PowerShow

User Manual

Release 1.0.7 (20261103002)
3 November 2026
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If PowerShow is not yet on this Mac, start with chapter 2, Installation, then come back to chapter 1, Quick Start. The same manual is inside the app, under Help ▸ PowerShow Help, where it can also be searched.

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Chapter 1

Quick Start

From a fresh install to a song on the screen: backups, your main screen, a confidence monitor and its layout, your first song, and a reel of announcements.

What this chapter sets up

This chapter takes a newly installed PowerShow to the point of running a song on your main screen, with the words on the screen and what is coming next on a confidence monitor for the band, and a reel of announcement pictures ready to go. Each step is short; the chapter it comes from has the detail.

Note If PowerShow is not installed yet, start with chapter 2, Installation, and come back here.

Before you start

- Connect the main screen — a projector or a TV — and the confidence monitor to the Mac.
- Have a song to import: a .pro file from ProPresenter 7, or a CCLI SongSelect account to download lyrics from.
- For the announcements, have a folder of pictures in Google Drive, with Google Drive for desktop installed on this Mac.

Note You can do all of this away from the venue. Leave a screen's destination on Placeholder and it appears only in the Run pane's preview, then point it at the real screen on the day.

Step 1: Choose a backup folder

PowerShow keeps everything you build — decks, shows, layouts and settings — in its library. Whenever a new version of PowerShow opens the library for the first time, it copies the library into a backup folder first, so an update can always be undone.

The first time PowerShow opens, after the licence, a sheet explains this, and Continue asks for a folder. If you chose one then, go on to step 2. Otherwise, or to check:

1. Choose PowerShow ▸ Settings… (Command-comma) and click Storage in the sidebar.
2. Under Backups, click Choose… beside Location — Change… if a folder is set already. The window that opens starts in your Documents folder.
3. Click New Folder, name it PowerShow, and open it. If Documents already has a PowerShow folder, just open that.
4. Click New Folder again and name it Backups. With Backups selected, click Use This Folder.
5. Click Back Up Now. Last Backup shows the time and what was copied.

Note Backups hold your decks and settings, not your pictures, videos or music —

PowerShow only ever reads those from where they already are. A folder on another drive, or one that syncs to the cloud, protects against more than one in Documents does. To put a backup back, see "Restoring a backup" in chapter 3.

Step 2: Set up your main screen

A display is a named output: the canvas you compose slides against, and where it goes. A new library already has one, called Main Screen, that goes nowhere yet.

1. Make sure the Mac extends onto the projector or TV rather than mirroring its own screen: in System Settings ▸ Displays, select it and set Use as to Extended display.
2. In PowerShow, open Settings ▸ Displays and select Main Screen. If the list is empty, click + to add a display.
3. Leave Role on Presenter. A presenter display shows the slides to the room.
4. Set Resolution to match the screen — 1920 × 1080 suits most projectors and TVs.
5. Under Segment 1, set Destination to HDMI / Display Port, then choose the projector or TV from Screen.
6. Make sure Enabled is ticked, and close Settings.

Note Rename the display whatever says where it is — Stage Screen, say. The name is only a label. For an AirPlay screen, a stream or a capture card, and for two projectors blended into one picture, see "Setting up your displays" in chapter 3.

Step 3: Add a confidence monitor

A confidence monitor is a screen the band and the speakers can see. It shows them a layout — the words on the main screen now, what is coming next, the time — rather than the slides themselves.

1. Connect the monitor and set it to Extended display in System Settings ▸ Displays, as in step 2.
2. In Settings ▸ Displays, click + and name the new display Confidence Monitor.
3. Set Role to Confidence Monitor.
4. Set Resolution to match the monitor.
5. Under Segment 1, set Destination to HDMI / Display Port, then choose the monitor from Screen.
6. Leave Layout on None for now: step 5 builds one.

Note Until it has a layout, a confidence monitor shows black, and Settings says so in orange. That is expected at this point.

Step 4: Import your first song

A song is a deck whose slides belong to sections — verses, choruses, a bridge — each in its own colour. PowerShow brings songs across from ProPresenter, and from the lyrics CCLI SongSelect lets you download, without retyping anything.

From ProPresenter

1. Find the song's .pro file. ProPresenter 7 keeps one file per song, usually in Documents ▸ ProPresenter ▸ Libraries.
2. Choose File ▸ Import ▸ Song Files… and select it. To bring a whole library across at once, choose Song Folder… and select the folder instead.
3. Check the sheet: it lists each section and the group it will go in. Choose the deck folder for it — Decks, in a new library — and click Import.

From a CCLI SongSelect download

1. Choose File ▸ Import ▸ From SongSelect… and, when SongSelect opens in your web browser, sign in with your church's account.
2. Find the song and download its lyrics as a text file.
3. Back in PowerShow, choose File ▸ Import ▸ Song Files… and select the file you downloaded — it is in your Downloads folder unless your browser saves downloads somewhere else.
4. Check the sheet, choose the deck folder for it, and click Import.

The song opens in the Flow pane, which pours its words across as many slides as it takes. Its CCLI number, writers and copyright come with it. How many lines go on a slide, the order the sections are sung in, and the section colours can all be changed — see chapter 5.

Note Bringing many songs across from SongSelect? Settings ▸ Importing can import every lyric file that lands in a folder by itself — see "From SongSelect, and importing automatically" in chapter 5.

Step 5: Build a layout for the confidence monitor

A layout is a slide whose objects fill themselves in from whatever is on air. This one shows the band the words on the main screen in large type, the next slide's words underneath, and the time.

1. Click Layouts in the workspace switcher at the top of the window.
2. Click + below the list of layouts. In the toolbar, name it Band Monitor and set Canvas to the monitor's resolution.
3. Choose Add ▸ Dynamic ▸ Current Slide (text). Drag it to fill the top two thirds of the canvas, and on the Text tab of the inspector on the right make the text large.
4. Choose Add ▸ Dynamic ▸ Next Slide (text). Put it along the bottom, smaller, in a different colour, so the two are never confused.
5. Choose Add ▸ Dynamic ▸ Date / Time for a clock, and put it in a corner.
6. Open Settings ▸ Displays, select Confidence Monitor, and set Layout to Band Monitor.

In the Layouts pane the objects show sample words, so there is something to arrange. On air

they show what is really on the main screen.

Note Next Group shows the name of the coming section — Chorus, Bridge — and can be painted in that section's own colour. Deck Progress shows how far through the song the band is. Current Slide Notes shows what you have written in the notes box under each slide in the Edit pane. All three are under Add ▸ Dynamic; chapter 6 has the rest.

Step 6: Make a smart deck of announcements

A smart deck follows a folder of pictures: put a picture in the folder and a slide appears; take it out and its slide goes. With the folder in Google Drive, whoever looks after the announcements can change them from any computer, and the deck keeps up by itself.

1. In Google Drive, make a folder called Announcements and put the pictures in it. Name them in the order they should run — 01 Welcome, 02 Morning Tea, 03 Youth Group — since the slides follow the names.
2. On this Mac, find the folder under Google Drive in the Finder's sidebar. Right-click it and turn on Google Drive's Available offline, so the pictures are on this Mac before the service rather than fetched while it runs.
3. In PowerShow, choose File ▸ New Deck…, name it Announcements, and leave Type on Presentation.
4. Beside Slides From, click Choose Folder…, choose Google Drive in the sidebar of the window that opens, then the Announcements folder, and click Use Folder.
5. Click Create. The deck fills with a slide for each picture.
6. To run the pictures by themselves, click Run in the workspace switcher, then choose an interval — 10 seconds, say — from the menu reading Manual in the deck's header. The reel goes back to its first picture at the end; the repeat button beside the menu turns that off.

- A picture added to the folder — from this Mac or any other — becomes a slide once Google Drive has brought it to this Mac. One taken out of the folder takes its slide with it. If a change does not show, quitting and opening PowerShow again brings every smart deck up to date.
- A slide that came from the folder cannot be deleted in PowerShow, because the picture would bring it straight back. Take the picture out of the folder instead.
- If the pictures are a different shape from the screen, right-click the deck in the sidebar, choose Smart Deck Settings…, and set Fit to Fill.

Note If Google Drive is signed out or not running, the folder cannot be read. The deck stays exactly as it was rather than emptying, and catches up once Google Drive is back. Chapter 4 has the rest of what a smart deck can do.

Putting it on the screens

1. In the sidebar, click the Decks folder, then the song.
2. Click Run in the workspace switcher. The song's slides fill the middle of the window.
3. Click Go Live in the control bar. The main screen goes black and the confidence monitor

shows Band Monitor.

4. Click the first slide. It is on the main screen at once, and the confidence monitor shows its words and the next slide's.
5. Press the right arrow key, or a presentation clicker's Next button, to move on.
6. Click Stop Outputs when you have finished.

Warning Clicking a slide puts it on the main screen straight away, with nothing to confirm. That is deliberate — an operator in a service should never have to answer a question — so remember that clicking about the grid while live is seen by the room.

Where to go next

A whole service
A show puts decks in order — songs, the sermon, the announcements — divided by section headers. Choose File ▸ New Show…, then drag decks onto it from the sidebar. Chapter 3.

Building slides
Text, pictures, video, backgrounds and transitions in the Edit pane. Chapter 4.

Songs
Groups, arrangements, and the Flow pane. Chapter 5.

Bible readings
A passage fetched, laid out and put on the screen in moments. Chapter 7.

Overlays
A speaker's name or a message laid over whatever is on air. Chapter 8.

Cues and timers
Lighting, sound and other equipment cued from slides, and countdowns on any screen. Chapters 9 and 10.

Remote control
Driving PowerShow from a phone, Bitfocus Companion or anything else on the network. Chapter 12.

Chapter 2

Installation

Which Macs and macOS versions PowerShow runs on, installing it, and installing the NDI® and Blackmagic Design Desktop Video software it can send through.

What you need

This manual describes PowerShow 1.0.7 (20261103002). Everything below is what this release needs; a later release may need something newer, and its own copy of this chapter will say so.

macOS
: macOS 14 Sonoma or later. PowerShow is developed and used day to day on macOS 26 Tahoe; it is built to run on every version from macOS 14 Sonoma onwards, but the versions in between have been tested less. If something misbehaves on an older macOS, say which version it is when you report it.

Mac
: Apple silicon or Intel. PowerShow is a universal app, so the same copy runs natively on both.

Screens
: Any display macOS can drive — HDMI, DisplayPort, USB-C or AirPlay. PowerShow uses the screens macOS already has; nothing extra is installed for them.

NDI (optional)
: To send or receive video over the network. Needs the NDI runtime, installed separately — see "Installing NDI®".

Blackmagic Design DeckLink or UltraStudio (optional)
: To send SDI or HDMI from a Blackmagic Design card. Needs Blackmagic Design Desktop Video, installed separately — see "Installing Blackmagic Design Desktop Video".

Keynote (optional)
: Only for importing PowerPoint files, which Keynote draws for PowerShow. Free from the App Store.

Note Neither NDI nor Desktop Video is needed to install or run PowerShow. Without them, PowerShow starts and works normally, and an NDI or DeckLink destination simply says what is missing.

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Installing PowerShow

1. PowerShow comes as a disk image, a .dmg. Double-click it and a window opens: PowerShow with an arrow to the Applications folder, and underneath, this manual as a PDF and the Companion module.
2. Drag PowerShow onto the Applications folder in that window.
3. Eject the disk image: click ⏏ beside PowerShow in the Finder's sidebar. The .dmg can then go in the Bin, or be kept to install from again.
4. Open PowerShow from the Applications folder, not from the disk image. The first time, macOS asks whether you are sure you want to open an app downloaded from the Internet — click Open. See "The first time you open it" below.
5. PowerShow shows its licence agreement the first time it opens on a Mac, and again if the terms ever change. Read it and click Agree to carry on; Decline quits. You can read it again at any time from PowerShow ▸ Licence….
6. PowerShow creates its library, the folder that holds your decks, shows and settings. By default that is ~/Library/Application Support/PowerShow; see "Where your library lives" in chapter 3 to keep it somewhere else.
7. The first time a new build opens your library, it backs the library up before changing anything. If no backup folder has been chosen yet, a sheet says what the backups are for; click Continue and choose a folder outside the library. We suggest Documents ▸ PowerShow ▸ Backups — step 1 of the Quick Start, in chapter 1, shows how to make it.
8. Carry on with chapter 1, Quick Start, to set up your screens and run your first song.

Note PowerShow does not need an installer, and nothing is put anywhere except the application and its library. To remove it, quit it and drag it to the Bin; the library stays where it is until you delete it too.

Note The manual in the disk image is the same as the one inside the app, under Help ▸ PowerShow Help. To make a fresh copy — to print, or to send to somebody setting up another Mac — choose Help ▸ Save Manual as PDF…. The Companion module beside it is for Bitfocus Companion; see "Using it from Companion" in chapter 12.

