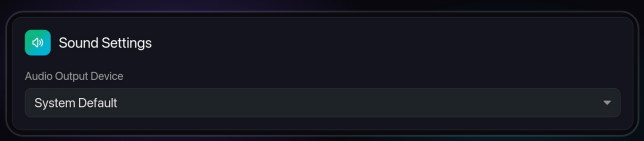
DMX Output Rate



Frames Per Second (FPS): choose **15**, **30**, **44** or **60** — how many times per second DMXRoll calculates and sends your lights during playback. More means smoother fades, at the cost of more work. The default is 30.

7.3

Sound Settings

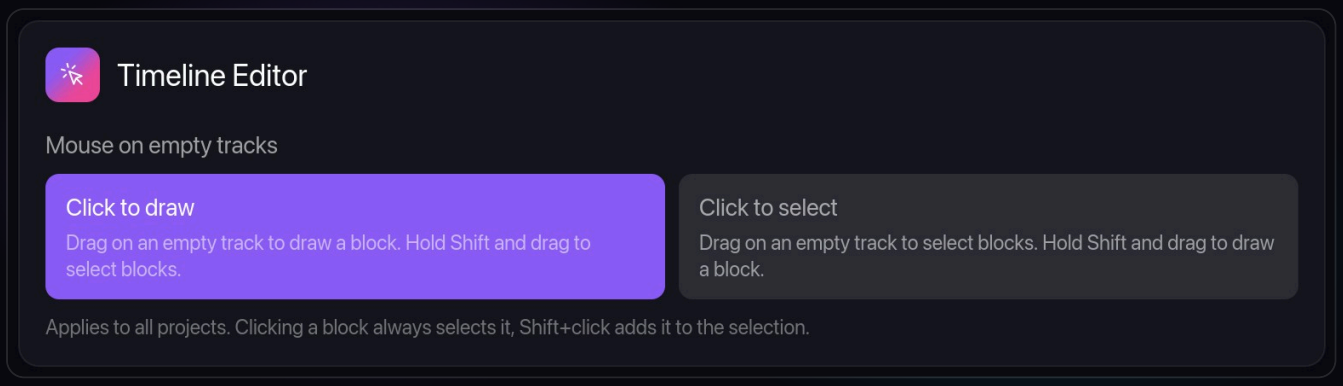


Audio Output Device — where timeline audio plays, such as an audio interface on stage. **System Default** follows macOS. Changes apply immediately.

7.4

Timeline Editor

Choose what a plain drag on an empty track does. This is an app-wide preference, not part of the project — it applies to every project you open.



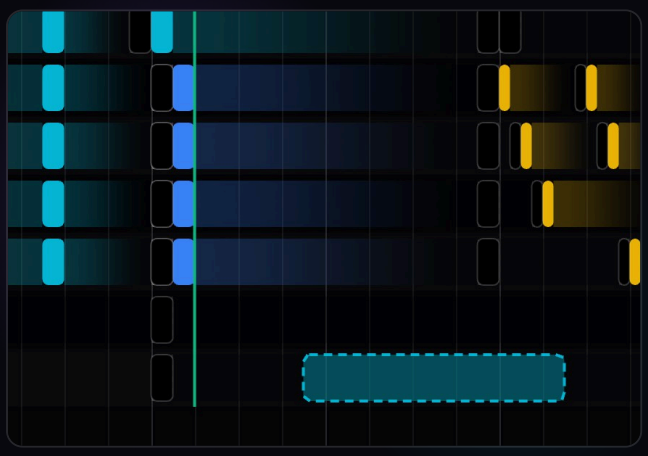
Click to draw · default

DRAG	Draws a block — pen pointer
SHIFT-DRAG	Marquee select

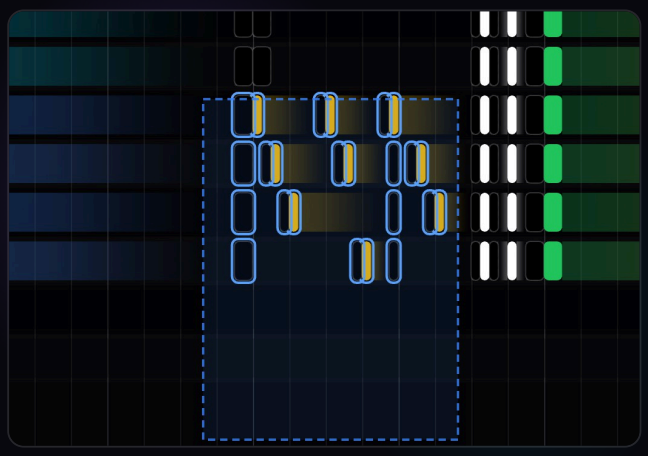
Click to select

DRAG	Marquee select — crosshair pointer
SHIFT-DRAG	Draws a block — pen pointer

In both modes, clicking a block always selects it, and ⇧-clicking a block always adds it to the selection or takes it out. The hint bar under the tracks shows what ⇧ does in the current mode.



Drawing — the dashed outline is the block you're about to create.



Selecting — everything the rectangle touches will be selected.