The first time you open it

PowerShow is signed with MU Systems' Apple Developer ID and notarised by Apple, which means Apple has checked it for malicious software. The first time a copy downloaded from the Internet opens, macOS asks whether you are sure you want to open it. Click Open. It does not ask again for that copy.

Note A build of PowerShow from before it was notarised is refused the first time instead, because macOS cannot check it. On macOS 15 Sequoia and later, open System Settings ▸ Privacy & Security, click Open Anyway next to "PowerShow was blocked to protect your Mac" and confirm with your password or Touch ID. On macOS 14 Sonoma, Control-click PowerShow in the Applications folder, choose Open, then click Open again. Installing a current build avoids this.

Permissions macOS will ask for

macOS asks before an app uses the network, a camera, a microphone or another app. PowerShow asks at the moment it first needs each one, not at launch, so you may not see all of these. Say yes to each one you use; if you said no by mistake, change it in System Settings ▸ Privacy & Security.

Local Network
: For NDI, and for sending to Companion, OSC and other devices on the network. Without it NDI sources are published to nobody and found on nobody else's machine, while everything looks correct.

Camera
: For a camera object on a slide. Without it the camera delivers nothing.

Microphone
: For routing an audio input in Settings ▸ Audio. Without it the routing carries silence.

Automation (Keynote)
: For importing PowerPoint files. Without it no slides can be drawn.

Incoming connections
: If the macOS firewall is on, it may ask whether PowerShow may accept incoming network connections. Allow it: NDI receivers, the remote control page and Companion all connect in to PowerShow.

Note Because PowerShow is signed with a Developer ID, macOS remembers these permissions when you install a newer build. The first notarised build may ask once more, because to macOS it is signed differently from the builds before it.

Installing NDI®

NDI is how PowerShow sends a display's picture over the network, and how it shows another machine's NDI source on a slide. PowerShow never includes the NDI software itself — it belongs to Vizrt NDI AB, who distribute it — so it is installed separately, once.

Built against
: NDI SDK 6.3.

Recommended
: NDI 6 — the current NDI Tools, or the NDI SDK for Apple.

Tested with
: 6.3.2, from the NDI SDK for Apple; 6.0.1, from NDI Tools.

Oldest that should work
: NDI 5. Every function PowerShow uses exists in NDI 5, but nothing older than NDI 6 has been tried. Older than NDI 5 is not supported.

Installing it

1. Download NDI Tools for macOS from ndi.video (free). This is the simplest choice, and gives you NDI Video Monitor for checking PowerShow's output too.

2. Run the installer and follow its steps.
3. Quit and reopen PowerShow if it was running. It looks for NDI when it starts.
4. Check it was found — see "Checking it all works" below.

The NDI SDK for Apple, from the same site, works just as well and is what developers usually have installed. You can have both; see below for which one PowerShow uses.

Where PowerShow looks

NDI Tools puts its NDI library inside its own applications rather than anywhere standard, so PowerShow searches several places and uses the first copy that has everything it needs:

1. A file you chose yourself with the Locate… button in Settings ▸ Displays.
2. The folders named by the NDI_RUNTIME_DIR_V6, NDI_RUNTIME_DIR_V5 or NDI_RUNTIME_DIR_V4 environment variables, if set.
3. /usr/local/lib and /opt/homebrew/lib.
4. The NDI SDK for Apple, in /Library/NDI SDK for Apple/lib/macOS.
5. Inside the NDI applications in the Applications folder — which is where NDI Tools puts it.
6. Anywhere else macOS normally finds libraries.

Note With both the SDK and NDI Tools installed, the SDK's copy is found first. If you want a particular copy used, choose it with Locate… — the file is called libndi.dylib (or libndi_advanced.dylib inside the NDI Tools apps).

Warning If PowerShow says NDI is not found and you know it is installed, use Locate… and choose the library by hand. If it says the runtime was found but is missing entry points, that copy is too old or incomplete — install a current NDI, or choose a different copy with Locate….

Installing Blackmagic Design Desktop Video

A Blackmagic Design DeckLink card or UltraStudio sends a display's picture down SDI or HDMI as a real video signal, and can bring a live signal into a slide. Blackmagic Design's Desktop Video software is what lets any application use one, and PowerShow uses the copy it installs.

Required
Desktop Video 16.0 or later.

Why that version
PowerShow is built against the DeckLink SDK 16.0. An older Desktop Video lists the device and then offers it no outputs, and Settings says so: "attached but offering no output, because Desktop Video … is older than the 16.0 SDK".

Tested with
Desktop Video 16.3 with a DeckLink Duo 2, sending and capturing.

1. Download Desktop Video for macOS, version 16.0 or later, from the support pages at blackmagicdesign.com.

2. Run the installer. macOS may ask you to allow Blackmagic Design's system software in System Settings — under Privacy & Security, or General ▸ Login Items & Extensions on newer macOS. Allow it.
3. Restart the Mac when the installer asks you to. The card is not available until you do.
4. Connect the card or UltraStudio if it is not already, and open PowerShow.
5. Check it was found — see "Checking it all works" below.

- PowerShow uses Desktop Video without copying any of it: it is opened from /Library/Frameworks when needed. A Mac without Desktop Video still runs PowerShow; a DeckLink destination there simply says Desktop Video is not installed.
- Update Desktop Video the usual way, from Blackmagic Design. PowerShow picks up a new version the next time it starts.
- Both directions are in use: sending a display to a card, and bringing a card's input into a slide.

Checking it all works

1. Open Settings ▸ Displays and add a display, or select one.
2. Select one of its segments and set its destination to NDI. The NDI Runtime row shows a green tick and the version found — for example "NDI SDK APPLE … 6.3.2.0" — with the file it came from underneath. An orange warning says what is wrong instead.
3. Set a segment's destination to DeckLink. With Desktop Video installed and a card connected, the device is listed, and choosing it says whether it supports the display's resolution and frame rate.
4. Go live. An NDI display appears in NDI Video Monitor on another Mac on the same network; a DeckLink output appears on whatever is plugged into it.
5. Watch the status strip at the foot of the Run pane: each output shows its frame rate and, for NDI, how many receivers are connected.

Updating PowerShow

PowerShow keeps itself up to date. It checks for a new version when it starts and every few hours after, downloads it in the background, and checks that it really is a release from MU Systems before offering it. Then a Software Update window shows what has changed, with three choices:

Install and Relaunch
PowerShow quits, puts the new version where the old one was, and opens it. The old version goes to the Bin, so it can be put back.

Later
Nothing changes. The update is kept and offered again at the next check, even after PowerShow has been quit and opened again, without being downloaded a second time.

Skip This Version
That version is not offered again by itself. A newer one still is, and Check for Updates still offers it.

Nothing is installed without you choosing to, and nothing is offered while the outputs are live:

an update found during a service waits until you stop them. To look for one yourself, choose PowerShow ▸ Check for Updates….

The first time a new build opens your library, it backs the library up before changing anything, so the previous version can always be restored.

After an update, PowerShow shows What's New: the notes of every release since the version this Mac had before, so a Mac that missed a few sees them all. It waits while the outputs are live, and in Express Mode, and appears once they stop. To read the notes again at any time, choose PowerShow ▸ Release Notes. They come with PowerShow itself, so they are there without an internet connection.

Note Release Notes shows the releases for the updates this Mac takes. On Stable you see stable releases; on Beta, betas as well. The notes of the version you are running are always shown.

Note A Mac that runs services unattended can be left alone: turn off Check for updates automatically in Settings ▸ General, and use Check for Updates between services.

Note Settings ▸ General ▸ Updates chooses which releases this Mac gets. Stable is the release every site gets. Beta adds versions that come out before every site has them; choose it only if you've been asked to try one. Going back to Stable doesn't undo a beta: PowerShow stays as it is until the next stable release newer than it.

Note PowerShow can only replace itself where your account is allowed to change the folder it is in. If it says it can't, sign in as an administrator, or move PowerShow to the Applications folder if it is running from Downloads.

Note A copy of PowerShow from before it could update itself has to be replaced by hand: quit it, replace it in the Applications folder with the new copy, and open the new one.

Note NDI and Desktop Video are updated separately, from their own makers. Check the versions above still apply when you update PowerShow: a release that needs something newer says so in this chapter.

Chapter 3

Getting Started

What the panes and the library are for, how to set up your screens, and how to put something on them.

What PowerShow is

PowerShow sends slides to several destinations at once — a projector or screen over HDMI or DisplayPort, an AirPlay display, an NDI® stream over the network, a Blackmagic Design DeckLink or UltraStudio card, or a placeholder that appears only in the app's own preview. One canvas can also be spread across several projectors and edge-blended into a single picture.

Everything you build lives in a library: a folder of plain JSON files that you can copy, back up, or keep on an external drive. Nothing is hidden in a database.

Note PowerShow is still being built. Where a feature is not finished, this manual says so rather than leaving it out — so you can tell the difference between looking in the wrong place and looking for something that does not exist yet.

The vocabulary

Four words are used precisely throughout the app and this manual. Getting them straight makes everything else easier.

Deck
: The unit of authoring: a set of slides on one design canvas. A song is a deck. A sermon's slides are a deck. A deck lives in exactly one deck folder.

Show
: A running order: an ordered list of references to decks, divided by section headers. The same deck can appear in as many shows as you like, and twice in one show.

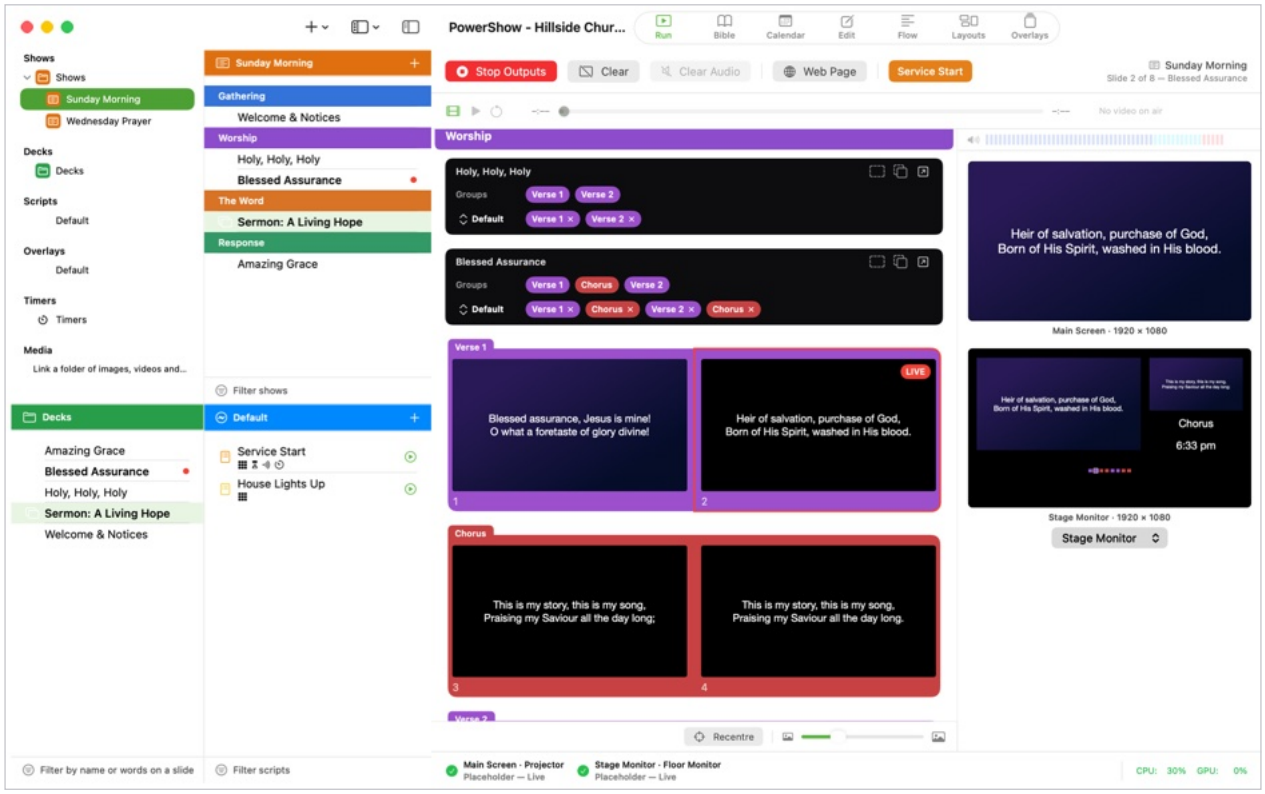
Slide
: One screenful, holding objects — text, images, video, shapes, live inputs and dynamic objects that resolve against whatever is on air.

Display
: A named output with its own logical canvas and one or more segments. A display with one segment is an ordinary screen; several segments spread one canvas across several projectors.

Note Before 19 August 2026 the word "show" meant what is now called a deck. If you have notes or files from then, that is the change.

The window

The main window has three parts: the workspace switcher along the top, the library sidebar down the left, and the pane you are working in filling the rest.



The Run pane during a service. The library sidebar is on the left, with the running order of the selected show below it; the slides of each deck fill the middle, and the preview of every display going to air is on the right.

The workspace switcher

Run

The running order as a grid of slide thumbnails. This is the pane you operate a service from.

Bible

Fetch a passage, dress it in a layout, and put it on the screen — see chapter 7.

Edit

The slide editor: a canvas, an object list and an inspector. Chapter 4.

Flow

One body of text flowed across as many slides as it takes. The fastest way to build a song or a reading. Chapter 5.

Layouts

Arrangements of live information for confidence monitors and lower thirds. Chapter 6.

Overlays

Objects laid over whatever is on air, switched on and off without moving the running order. Chapter 8.

The library sidebar

The top half is a tree of containers; clicking one lists its contents in the bottom half. The two halves are one act: name a thing above, work with what is in it below.

The Add menu at the top of the sidebar makes new decks, shows, scripts and folders, and links folders of media. Beside it is the listing column menu — see "A second listing column" below. With the sidebar hidden, both move beside the sidebar button, so they are always to hand.

Decks
: Folders of decks. Click a folder to list its decks; click a deck to open it in the editor.

Shows
: Folders of shows. Expand a folder, click a show, and its running order appears below.

Scripts
: Folders of scripts — named lists of triggers that slides can run. Chapter 9.

Overlays
: Folders of overlays, each with a play button that puts it on the screen.

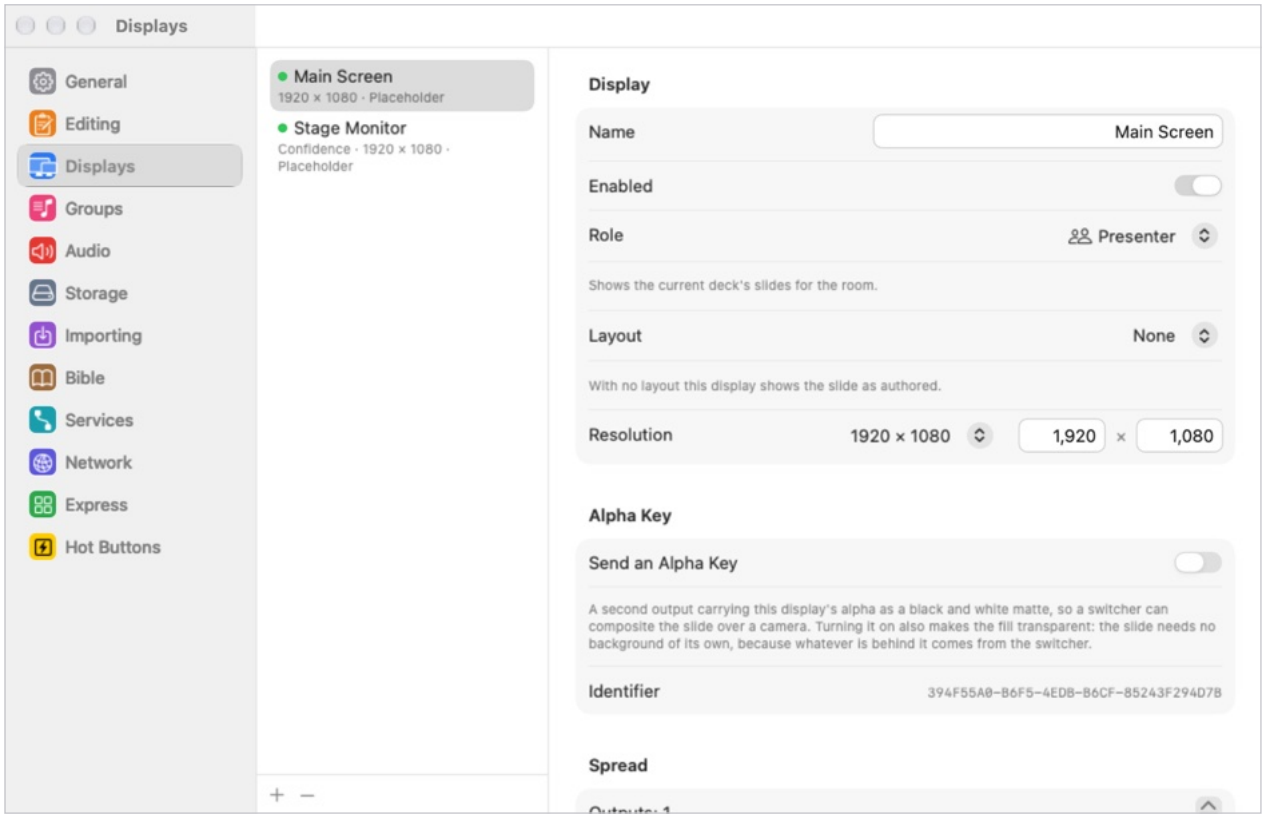
Timers
: The library's countdowns and count ups, with a live reading and transport for each. Chapter 10.

Media
: Links to folders of images, videos and audio elsewhere on this Mac. Nothing is copied or imported.

Note Selecting a show is what tells the Run pane what to run. Browsing a deck folder or a media folder deliberately does not change the running order — mid-service is the worst possible moment for the programme to change because somebody went looking for a picture.

Setting up your displays

A display is a named output. It has a logical canvas — the size everything is composed against — and one or more segments, each of which goes somewhere real.



Settings ▸ Displays, with a projector and a confidence monitor. Both are placeholders here, which is how a service can be built away from the venue.

1. Open Settings with Command-comma and choose Displays in the sidebar.
2. Click + to add a display, and give it a name that says where it is: "Stage Screen", "Foyer TV", "Stream". The name is editable at any time and nothing else depends on it.
3. Set the display's resolution. This is the canvas you author against, not necessarily the pixels that go down the wire.
4. Choose the role. A Presenter shows the deck to the room; a Confidence Monitor shows a layout of live information to the team.
5. For each segment, choose a target: a screen macOS can see, an NDI stream, a DeckLink device, or a Placeholder.
6. Tick Enabled, and close Settings.

Targets

HDMI / DisplayPort / AirPlay

Any screen macOS already has. PowerShow opens a borderless window on it above everything else. AirPlay displays appear here once macOS has connected them — there is no route picker inside PowerShow yet.

NDI

A video stream over the network. Requires the NDI runtime to be installed; see chapter 2 to

install it and chapter 11 to use it.

DeckLink
A Blackmagic Design playback device. Requires Blackmagic Design Desktop Video; see chapter 2 to install it and chapter 11 to use it.

Placeholder
A routed output with no hardware behind it. It appears in the Run pane's preview and the status strip and opens no window — useful for building a service before you are at the venue.

Warning Screens are matched by their display ID first and their name second, so a projector re-plugged into a different port is usually still recognised. If a display goes to the wrong screen, check the target in Settings before changing anything else.

Spreading one canvas across several projectors

Two projectors side by side can show one continuous image, with their overlapping edges blended so the seam disappears. You set the canvas you want and how much the projectors overlap; PowerShow works out the rest.

1. In Settings ▸ Displays, select the display and set its resolution to the whole wall — for example 3449 × 1080 for two 1920 × 1080 projectors overlapping by 391 pixels.
2. Set the number of segments to the number of projectors.
3. Set the overlap in pixels. Each segment is given its slice of the canvas, with neighbours sharing exactly that band.
4. Point each segment at its projector.
5. Decide who does the blending. Most projectors ramp their own edges better than software can, in which case leave Software Blend off.

Note Overlap and blending are separate settings on purpose. Turning software blending off does not un-overlap the projectors, and changing the overlap does not silently switch the ramps back on.

What each segment is sent as is independent of how much canvas it covers. A segment covering 1920 points of a 3449-wide canvas can still be sent to the projector as a 1920 × 1080 signal.

Note On a wall driven from DeckLink or NDI outputs, a video is played once for the whole display and every projector shows its own part of that one picture. The halves cannot drift apart however long the clip runs, and its sound comes from that one player. On a wall driven from two screen outputs, each projector plays its own copy, started together.

Going live

1. Choose a show in the sidebar, or open a single deck if you are rehearsing one.
2. Switch to the Run pane.
3. Click Go Live in the control bar. Every enabled display opens.
4. Click any slide thumbnail. It goes to air immediately — there is no confirmation step, deliberately.
5. Use the right and left arrow keys, or Next Slide and Previous Slide in the Output menu, to move through the running order.

Go Live
: Opens the routed outputs. Windows appear on their screens; NDI starts publishing; a DeckLink starts scheduled playback.

Clear
: Blanks every output but stays live. It also stops the slide's sound, takes every overlay off and stops any deck advancing on a timer — nothing is going out. Afterwards nothing is on air, so Next goes to the first slide of the running order — click the slide you want instead. To black one screen and keep your place, use a Clear trigger scoped to a display (chapter 9).

Stop Outputs
: Closes the outputs entirely. The same button reads Go Live when nothing is open.

Warning Clicking a slide puts it on the screen at once. That is the design — an operator under pressure should not have to confirm anything — so be aware that clicking around the grid during a service is visible in the room.

A presentation clicker

A clicker plugged into the Mac — a Logitech, a Kensington or most others — steps the service with its Next and Back buttons, the same as the arrow keys. It does not matter where you last clicked in the window: the sidebar, the Run pane or another pane.

- PowerShow has to be the app in front. With another app in front, the clicker's presses go to that app.
- The outputs have to be live. When they are not, the buttons do nothing in PowerShow.
- While you are typing into a field, the field gets the press instead.
- Holding a button down moves one slide, not several.

Note A clicker's Next and Back reach the Mac as Page Down and Page Up, so those keys on a keyboard do the same. The clicker's other buttons are not used. If its blank-screen button sends B and a song group carries the B key, pressing it in the Run pane goes to that group.

Selecting slides in the Run pane

Slides can be selected in the Run pane to act on several at once — deleting a run of them, setting a group, or putting them all on a timer.

Live
A plain click puts the slide on the screen and selects nothing. There is no confirmation step, deliberately, and a selection you had to clear first would be one. Command-click adds a slide to the selection, shift-click takes a run of them.

Not live
A plain click selects instead — there is nothing to put on air — so you can tidy a deck before a service without going to the Edit pane. Command-click and shift-click work the same as they do live.

Right-click
Acts on the whole selection when the slide you clicked is part of it, and on that slide alone when it is not.

Note Song slides cannot be deleted from here whatever is selected. What a song runs is its arrangement, so deleting one of its slides would quietly change what is played. A mixed selection deletes the presentation slides and says how many it left.

Note A selected slide is outlined in the accent colour; the slide on air is outlined in red with a LIVE badge, so the two are never confused.

To make the slide on air easier to find at a glance, turn on Settings ▸ General ▸ Blinking LIVE badge. The badge then fades out and back in, three quarters of a second each way, for as long as the slide is live, and so does the dot beside the live deck in the sidebar. Off, both stay steady.

Taking a background off a slide

Right-click a slide in the Run pane and choose Remove Background. It happens straight away — putting one back is a matter of dragging a picture onto the slide again.

What it removes
The background that slide sets. If an earlier slide set one that carries through, that one will still be behind this slide afterwards.

When it is offered
Only on a slide that sets a background of its own. A slide that is simply showing one carried from earlier has nothing of its own to take off.

On a song
A song's backdrop carries through the whole song, so taking it off the slide that set it clears the song. The menu says so.

Note If the slide is on screen when you do it, the projector changes immediately.

Duplicating a slide

Right-click a slide in the Run pane and choose Duplicate Slide. The copy lands straight after it, carrying everything the original had — its picture, its group, its cues, its sound and its timer.

- Select several first and each one is copied, each landing after its own original.
- The copy keeps the same name. It is told apart by its number and its picture, and renaming it to "Copy" would put that word on a confidence monitor.
- On a deck built from a folder of pictures, the copy is a slide of your own rather than one belonging to a file — so it stays put when the folder is re-read, and you can edit it freely.

Note Songs are duplicated in the Edit pane rather than here. A copy of a song slide belongs to the same section, so every time that section came round it would play one slide longer — which is not what a menu item called Duplicate Slide should quietly do.

Emptying a deck

Right-click a slide in the Run pane and choose Remove Slides. Three items there take a whole run of the deck out at once: all of its slides, this slide and everything after it, or this slide and everything before it. The same Remove All Slides item is on a deck's cover tile, at either end of the deck.

It asks first
Each one puts up a question saying how many slides will go and how many will be left. This is the one thing in the Run pane that asks — nothing puts these slides back.

The whole deck, not the selection
These three act on the deck, whatever happens to be selected. Everything else in that menu acts on the ticked slides.

A deck may end up with none
Remove every slide and the deck is left empty. The deck itself stays in the library, and the Run pane keeps a space where its slides would be so you can put some back.