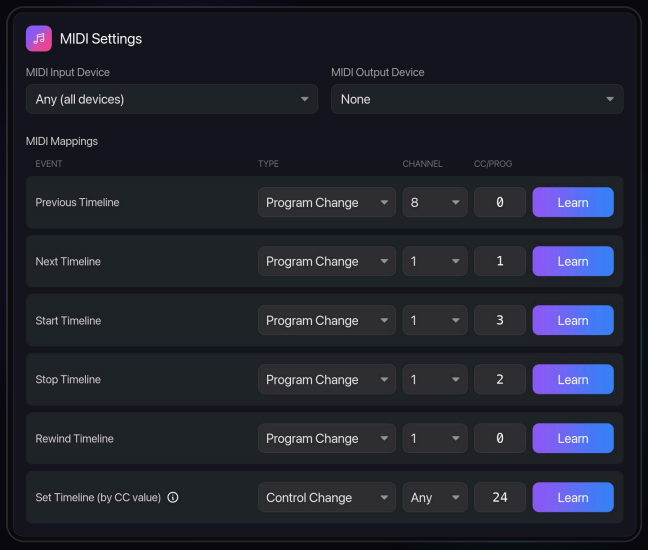
COMING FROM A VIDEO EDITOR?

Click to select works like most video editors: drag across empty space to select. Hold ⇧ whenever you want to draw.

7.5

MIDI Settings

Run the show from a MIDI controller, a footswitch or your backing-track rig.



- **MIDI Input Device** — which device to take control from. **Any (all devices)** listens to all of them. DMXRoll notices devices being plugged in and out.
- **MIDI Output Device** — your choice is remembered, but this version doesn't send any MIDI yet.
- **MIDI Mappings** link MIDI messages to actions. Columns: **Event** (the action), **Type** (Control Change or Program Change), **Channel** (Any or 1–16) and **CC/Prog** (controller or program number, 0–127).
- **Learn** — click it (it changes to "Listening") and the first MIDI message that arrives is assigned to that action: type, number and channel.

ACTION	WHAT IT DOES
Previous Timeline	The previous timeline, like ⇧ Tab.
Next Timeline	The next timeline, like Tab.
Start Timeline	Starts playback (when stopped).
Stop Timeline	Stops playback (when playing).
Rewind Timeline	Moves the playhead to the start.
Set Timeline	Picks a timeline by number. With Control Change the controller's value decides; with Program Change, the program number — 0 is the first timeline in the list, 1 the second, and so on. With Program Change it reacts to any program on that channel.

DEFAULTS FOR NEW PROJECTS

Control Change on any channel: **Next 20**, **Previous 21**, **Stop 22**, **Start 23**, **Set Timeline 24**, **Rewind 25**.

08 · REFERENCE

Keyboard *shortcuts*

EVERYWHERE

⌘ S	Save the project — even while typing
Space	Play / Stop
Tab ⇧ Tab	Next / previous timeline
Q W E R	Settings / Fixtures / Timelines / Stage
[ ]	Stage: Setup / Live
Esc	Clear the selection, close dialogs, cancel renaming
⌘ ⇧ P	Show the first-run screen again

EDITING

⌘ Z	Undo — on Stage (Setup) the stage history
⌘ ⇧ Z ⌘ Y	Redo
Delete ⌫	Delete selected blocks or audio; on Stage, the selected object

TIMELINES

0 – 9	Pick a palette color (and recolor the selection)
G	Snap to grid on / off
⌘ C ⌘ V	Copy / paste blocks (at the playhead)
⌘ A	Select all blocks
⌘ D	Duplicate the selection
⌘ T	Split selected blocks at the playhead
⇧ F	Fill gaps with the current color
⌘ ⇧ D	Block data editor (JSON)

ZOOM & SCROLL

⌘ + ⌘ –	Zoom in / out
⌘ 0	Default zoom
⌘-scroll · pinch	Zoom around the pointer
⇧-scroll	Scroll horizontally
Scroll over a block	Brightness of the block or selection — the view stays put

MOUSE

Drag a block	Move it (the whole selection, if selected)
⌥-drag a block	Copy blocks
Drag a block edge	Resize
⇧-click a block	Add to / remove from the selection
⇧-drag, empty track	Marquee (Click to draw) or draw (Click to select)
⌘ + marquee	Add to the selection
Double-click a color	Edit the color
Click / drag the ruler	Place the playhead / scrub

TYPING?

Single-key shortcuts — Space, letters, digits — don't work while the cursor is in a text field; there they type. Click outside the field or press Esc.

09 · REFERENCE

Files, data *& good to know*

Where your shows live

- A project is one `.dmxroll` file — an SQLite database with your fixtures, timelines, settings and audio. To move a show to another computer, copy that file.
- App preferences (such as timeline zoom and the editor mode) and the recent projects list live in `~/Library/Application Support/dmxroll` — the same folder earlier versions of DMXRoll used, so your recent projects carry over.

Coming from an earlier version

- Projects from earlier versions of DMXRoll open without any conversion, and data this version doesn't recognize is preserved when you save.
- Earlier versions don't know Constant channels, so don't open projects that use them in an older DMXRoll.

Requirements

- A Mac with Apple silicon (M1 or later).
- For network output: an Art-Net or sACN node on your network. For USB: an Enttec USB Pro–compatible or FTDI-based Open DMX interface — or another device through OLA.

Good to know

- MIDI Output doesn't send messages yet.
- Identify doesn't work during playback.
- A few complex emoji (such as a running person with an arrow) don't display in names — the rest of the name shows normally.

DMXRoll

Program your lights

like you program your music.

DMXROLL.COM