Note Not offered on a song or on a deck built from a folder. A song is run by its arrangement, which names sections rather than slides; a deck built from a folder puts its slides straight back the next time the folder is read. Take the files out of the folder instead.

The audio level meter

A pair of bars sits at the top of the preview panel on the right, above its controls, showing what PowerShow is putting out — a slide's own sound or playlist and the video on the slide, combined, one bar per channel.

The scale
It runs from −60 dBFS at the left to full scale at the right. Green is comfortable, amber past −18 dB is loud, and red past −6 dB means there is very little room left.

The thin line
The loudest moment lately, held for a second and a half so you can read it off before it falls. It never sits behind the bar.

CLIP
Appears when something has reached the top of the scale. That is the one thing worth watching for — audio past full scale is distorted before it leaves the Mac.

In silence
The bars stay put and empty. A meter that disappeared would leave you unable to tell no sound from no meter.

The speaker
Click it for the master volume: a fader that every sound PowerShow plays — a slide's sound or playlist, its video, a capture card — goes out through, at its own volume times the fader. The meter shows the level after it. The speaker's waves show where the fader is, and it turns orange and struck through at nothing. The fader is remembered on this Mac. Web pages and the audio matrix are not on it.

Its style
Right-click the meter to choose how it looks: Bars, a Gradient running green through orange to red, Classic Round LEDs in green, yellow and red, or 80s rectangular LEDs in blue, cyan and red — which glow very slightly — or in green, yellow and red, or Narrow Vertical LEDs in those same two sets of colours. Those last two put both channels in one row: each column is two short lamps touching, the left channel above and the right below, so where one channel is louder its half of the column lights and the other's stays dark. Every style takes the same width and reads the same scale — only the look changes. The LEDs keep the held peak as a single lamp lit on its own. The choice belongs to this Mac rather than to the library.

Note It shows this app's own sound. A web page on a slide plays through the system output rather than through PowerShow's, so it is not on the meter, and neither is the audio matrix in Settings — that patches other people's inputs to outputs rather than anything PowerShow is playing.

A deck with no slides

A deck is allowed to hold nothing. Deleting its last slide is not refused, and neither is dragging every slide out of it into another deck — the deck stays in the library with nothing in it.

In the Run pane
The deck keeps its header and its covers, and a dashed space sits where its slides would be. Right-click that space to import files as slides, or drop files straight onto it.

In the Edit pane
The canvas says "No Slide". The + above the slide list adds one, exactly as it does on any other deck.

Running a service
An empty deck has nothing to show, so the arrow keys step straight over it to the next deck. It does not stop or interrupt anything.

Note A song with no slides cannot be filled from the Run pane, because a slide put in from outside would belong to no section of the arrangement. Add its sections in the Edit or Flow pane.

Importing files as slides

Right-click a slide in the Run pane and choose Import Slides from Files. Pick one or more pictures, videos or sounds and each becomes a slide of its own, landing immediately after the slide you clicked.

- On a deck cover, the same item puts them at the start of the deck — or at the end, on the cover at the foot of the deck.
- On a deck with no slides, it is on the right-click menu of the empty space.
- On a presentation deck you are asked whether the pictures should go on the slide or behind it, exactly as dropping them into the gap between two tiles does. Sounds never ask — a sound has nowhere on a slide to be.

Note Not offered on a song. What a song runs is its arrangement, which names sections, so a slide brought in from outside would be there and never come up.

Moving a slide to another deck

Drag a slide in the Run pane and drop it on a slide of another deck. A line shows where it will land; let go and it moves there — out of the deck it came from and into the one you dropped it on.

- Drop on the left or right half of a tile to land before or after it.
- Select several first and they all move together, keeping the order they were in.
- Dropping on a slide of the same deck reorders it, exactly as it always did.

Where it is not offered

Songs

A song is run by its arrangement, which names sections. A slide taken out would leave the arrangement short, and one put in would belong to no section and never come up — a slide that is there and can never be sung.

Decks built from a folder

Their slides are maintained from the folder. One dragged out would come straight back the next time the folder was read, and one dragged in would sit in an order the folder decides. Move the file instead.

Note Neither kind will take the drop, and no line appears over their slides, so there is nothing to undo.

Note Dragging every slide out of a deck is allowed, and leaves it empty — it stays in the

library with a "No slides" space where its slides were, ready for more.

Note This is not on the Edit pane's undo, which takes back changes to a slide rather than to a deck. It is the same kind of change as deleting a slide from the Run pane.

A deck inside another deck

A deck can run inside another, at a point in its slides — a bumper in the middle of the notices, or an item built out of decks that are kept separately. It is the deck itself rather than a copy, so editing it changes it everywhere it runs.

1. In the Run pane, drag a deck from a folder in the sidebar onto a slide of the deck it should run inside.
2. Drop on the left half of the slide to run it before that slide, or on the right half to run it after.
3. Its slides appear in among the others, under a green line with its name on a tab where it starts.

Moving it

Drag the green tab with its name on it, and drop it the way you would drop a slide: in the gap between two of the other deck's slides, or at either end of another deck running inside the same one. A line shows where it will land.

- It moves within the deck it runs in. To put it in a different deck, take it out and drag it into that one from the sidebar.
- Where decks already run in a gap, the right half of the slide before the gap puts it ahead of them and the left half of the slide after puts it behind them.
- A deck with no slides of its own takes it at its "No slides" space, which is its end.

Moving slides round it

The other deck's own slides move round a nested deck exactly as they look: a slide lands where the line is drawn, and the nested deck stays where it is.

- The edges of a nested deck — the left half of its first slide and the right half of its last — are beside it. A slide from the deck around it dropped there lands next to the nested deck, not inside it. That is also how to put a slide between two nested decks that run one after the other.
- Drop anywhere else on a nested deck to move a slide into it, as with any other deck.
- Or right-click a slide and choose Move After. It lists the deck's slides by number and name, and each deck inside it as a submenu of its own slides; choose a slide and the slide you clicked — or the selected slides of that deck — moves to straight after it. To the Start puts it first. A locked deck is listed with a padlock and cannot be chosen.
- Deleting the slide just after a nested deck leaves the nested deck where it was.

Locking it

The padlock at the right-hand end of its tab locks it where it sits, and the green line along the top of its slides turns dotted. Locked, nothing about it can be changed from inside the other

deck — its slides, its covers and anything inside it — but it can still be moved by its tab, and its slides still go on air. Click the padlock again to unlock it.

Note The lock belongs to that place, not to the deck. The same deck opened on its own from its folder, or run as one of a show's own decks, can be edited as usual.

Switched-off slides

The eye in a deck's header counts and hides the switched-off slides of every deck running inside it as well as its own, since those decks have no header of their own. It appears whenever any of them has a slide switched off.

Taking it out

Right-click any of its slides and choose Take “name” Out of “name”. The deck itself stays in the library.

Note A song cannot hold another deck — it runs its arrangement rather than a list of slides — but a song can run inside something else.

Keeping up with the service

The Run pane scrolls to follow what is on air — but only when the service moves without you pointing at it.

Arrow keys and the remote
: The grid scrolls to bring the new slide into view, centred, when the service moves to a slide on a different row. Moving along a row you can already see leaves the pane alone.

Clicking a slide
: The grid does not move. You are already looking at the tile you clicked, and pulling it to the middle under the pointer is a jolt.

Recentre
: The button beside the slide-size slider at the foot of the pane. It scrolls to whatever is on air, wherever you have wandered to.

The sidebar
: The deck being run is marked with a red dot and its name in bold, so the running order shows where the service is without you leaving the Run pane.

Stopping at the end of a deck

By default the arrow keys run straight through the service, so the slide after the last one in a deck is the first slide of the next. If you would rather not overrun a song into the next item, turn on Settings ▸ General ▸ Stop at the end of a deck.

- The first press at a deck's last slide stops and says which deck is next.
- Press again to go there.
- The same going backwards, at a deck's first slide.
- A deck nested inside another is part of that item, so stepping into it or back out of it never stops. The stop comes where the item itself ends.

- Clicking a slide, a cue and an auto-advance are unaffected — this is about the keys, which are what get pressed one too many times.

Skipping a slide

A slide can be turned off without deleting it — a verse not being sung this week, a notice that has already run, a video whose licence has not arrived. Right-click the slide in the Run pane and choose Disable Slide.

- A disabled slide stays where it is, faded, and marked SKIPPED. It keeps its number and its picture, so you can see what you have taken out.
- The arrow keys and the remote step straight past it, however many are in a row.
- Clicking it selects it rather than putting it on screen, which is how you reach the menu to turn it back on.
- A deck on an auto-advance moves on to the next slide that is enabled.
- Right-click and choose Enable Slide to put it back.

Note This works on songs as well as presentations, unlike deleting. Because the flag belongs to the slide, disabling a chorus skips it every time the arrangement comes round to it.

Note Select several slides first and the menu turns all of them off at once. A mixed selection offers both, each saying how many it means.

Warning Disabling the slide that is currently on screen moves the service on to the next one. A slide that every control skips and the projector still shows is not a state worth leaving you in.

Starting PowerShow ready to go

A Mac in a rack can be told to open its outputs — and to start a service — without anybody touching it.

Settings ▸ General ▸ Go live when PowerShow starts
Opens every enabled display as soon as PowerShow starts, exactly as clicking Go Live does. Nothing is put on them; the outputs are open and waiting for you to choose a slide.

--show "Name"
Goes live and puts the first slide of that show's first deck on the screen.

--deck "Name"
Goes live and puts the first slide of that deck on the screen.

--go-live
Does what the setting does, for one launch.

```
PowerShow --show "Sunday Morning Service"
```

```
PowerShow --deck "Prayer Morning"
```

The name is the one shown in the sidebar and case does not matter. A show or a deck named on the command line goes live whatever the setting says: typing it is the more specific instruction, and the setting is the standing one.

Note The examples above run the application inside the bundle — open -a PowerShow --args --show "Sunday Morning Service" does the same thing from a script or a login item, and --library <path> can be given alongside either.

Warning If the name matches no show or deck in the library, PowerShow says so in the Run pane's status strip and does not go live. That is deliberate: a dark screen that explains itself is better than the wrong service on the projector with nothing to say it is the wrong one.

Running several decks at once

PowerShow normally puts one deck on every screen it is driving. A deck can instead be told which displays it goes to, and then several decks can be on air at the same time — the notices looping on the foyer screen while the songs run in the auditorium.

1. In the Run pane, click the display icon in the deck's header.
2. Tick the displays this deck should run on. Leave it on Any Free Display for a deck that goes wherever there is room.
3. Click a slide as usual. The deck takes the displays it named; anything else on air keeps the rest.

The one rule

The most recently started deck wins, and a protected deck cannot be displaced. Everything else follows from that:

- A deck with no targets asks for every display, which is why starting one takes the whole room back.
- Starting a deck targeted at one screen leaves every other deck exactly where it is.
- A deck left with no displays stops running. There is nowhere for it to be, and nothing on screen would say it was still going.
- Only one deck at a time can be untargeted. Starting another replaces it.

Protect From Takeover
: Nothing started later can take this deck's displays. For the screen that must keep showing the notices whatever else happens during the service.

Clear This Deck
: Takes it off the air. The screens it held go to whichever deck claims them next — a targeted deck first, then whichever deck is running untargeted. This is the only way to release a protected deck.

Which deck the arrow keys drive
: The one you last put a slide from. Its name is what the Run pane's status line and the

remote report, and its clip is what the video controls act on. Click a slide in another deck to drive that one instead.

Note The LIVE badge is red for the deck that goes wherever there is room, and a colour of its own — magenta, then orange, then green — for each targeted deck. The dot beside the deck in the left-hand list is the same colour, so you can see at a glance which deck is on which screen.

Note A deck keeps its colour for as long as it is on air, so clearing one deck never re-colours the others.

Note Clicking through a deck that is already on air does not re-date it, so advancing one deck never steals a screen from another.

Note Each deck keeps its own auto-advance, so a notice reel goes on looping while you work through the songs on another screen.

Note A deck on air does not have to be in the running order you are looking at. Switch shows and the notices deck holding the foyer screen carries on.

Warning Sound is not split between decks: one track plays at a time, and it follows the deck you last put a slide from.

Express Mode: a simple screen for whoever is running it

Express Mode is PowerShow with everything that is not "run this" taken away: a few large buttons, and then the Run pane. It is for a machine somebody runs a service on without building anything — a volunteer putting the pre-service notices up, a speaker running their own slides.

There is no sidebar, no Edit pane and no list of workspaces. What is not there cannot be clicked by mistake, which is the whole point.

Setting up the buttons

1. Open Settings ▸ Express.
2. Click + to add a button.
3. Choose whether it runs a Show or a Deck, then pick which one.
4. Give it a name, or leave the name empty to use the name of what it runs.
5. Choose a background — a colour, a wash, or a picture — the colour for the words, and an icon if you want one.
6. Drag the buttons into the order they should appear in.

Icon or text

A button can have an icon above its name, or just the name. Text alone is often clearer for

something whose name says it all.

A picture
Fills the button. The background colour still shows through underneath, so a button whose picture has been moved falls back to the colour rather than looking broken.

The picture only
With a picture chosen, Show the picture only hides the name, the icon and the Show or Deck under it — for artwork that already says what it is. If the picture goes missing, the words come back, so the button can still be found.

Not shown yet
A button with nothing chosen is listed here in orange and left out of the chooser. A large button that does nothing when somebody presses it is worse than one that is not there.

Using it

1. Turn it on from View ▸ Express Mode, or start PowerShow with --express.
2. Press a button. PowerShow opens the outputs and puts up its first slide.
3. Run the service from the Run pane as usual.
4. To run something else, press Choose in the control bar.

```
open -a PowerShow --args --express
```

Settings ▸ Express ▸ Open PowerShow in Express Mode
Makes this Mac start in Express Mode every time. That is the setting for the machine in the foyer.

View ▸ Express Mode
Turns it on for now. It does not change what happens next time PowerShow opens — the setting above is what does that.

--express
Starts in Express Mode for this launch. Name a show or a deck as well and it starts that straight away, without asking.

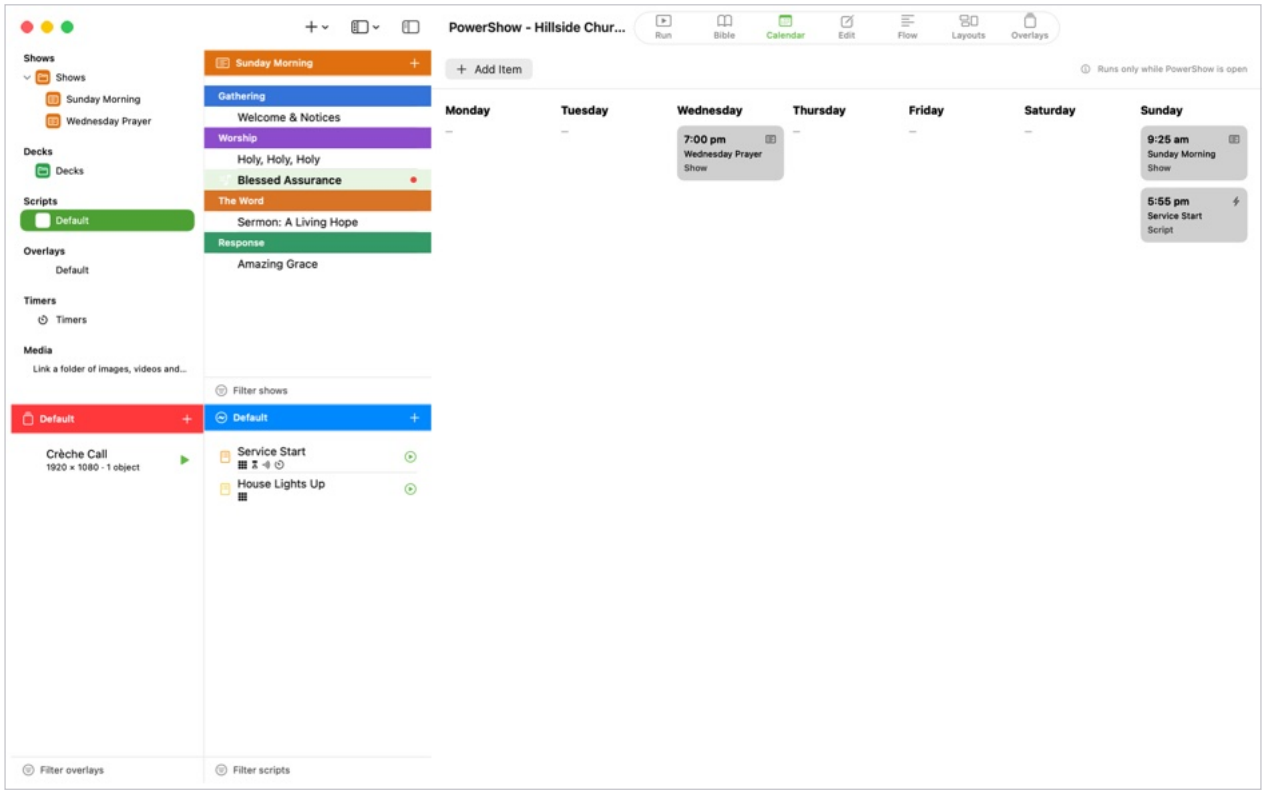
View ▸ Leave Express Mode
Goes back to the whole app. Whatever is on the screens stays there — leaving does not black the room.

Note The menu bar is not hidden, so there is always a way back out.

Note The buttons live in the library, because each one names a show or a deck. Whether this Mac opens in Express Mode is a setting on the Mac, so a library copied to another machine does not bring the mode with it.

The Calendar: doing things every week

The Calendar workspace runs a show, a deck or a script at the same time each week — a pre-service loop at nine on Sunday, house lights at seven on Thursday.



The Calendar: the days of the week across the top, and what runs on each of them underneath.

1. Switch to the Calendar workspace.
2. Click Add Item.
3. Choose whether it runs a Show, a Deck or a Script, then pick which one.
4. Tick every day it should happen on. One item can cover several days.
5. Set the time. One time covers all the days you ticked — for a different time, add a second item.
6. Save. It appears in the column for each day, in time order.

A Show or a Deck

Opens the outputs if they are not already open, then puts the first slide on the screen — the same thing as going live and clicking the first slide.

Start on

For a deck, choose which slide it starts on. The default is the first. For a song this is a section of the arrangement, and it starts the first time that section comes round.

Starting a show part way in

A scheduled show can name a deck to start at, and then a slide within that deck. Both default to the first. The show is selected when the item runs, whatever was open before.

A Script

Fires the script. It does not open the outputs: a script is show control, and opening the projectors for a lighting cue would put a black screen in front of a room that was not using

the screens.

Switch Off
Right-click an item to switch it off for a while. It stays in the table, greyed, rather than being deleted.

Run Now
Right-click an item to run it immediately — useful for checking it does what you meant before Sunday.

Warning PowerShow has to be running at the time. If it is not, the item is simply missed — nothing is caught up when you next open the app, because starting last Sunday's service on Monday morning would be worse than doing nothing.

Note Deleting a show, a deck or a script also removes any calendar item that ran it, so the table never points at something that is no longer there.

Note If the slide an item was set to start on has been deleted since, it starts at the deck's first slide and says so in the Run pane's status strip — better a service that starts in the wrong place than one that does not start. The same if a deck has been taken out of the show.

Note A deck that appears in a show more than once starts at the first time it comes round. The sheet says so when you pick one.

Note To have the Mac itself ready, set Settings ▸ General ▸ Go live when PowerShow starts, and add PowerShow to your login items.

Reading the Run pane

- The grid shows every slide the show will run, grouped by deck, with a pinned header per deck carrying its name and controls.
- The live slide has a red LIVE badge and a highlighted border.
- Small badges in a slide's top-left corner say it does something beyond appearing: a bolt for triggers and scripts, a speaker for audio, a clock for its own auto-advance.
- The preview panel shows what each output is actually sending, composited from the frames the surfaces were handed — not a re-drawing of what should be on air.
- Under the buttons, below a line, is the transport: play or hold, restart, and a scrub bar, with the name of what it is driving at the end. It is always there, greyed when there is nothing to drive.
- It shows the sound's controls when a sound is playing and no video is on air, and the video's otherwise — including when nothing is playing. The icon at its left switches between the two for the moment, say to hold a bed while a clip plays; the next change of what is on air puts it back. Play, restart and the bar sit in the same places either way.
- For video, the scrub bar moves the clip. As you drag, a picture under the bar follows roughly — the nearest whole frame the file keeps, which can be a second or more away —

and shows the exact frame once you stop. The clip itself moves when you let go, on every output together.

- For sound, it drives the file or playlist that is playing. A playlist adds previous and next track buttons; previous goes to the track before when a track has only just started, and back to the start of this one once it is a few seconds in. Next on the last track of a playlist that does not repeat stops it, as the end of that track would have. Moving through a sound happens when you let go of the bar.
- Holding the video holds the slide's sound with it, and playing the video lets it go, as it always has. Holding the sound from its own controls is the sound's alone: the video's play does not start it again.
- The status strip along the bottom lists every open surface, with its state, its frame rate, and any failures.
- At the far right of the status strip is how much processor time PowerShow itself is using, and how busy this Mac's GPU is.
- View ▸ Hide Status Bar (⌘/) hides the strip, and Show Status Bar brings it back; PowerShow remembers which you chose. While it is hidden, a message about something that could not be done still appears along the bottom on its own, and goes when the message does.
- Add ▸ Smart Image puts a QR code on a slide. Type a link in the inspector and the code appears; it is generated by PowerShow, so there is no file to lose and nothing to relink. Padding sets the clear margin round it, counted in the code's own squares — four is what scanners look for, and less is tighter on the slide but harder to scan.
- While you type into a text object, a name or a setting, the slide list, thumbnails and outputs catch up when you pause rather than with every letter. Nothing is lost: moving to another object, slide or pane saves what you typed first.
- Add ▸ AI Image opens Apple's Image Playground. Describe the picture you want, choose one, and it comes back onto the slide as an ordinary image. The file is kept in an AI Images folder inside your imports folder (~/Documents/PowerShow/Imports unless you change it in Settings ▸ Storage), so it relinks and backs up like any other picture. The item appears only on a Mac that can run Image Playground — macOS 15.1 or later on Apple silicon, with Apple Intelligence switched on — but a slide made with it plays on any Mac.
- Right-click a slide and choose Edit Slide to open its deck in the Edit pane with that slide selected. For a slide in a deck running inside another, that is the inner deck. It is not offered on a smart deck, whose slides come from its folder's files, or in Express Mode. The show being run stays as it was.
- Option-click a slide to switch it off, or back on — the same thing as Disable Slide in its right-click menu.
- A deck whose header shows an eye has switched-off slides in it, or in a deck running inside it. Click the eye to hide them and tidy the view; they stay in their decks and keep their numbers, and clicking it again brings them back.

The preview panel has two tabs. Outputs shows one picture per display, or per segment if you switch to Segments — the drill-down for checking a single card's feed. Slide shows the live slide's whole canvas, uncropped.

- View ▸ Previews chooses which displays the panel shows: Show All, Show None, or tick each display. A display added later shows until you untick it. If everything on air is unticked, the panel says so rather than claiming nothing is on air.
- View ▸ Hide Preview Controls takes away the tabs and the Displays and Segments switch,

leaving just the displays going to air, as Previews chooses them. Show Preview Controls brings them back. Both choices are remembered on this Mac.

- Leaving a display out of the panel never silences a clip. On a desk with only placeholder outputs, where the panel itself plays a clip's sound, it goes on playing it.

Note The processor figure is a percentage of one core, the same number Activity Monitor shows for the app, so it can go past 100% on a Mac with cores to spare without anything being wrong — 150% is a core and a half's worth of work spread across several. It covers PowerShow alone, not the whole machine.

It is green, yellow or red depending on how close PowerShow is to a ceiling, and there are two: how much of this Mac's cores it is using, and how full its main thread is. The colour follows whichever is nearer, which is why the figure can turn yellow at 100% on a large Mac and stay green at 300% on the same machine — one busy thread is a ceiling however many cores are idle beside it. Hover over it to see the main thread's own figure.

The graphics figure beside it is the whole Mac, including every other application — macOS does not report a per-app share. It is worth a look when the picture stutters while the processor figure looks healthy: something else competing for the GPU shows up there and nowhere else.

Warning A yellow or red reading is worth a glance when scrolling text judders, or when the clips on a wall driven from screen outputs are not quite staying together: a full main thread is what makes a synchronised start arrive late, and it can happen while the Mac as a whole looks idle.

Note Leaving the Run pane and coming back returns you to the slide that is on air, or to the top of the deck you were working on.

Finding things in the sidebar

The field at the foot of the lower sidebar pane filters whatever is listed above it — decks in a folder, the decks in a show, scripts, overlays, timers or the files in a media folder.

For decks it searches the words on the slides as well as the name. Decks whose name matches come first; under a "Found on a slide" heading come the ones whose words match, each showing the line the words were found on — so a half-remembered phrase finds the song it belongs to.

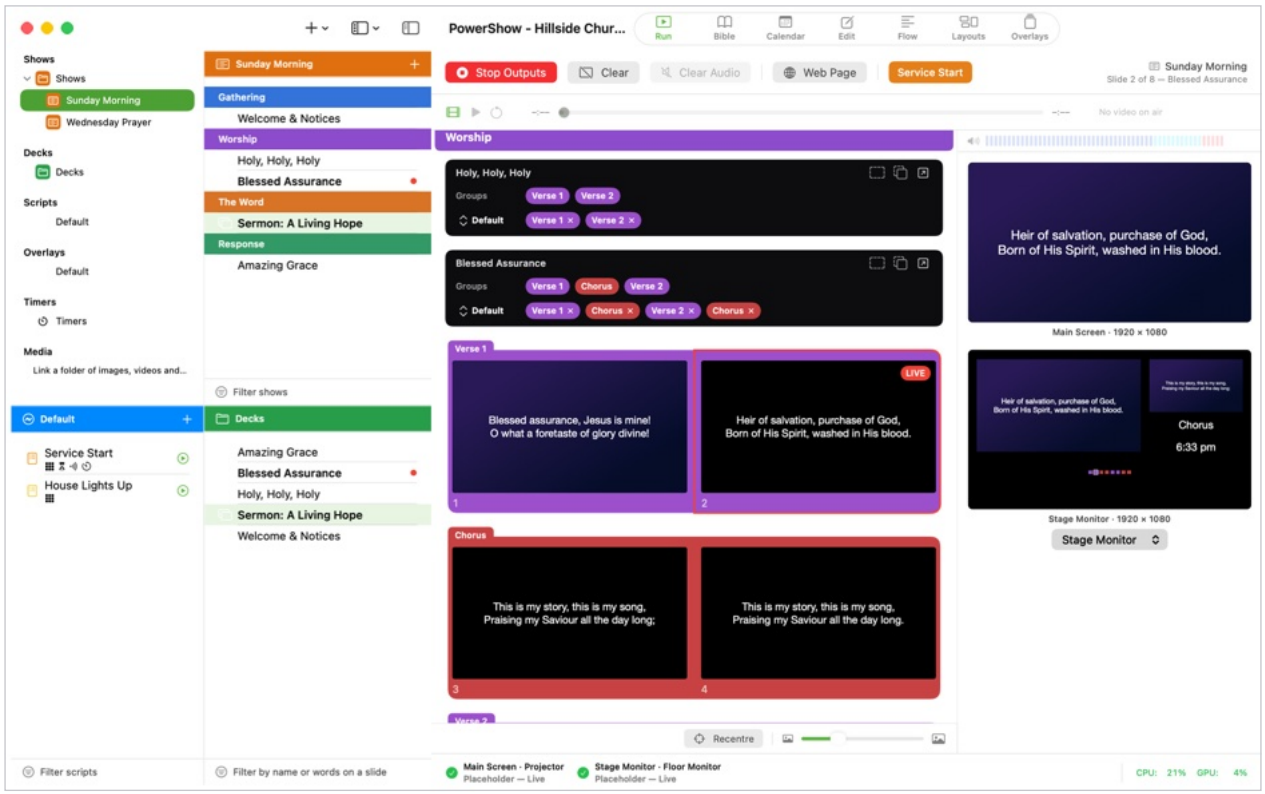
- The filter is remembered for each kind of listing, so typing a phrase while looking at one song folder and then clicking the next folder keeps looking for it.
- The ⊗ at the right of the field clears it. So does Escape while typing in it.
- Matching ignores case and accents, and nothing is a wildcard — an apostrophe or a bracket means that character.
- Filtering a show's running order leaves out its section headers, since a heading with its decks hidden introduces nothing.

Note If a filter hides everything, the pane says so and offers to clear it — which is a

different thing from a folder that is genuinely empty.

A second listing column

The listing column menu, at the top of the sidebar beside the Add menu, opens a second column inside the sidebar, to the right of the tree. It is split in two, and each half lists one kind of thing — so a show's running order, a folder of songs and a folder of scripts can all be in view at once, instead of taking turns in the one lower pane.



The listing column open. The running order is in its top half and a folder of songs in its bottom half, while the sidebar's own lower pane lists scripts.

- The menu has Show Listing Column or Hide Listing Column, then a Top Half and a Bottom Half section listing Shows, Decks, Scripts, Overlays, Timers and Media, with a tick against what each half lists. Choosing what the other half lists swaps the two, and choosing either opens the column.
- The first time it opens, the top half lists shows and the bottom half decks, and the sidebar's own lower pane lists scripts.
- Clicking a folder in the sidebar lists it in whichever area holds that kind. The other two areas keep what they were showing, so finding a song does not take the running order out of view.
- The two lower halves are always the same height: drag either divider and both move.
- Everything works the same in either column: dragging decks into a running order, scripts onto slides, files onto slides, filtering, and the right-click menus.
- The column is part of the sidebar, so hiding the sidebar hides it too, and opening the column brings a hidden sidebar back. Choose Hide Listing Column from its menu, or View ▸ Hide Listing Column, to close it, and the sidebar's lower pane lists everything again.

Note The sidebar can highlight only one row at a time, so the row whose contents a half is listing is not always the highlighted one. The coloured bar at the top of each list says what it is showing.

Asking the manual a question

Help ▸ Ask the Manual… — or Ask the Manual at the top of the help window's sidebar — answers a question in ordinary words, such as "How do I make a countdown turn red near the end?" The answer is written by Apple Intelligence on this Mac from the manual's own sections, and lists the sections it came from as links.

- It needs macOS 26 or later with Apple Intelligence turned on. On an earlier macOS the item is not there; with Apple Intelligence off, the panel says how to turn it on.
- Nothing leaves the Mac, and it works without an internet connection.
- An answer usually takes 10 to 30 seconds while the model reads. The sections it is reading are listed straight away, so you can open the right one without waiting.
- A question the manual does not cover gets an answer saying so rather than a guess.

Warning Answers can be wrong — the model is small and only sees a few sections at a time. Before relying on one in a service, follow its link and check the section it came from.

Arranging the sidebar

Folders and shows in the upper half of the sidebar stay in the order you put them. Drag a row up or down to move it; a line shows where it will land.

- Folders move among the folders of their own kind — show folders among show folders, deck folders among deck folders, and the same for scripts, overlays and media.
- Shows move within the folder they are in. To put a show in a different folder, right-click it and choose Move to Folder.
- The order is saved with the library, and the Move to Folder menus and folder pickers elsewhere follow it.

Note A folder linked as an audio playlist drags as the playlist itself, so it can be dropped on a slide. Drag the other media folders around it.

Note Duplicate means two different things depending on where you right-click a deck. In a show's running order it adds the same deck again straight after that one — the show plays it twice, and an edit to the deck shows up in both places. In a deck folder it makes a separate copy of the deck to change on its own.

Moving a setup to another Mac

Settings ▸ Storage ▸ Setup writes a zip of the things that make this Mac behave the way it does, and reads one back on another. It is the rig rather than the work — decks, shows and media travel with the library itself.

- Displays — screens, spreads, blend ramps and what each one sends.
- Layouts — confidence monitor and lower-third designs.
- Slide Groups — the library's verse and chorus colours.
- Overlays — logos, messages and anything else laid over what is on air, and the folders they are filed in.
- Scripts — show-control cues, and the folders they are filed in.
- Timers — countdowns and count-ups, with their lengths and formats.
- Audio Settings — where video sound goes, and the input-to-output patch.
- Network Settings — whether the remote API is on, and on which port.

1. On the Mac that is set up, open Settings ▸ Storage and press Export… under Setup.
2. Tick what should travel. Anything not set up yet is greyed out and says so.
3. Choose where to save the package, and copy it to the other Mac.
4. There, press Import… under Setup and choose the package.
5. Untick anything that should stay as it is, and press Import.

Note The package is an ordinary zip. You can open it in the Finder and see the files inside, and a package assembled by hand out of the right files imports just as well.

Note Scripts and overlays arrive filed in the folders they were in. Those folders take the place of this Mac's script or overlay folders; deck and show folders are not touched.

Note Slides, hot buttons and calendar entries find a script or a timer by its identity rather than its name. Between two copies of the same library that is the same script, and everything keeps working. Imported into an unrelated library, anything there that ran a script or showed a timer that has been replaced points at nothing, so check them afterwards. A script that starts a timer wants Timers ticked too.

Warning Each ticked item replaces this Mac's version of it outright — there is no merging two lists of displays. A copy of the library is taken first, marked "before import", so Restore… can put it back. Importing is refused while the outputs are live.

Where your library lives

By default the library is in ~/Library/Application Support/PowerShow. It can be anywhere: an external drive, a share, or a synced folder.

File ▸ Change Library…
Open a different library, or create one somewhere else.

File ▸ Reveal Library in Finder
Open the current library's folder.

Settings ▸ Storage
Move the library somewhere else, copying it and putting the originals in the Trash — never

deleting them outright.

Every library has a name, shown in the main window's title — "PowerShow - Default" — so you can tell at a glance which one you are working in. Until you give it one, a library is called after the folder it is in, and the one in the default location is called Default. Change it in Settings ▸ Storage ▸ Name; clear the field to go back to the folder's name. The name is kept inside the library, so it goes with the library when it is copied or moved to another Mac.

Warning If a library's drive is not mounted, PowerShow says the library is unavailable rather than treating it as empty. Do not create a new library at the same path to get past this — mount the drive and reopen. An unreachable library is never mistaken for an empty one, and that protection only works if you let it.

Which deck and show you had open is remembered per library, so reopening a library puts you back where you were.

Media on another account or Mac

Pictures, videos and audio are referenced rather than copied into the library. A library copied to another account or another Mac still finds them, as long as the media was copied too, into folders of the same names.

- Anything in your home folder — Documents, Movies, the Desktop — is remembered relative to it, so ~/Documents/Media on one account is ~/Documents/Media on the next.
- Google Drive, Dropbox and OneDrive are found under whichever account this Mac is signed into. A shared drive called Media is the same shared drive for everybody who has access to it. On a Mac signed into two Google accounts, the account the file was chosen from is tried first.
- Media that was in Google Drive's older locations — /Volumes/GoogleDrive or ~/Google Drive — is looked for where Google Drive keeps it now.
- An external drive is found by its name, so give it the same name on every Mac.
- Libraries saved by earlier versions find their media the same way. Nothing needs converting.

Note Only a file that is missing is looked for elsewhere. A file that is where the library says it is always stays put, and anything outside your home folder — another account's folder you can read, a share — is kept exactly as it was chosen.

Warning A version of PowerShow from before media could travel like this cannot read paths saved this way, and shows media in your home folder as missing. Nothing is lost: opening the library in this version again brings the media back, and the backup taken when this version first opened the library has the old paths.

Automatic backups

The first time a new build of PowerShow opens your library, it copies the library's settings and decks somewhere safe before anything reaches a screen — so if an upgrade ever changes something you did not want changed, the version from before it is still there.

The first time PowerShow opens on a Mac with no backup folder chosen, a sheet explains this straight after the licence. Continue asks for a folder; Not Now leaves it for Settings, and PowerShow asks again when the next new version opens the library.

1. Open Settings ▸ Storage.
2. Under Backups, choose a location. Anywhere but inside the library itself will do — Documents ▸ PowerShow ▸ Backups is a good place, and an external drive or a synced folder is better still.
3. Press Back Up Now whenever you want an extra copy, before a big edit for instance.

When it happens by itself

Only when the build number changes — an upgrade or a downgrade. Ordinary launches copy nothing.

Where it goes

A folder named for the date, the time and the build, so a listing sorts and you can tell which copy came from before which upgrade.

Restoring one

Settings ▸ Storage ▸ Restore… lists what is in the backup folder with the date and what each one holds. A backup folder is also a complete library in its own right, so File ▸ Change Library will open one where you would rather look before you replace anything.

Warning Backups do not include your images, videos or audio. Those are referenced from wherever they live on this Mac and PowerShow only ever reads them, so backing them up is a separate job — and copying them would turn a two-second backup into one nobody would wait for at launch.

Note If PowerShow was told to go live at startup — by the setting or on the command line — it never asks for a location: a machine coming up before a service must not sit behind a file panel. It backs up if a location is already set, and says so in the Run pane's strip if there is not one.

Note Nothing is ever deleted from the backup folder. How many copies to keep is your decision.

Restoring a backup

Settings ▸ Storage ▸ Restore… shows every backup in your backup folder — when it was taken, how many decks and shows are in it, and which build took it — and puts a chosen one back into the library you are working in.

1. Open Settings ▸ Storage and press Restore…
2. Pick a backup. The list is newest first, and each row says what is in it.

3. Press Restore and confirm. PowerShow copies the library as it is now into your backup folder first, then replaces it with the backup.

Warning Restoring replaces everything in the library — every deck, show, layout, overlay, timer and setting. Anything made since the backup was taken will not be in the library afterwards. It is not lost: it is in the copy PowerShow takes first.

Undoing a restore
The copy taken beforehand appears in the same list, marked “before restore”. Restoring that puts things back as they were.

Backups from elsewhere
Choose Another Folder… points the list at any folder — a backup drive, or a library copied off another Mac. Choose the backup itself or the folder it is in; either is listed.

What is not replaced
Your images, videos and audio. They are referenced rather than stored in the library, so a restore does not touch them.

Note Restoring is refused while the outputs are live. Stop them first — every deck on the machine is about to be replaced.

Note Nothing is deleted outright: what the library held goes to the Trash as well as into the copy, the same as when a library is moved.

Backing up and moving a library

A library is a folder of plain JSON files with one file per deck. Backing it up is copying that folder — there is no export step and nothing to unlock.

1. Choose File ▸ Reveal Library in Finder.
2. Copy the whole PowerShow folder to your backup drive or cloud folder.
3. To put a backup back, use Settings ▸ Storage ▸ Restore… (see "Restoring a backup" above), which keeps a copy of what it replaces. Opening a copy directly with File ▸ Change Library… also works.

Warning A backup of the library does not include your media. Images, videos and audio are referenced from wherever they live on this Mac, never copied in, so back up those folders as well — otherwise a restored library will be full of grey question marks.

Moving a library somewhere else

1. Open Settings ▸ Storage.
2. Choose Move Library… and pick the new location.
3. PowerShow copies everything, checks that every file arrived at the same size, and only then puts the originals in the Trash.

Note The originals go to the Trash rather than being deleted outright. This is somebody's

entire library, and a move that went somewhere unexpected has to be recoverable.

Sharing a library between Macs

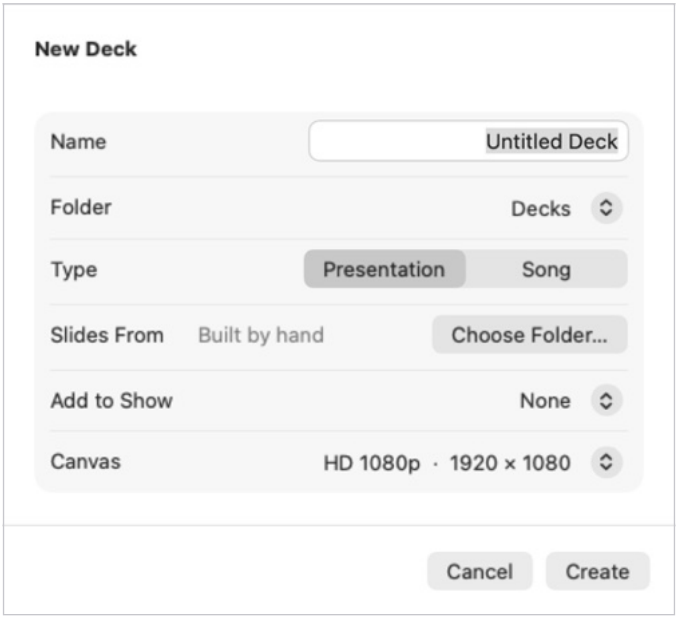
A library can live on a synced folder, but be careful: PowerShow reads it once at launch and does not watch it, so two Macs editing at once is last-writer-wins per file. Some things are also machine-specific and will not travel usefully — display definitions, service addresses, MIDI destinations, media paths and installed fonts.

Chapter 4

Decks and Slides

Building slides by hand: the canvas, objects, text, backgrounds, and how a deck is run.

Creating a deck



The New Deck sheet. The canvas size is chosen here, where it is free to choose.

1. Choose File ▸ New Deck…, or press Command-N.
2. Give the deck a name and choose the folder it belongs in.
3. Choose the canvas size. This is the resolution every object on every slide is positioned against — 1920 × 1080 unless you have a reason otherwise.
4. Click Create. The deck opens in the Edit pane with one empty slide.

The canvas size is offered when you create a deck because it is free to choose then and awkward later. It can still be changed afterwards — see Resizing the canvas below.

Note Every measurement on a slide is in canvas points: an object's position and size, a font size, a shadow's distance, a corner radius. That is what lets one deck drive a 1080p side screen and a 4K wall from the same numbers.

Smart decks: slides from a folder

A smart deck keeps itself in step with a folder of images and videos on this Mac. Drop a picture into the folder and a slide appears; take one out and its slide goes. Nothing is copied into the library — the deck points at where the files already live.

1. Make a new deck as usual.

2. Beside Slides From, click Choose Folder… and pick the folder.
3. Click Create. The deck fills with the folder's images and videos, in name order.

Name order
"Slide 2" comes before "Slide 10", the way the Finder sorts them rather than strictly alphabetically.

Shuffle
The shuffle button in the deck's header in the Run pane puts the slides in a random order.

Back to name order
The button beside it puts them back. It is highlighted when the deck is already in name order.

Dragging
You can reorder a smart deck's slides by hand in the Run pane, exactly as you would any other presentation deck.

Where a new file lands depends on the order the deck is in. If the slides are in name order, the new one slots into its proper place. If you have shuffled them or dragged them into an order of your own, new slides go on the end — moving your slides around for you would be worse than adding to the bottom.

Note Cues behave differently for the two ways of reordering, and deliberately. Shuffling leaves triggers where they are, so a cue on the first slide stays on whatever is first — it is about the reel starting, not about that week's first picture. Sorting by name, and dragging a slide yourself, take a slide's cues with it.

- A slide that came from a file cannot be deleted from the deck — the file is still in the folder, so the slide would come straight back. Take the file out of the folder instead.
- A slide you add by hand is left alone by the folder and can be deleted normally.
- If the folder is on a drive that is not mounted, the deck is left exactly as it is rather than being emptied.
- Videos arrive heard and playing once, as they do anywhere else on a slide. Mute one or set it to loop in the inspector and it stays that way through every later refresh.
- Replace a file with a new one of the same name — this week's notice over last week's — and the new picture appears wherever the old one was showing, on air included. A file that is written over where it stands, rather than replaced, is picked up the next time its slide is shown.

To change what a smart deck follows, right-click it in the sidebar and choose Smart Deck Settings…, or click the folder button in its header in the Run pane.

Folder
Point the deck at another folder. Slides whose file has the same name in the new folder are kept, cues and all — so moving a folder to a shared drive, or copying last term's, keeps what you set up. The rest go, and the new folder's other files become slides.

Images and Videos
Which kinds of file become slides. Switch videos off and the clips' slides go; switch them back on and they come back as new slides.

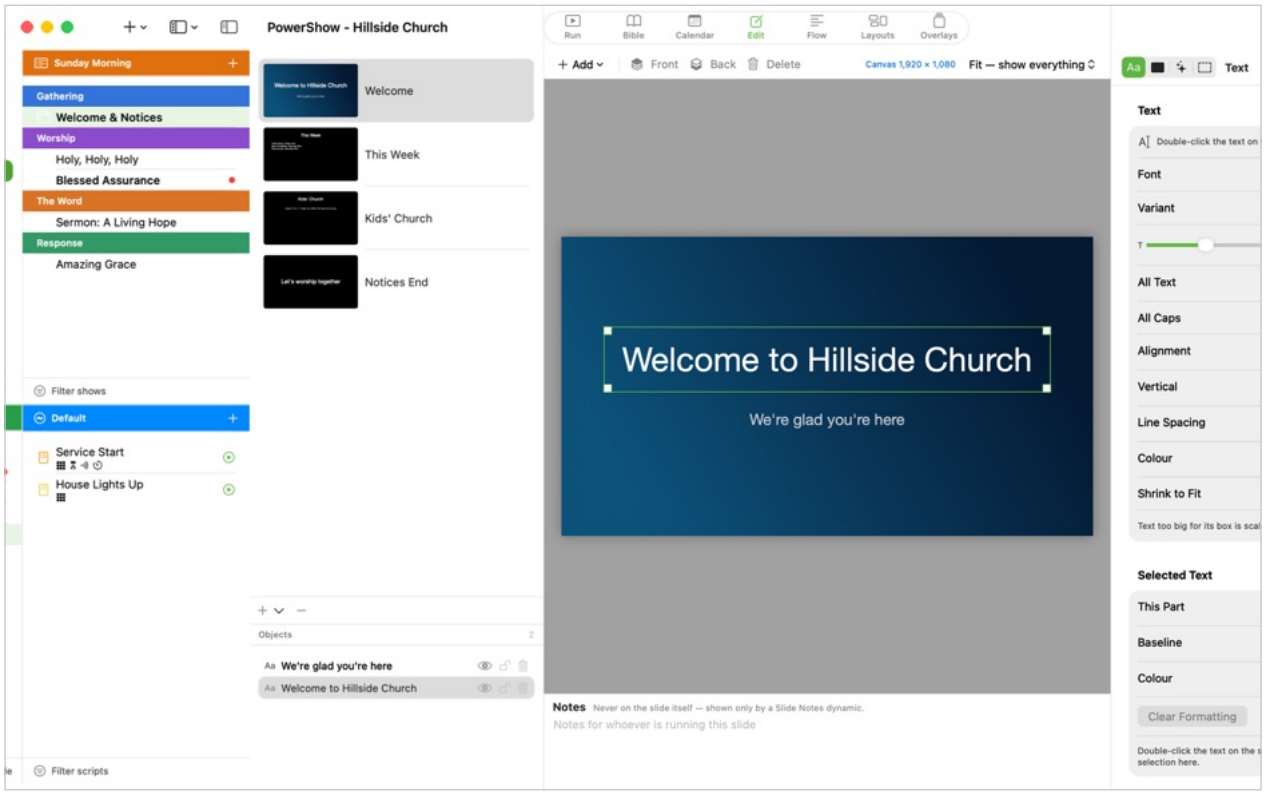
Fit

Fit shows the whole picture, with bars where its shape differs from the slide's. Fill covers the slide and crops the edges. It applies to every slide made from the folder, including any you have changed by hand.

Note Nothing changes until you click Save, and the sheet says first how many slides will be kept, removed and added — in orange if any of the slides that go have cues, a sound, timing or notes of their own.

The Edit pane

The Edit pane has three columns. On the left, the deck's slides above and the current slide's objects below. In the middle, the canvas, with the slide's notes in a box underneath. On the right, the inspector for whatever is selected.



The Edit pane: the deck's slides and the selected slide's objects on the left, the canvas in the middle, and the inspector for the selected object on the right.

Where a slide has nothing behind it, the canvas shows a dark grey checkerboard, so a transparent slide does not look like a black one. On air an empty slide is still black — the checkerboard matters for overlays, layouts over a stream, and anything sent with an alpha key.

- Click a slide in the list to edit it. Command-N with Shift adds a new one.
- The object list shows the front-most object at the top, which is the opposite of the order they are drawn in — that is deliberate and matches every other design tool.
- With nothing selected, the inspector belongs to the slide itself — its name and group, its triggers and scripts, its audio and its background, each on a tab of its own. See The

inspector's tabs below.

- Drag objects in the list to change what is in front of what.

Lock
A locked object cannot be moved, resized, edited, renamed or deleted. It is still drawn and still goes to air. Its selection border turns orange and dashed and its handles disappear, so it is obvious rather than merely enforced.

Hide
A hidden object is not drawn and cannot be clicked on the canvas. Use it to park something you are not ready to delete.

Rename
Right-click an object in the list. An unnamed object describes itself — the first line of a text object, the filename of an image — so name one when what it is for is not what it says.

Duplicate
Right-click an object in the list and choose Duplicate. The copy lands just in front of the original, nudged down and to the right so you can see it, and is selected ready to drag into place. It works the same way in all three editors, and a copy of a locked object arrives unlocked so it can be moved.

Delete
The bin at the end of each row, or Delete in its right-click menu. It works the same way in all three editors — slides, layouts and overlays — and ⌘Z puts the object back, so it asks nothing first. A locked object's bin is greyed until you unlock it. The Delete key removes whatever is selected — one object or several.

The inspector's tabs

The inspector shows one group of settings at a time. The row of icons along its top chooses which: hold the pointer over an icon to see its name, and where the inspector is wide enough, the name of the tab you are on is written beside them.

Nothing selected
The inspector belongs to the slide, on four tabs: Slide — its name, and on a song its group; Cues — its triggers and the scripts dropped on it; Audio — its sound; and Background. A layout or an overlay has Background alone, since it is named in its own list and fires no cues and plays no sound.

One object selected
The object's own tabs come first and Object comes last. Object is what every object has: its type, its name and its lock, where it sits and how big it is, its rotation, its opacity and whether it is hidden.

A text object
Text — the typeface, size, colour and alignment, and This Part for words you have selected; Background — the panel behind the words; Effects — the shadow and scrolling.

A dynamic object
Dynamic — what it shows and which deck it follows. One that draws words has the three text tabs after it, and a timer has a Timer tab too, for which timer it shows and its breakpoints.

Everything else
One tab named for what it is — Shape, Line, Image, Video, Live Input, Web Page, Player, Media or Smart Image — and then Object.

- The tab you chose is kept as you click from one object to the next, as long as the next one has it. Lining things up on Object, or setting type on Text, stays where it is — and a picture in between does not lose you the Text tab.
- Double-clicking into a text object brings its Text tab forward.
- A locked object's tabs are greyed, with an Unlock button at the top of each. The Object tab's Locked switch works too.
- Several objects selected at once have no tabs. The inspector lists them instead.

Note The Flow pane's inspector has no tabs. It styles every slide of a song at once, and all of it is about the words.

Slide notes

Every slide of a deck has a notes box, under the canvas in the Edit pane. Write in it whatever whoever is running or leading the slide needs to know: who comes in next, a reminder to start the video, the line the pastor will finish on. Notes are never drawn on the slide itself, so the room never sees them.

- Drag the divider above the box to make it taller or shorter. The height is remembered, and the box never takes more than half the column — the canvas keeps the rest.
- What you type is saved when you pause, when you click away and when you move to another slide, and always onto the slide you typed it on.
- While you are typing in the box, Command-Z undoes typing there, the way it does while you edit text on the canvas.
- Notes go with their slide: when it is duplicated, dragged to another deck, or shuffled in a smart deck. In the Flow pane, deleting the break between two slides keeps both slides' notes, one after the other, on the slide that remains.
- Layouts and overlays have no notes box. Neither is a slide of the running order, so there is nothing for its notes to be the notes of.

Showing notes to the band

Notes reach a screen through two dynamic objects: Current Slide Notes shows the notes of the slide on air, and Next Slide Notes those of the slide after it. Put them on a confidence monitor's layout and the team can read them while the room sees only the slides.

1. Switch to the Layouts pane and open the confidence monitor's layout.
2. Choose Add ▸ Dynamic ▸ Current Slide Notes. It arrives as a deep box with its text set from the top-left corner, the way notes are written.
3. Drag it to where the team will look for it, and set the type on its Text tab. Notes are read rather than glanced at, so make them large enough to read from wherever the band stands.
4. Add Next Slide Notes as well if the team wants warning of what is coming.

Note On air, a slide with no notes leaves the object empty. In the Layouts pane it shows sample words instead, so there is something to set type against.

Note Change a note while its slide is on air and the monitor shows the new words once you pause typing.

Adding objects

Use the Add menu in the toolbar above the canvas, the Slide menu, or drag a file from a media folder or the Finder straight onto the canvas.

Text
Words you type, with a full set of typographic controls. Command-Shift-T.

Shape
A rectangle, circle, triangle or ellipse, a flowchart symbol or a block arrow, filled and/or outlined — choose from the Shape submenu and its Flowchart and Arrows submenus, and change it later in the inspector. Shapes below has the detail. Everything else on a layout usually sits on top of one.

Image
A picture referenced from disk. Command-Shift-I.

Video
A clip referenced from disk, with looping and a fit mode. Command-Shift-V.

Live Input
A camera, an NDI® source, or a DeckLink or UltraStudio capture, drawn live.

Dynamic
Content that comes from whatever is on air rather than from the object: the current or next slide, its notes, the current or next section name, the deck name, a song's CCLI details, the date and time, deck progress, or a timer.

Warning Media is referenced, never copied into the library. Moving or renaming a picture after you have used it leaves the slide pointing at nothing, and PowerShow draws a grey panel with a question mark — on the output as well as in the editor, deliberately, because a silently black region on a stage screen looks exactly like a slide that was meant to be black.

Adding a slide

The + button under the slide list adds a blank slide after the one you have selected. The small chevron beside it offers a list of templates — a slide that arrives with its headings and text already in place, ready to be typed over.

Blank
Nothing on it, which is what + on its own gives you. On a song it carries one empty text box, in the song's own place and style, ready for words — a song's slides always have one.

Title / Title and Subtitle
A large line across the middle of the slide, for the start of an item.

Header
A heading across the top, with the rest of the slide left to you.

Header and Sub-header
A heading with a smaller line beneath it.

Header and Text
A heading with a block of body text under it.

Two Columns
A heading with two text blocks side by side.

Quote
A large quotation with an attribution under it.

Note A template only adds objects. What you get is an ordinary slide — move, restyle or delete anything on it, exactly as if you had added the text yourself.

Note Templates size themselves to the deck's own canvas, so one used on a 1280 × 720 deck looks the same as on a 1920 × 1080 one rather than arriving too big.

⇧⌘N adds a blank slide from anywhere, and File ▸ New Slide from Template offers the same list from the menu bar.

Warning The words a template puts on a slide are ordinary text, and they will go to air if you leave them. Type over them.

Editing text on the slide

Text is edited where it sits, at the size it will be on the screen — the same font, the same colour, in the same place on the same backdrop.

Clicking an object happens in two stages. The first click selects it and does nothing else — so picking something up can never also start changing it. Once it is selected, clicking reaches the text.

Click a selected object
Puts the caret where you clicked. Click past the end of the words and it goes to the end.

Double-click
Selects the word under the pointer. If there is no word there, the caret goes to the end rather than guessing at the nearest one.

Triple-click
Selects all of the text, wherever you clicked.

Edit Text
The button on the inspector's Text tab does the same thing, with the caret at the end — there is no click to put it anywhere else.

Escape
Stops editing. Clicking another object or elsewhere on the page does too.

Note Double-clicking an object that is not selected does both at once: the first click selects it and the second takes the word, so you do not have to click twice over.

Note Clicking a Bold or Italic button in the inspector does not end editing, so the selection survives being styled. That is deliberate: focus moving to a button is not you saying you have finished.

Moving and resizing objects

- Drag an object to move it. Drag a corner handle to resize it.
- A picture or video set to Fit keeps its shape as you resize it, so the handles stay on its corners. The corner follows the pointer along its diagonal. To reshape the box freely, set Scaling to Fill — the picture then covers the box, cropped — or to Stretch. If a box is not the shape of what is in it, Reset to Original Size in the inspector puts it right. A video always arrives in a widescreen box, so a portrait clip needs this once.
- Hold Option over a corner handle to rotate instead — the pointer turns into a curved arrow to say so. The object turns about its own centre and follows the pointer round.
- Hold Shift over a corner handle of a picture to mask it instead — the pointer turns into crop marks. The picture stays exactly where it is and the corner moves over it, hiding whatever is outside; the rest of the picture shows faintly while you drag. Drag back out to bring it back. The edge stops where the picture ends, and resizing a masked picture the ordinary way scales it, mask and all.
- Yellow guides appear while you drag, showing what the object has lined up with: the edges and centres of the other objects on the slide, and the canvas's own edges and centre lines.
- An alignment within reach snaps the object exactly onto it. Hold Command to suspend snapping while you drag — useful for bleeding an object off the edge of the slide, or placing something a few points off a line that would otherwise swallow it.
- Dragging a corner near the edge of the slide snaps to it, so a picture can be made to fill the slide exactly without typing numbers into the inspector — set it to Fill first if it is not the slide's shape, since a picture set to Fit keeps its own. A nearer object still wins — the slide's edges are alignments like any other, not special ones.
- The two axes snap independently, so an object can take its horizontal position from one neighbour and its vertical from another.

Note To show the whole of a masked picture again in one go, choose Remove Mask in the inspector. The frame grows back out to the picture's edges, and the picture does not move.

Note A rotated object takes no part in snapping, as a target or as the thing being dragged. Its stored frame is not where its edges are drawn, so a guide there would be a line you can see does not touch what it claims to align with.

Command-Z
Undo the last edit to the slide or layout you are editing — twenty deep. A burst of edits under half a second counts as one, so typing a word in the inspector is one undo rather than six.

Shift-Command-Z
Redo. Making a new edit after undoing clears what was undone.

Command-D
Duplicate the current slide.

Note Undo is the editor's, not the whole application's. Deleting a deck, reordering a show or changing a display are not on it. While you are typing text on the canvas, Command-Z is the text editor's own undo and takes back a word.

Selecting several objects, and copying them

Objects can be copied and pasted onto any slide, layout or overlay — on the same slide, another slide of the same deck, or a slide of a different deck. Select the objects, choose Edit ▸ Copy (⌘C), go to where they should go, and choose Edit ▸ Paste (⌘V).

Select several
Shift-click or Command-click objects on the canvas to add them to the selection, or to take one back out. In the object list, Command-click and Shift-click work as they do in any list. Edit ▸ Select All (⌘A) selects every object that is drawn — hidden ones are left out, though you can still pick them in the list.

Copy and Cut
⌘C copies the selected objects; ⌘X copies them and takes them off the slide. The words of any text objects are copied as plain text too, so they can be pasted into a text field or another application.

Paste
⌘V puts the objects on top of everything on the slide you are editing, in the same order among themselves, and selects them so you can drag them into place. Onto another slide they land exactly where they were. Pasted back onto the slide they came from they are moved down and to the right, so you can see them — further each time you paste.

Delete
The Delete key, Edit ▸ Delete or Delete in the toolbar removes every selected object at once, and ⌘Z puts them back. While you are typing in a text object or a field, Delete deletes letters as usual — it only removes objects when nothing is being typed into.

Right-click in the list
Copy, Cut, Paste and Delete are on the object list's right-click menu too. Right-click a row that is part of the selection and they act on all of it; right-click any other row and they act on that row alone.

Move several
Drag any of the selected objects and they all move together, keeping their places relative to each other, and ⌘Z puts them back in one. The group lines up as one block — its outer edges and its centre — with the other objects and the edges and centre of the slide, and

Command suspends that as it does for one object. Dragging an object that is not selected moves that one on its own and selects it instead.

Beyond moving them, nothing about several objects can be changed at once: there are no handles to resize them, and the inspector lists them rather than offering controls. Select one object on its own to change it.

Note A copy is never locked, even if the object it came from was, so it can be moved. A locked object can be copied, but the selection cannot be moved, cut or deleted while anything in it is locked — unlock it first. Pressing Delete then just beeps.

Note Pasted onto a deck whose canvas is a different size, objects are scaled to it and centred, so they sit in the same place on the slide and keep the same size relative to it — the way Resizing the canvas treats a deck.

Note Text from a layout's field becomes ordinary words when pasted onto a slide or an overlay, since nothing would ever fill it there. Text pasted into a layout arrives as a label; switch it to a field on its Text tab if it is the hole for the words.

Note While you are typing in a text object, ⌘C, ⌘X and ⌘V copy and paste words, exactly as in any text field.

Editing text

Text is edited in place, on the canvas, at the size and in the font it will actually be — select the object, then click into it, as "Editing text on the slide" describes. Press Escape, click elsewhere, or select another object to finish.

All Text and This Part

The inspector's Text tab has two sets of bold, italic and underline buttons, and the difference matters. All Text changes the whole object. This Part changes only the words you have selected on the canvas — or, with nothing selected, what you type next.

- Use This Part for a superscript verse number, a word in another colour, or one line in a different weight.
- Every run attribute can also be turned off inside an object that has it on — a run can force bold off in a bold box, which a plain toggle could not express.
- Text pasted from another application carries no runs and is drawn with the box's own attributes.

Attributes

Most of these are on the Text tab. The panel behind the words has a tab of its own, Background, and the shadow is on Effects, with scrolling.

Font family and face

The face is stored specifically, so Light stays Light. A font missing on another Mac falls back to the family and is flagged in the picker rather than silently blanking it.

Shrink to fit
On by default. Text that would overflow its box is scaled down until it fits, rather than being clipped. A lyric silently losing its last line mid-service is the worst failure this app can have.

All caps
Applied when drawing, never stored uppercased, so turning it off gives you back exactly what you typed.

Alignment
Left, centre, right and justified, plus vertical alignment within the box.

Shadow
Distance, blur and colour, in canvas points, so a shadow scales with the slide rather than being a fixed number of screen pixels.

Background
A panel behind the words: a flat colour or a gradient, with its own opacity and corner radius. Off means genuinely no panel.

Note Text is inset from its box by a quarter of the point size on every side, so it never looks cramped against an edge, and the inset is the same whatever the alignment.

Scrolling text

A text object can move inside its own box — a notice crawling across the bottom of a screen, a long reading rolling up it.

1. Select the text object.
2. On the inspector's Effects tab, switch on Scroll the text.
3. Choose a direction: up, down, left or right. Up is the credits roll — the words rise in from the bottom of the box and leave at the top.
4. Set the speed in points a second. That is measured on the deck's canvas, so a crawl set up against a 1920-wide deck moves at the same relative speed on a 4K wall.
5. Fade edges softens the two edges the text travels between, so words appear out of nothing instead of being cut off at a hard line.
6. Padding keeps space clear inside the box — a crawl usually wants some at the left and right and none top or bottom.

Note The text holds still in the Edit pane and in the slide list, the way a video does, so it can be positioned — and it is shown sitting in its box there, rather than in the position just off the edge it starts from. It moves on the outputs and in the Run pane's preview.

Note A speed of nothing holds the text still without losing the other settings, which is useful while you set the padding up.

Note The scroll starts from the beginning each time the slide is put on the screen — including when you click a slide that is already live, and when you use Restart Slide.

Note Scrolling moves on every kind of output — screens PowerShow drives directly, the preview, and NDI, DeckLink and UltraStudio. Those last are drawn again several times a second while a scroll is on air, at a rate that divides the output's own so the movement stays even.

Shrink to fit
Ignored while scrolling. Text that shrinks until it fits cannot overflow, and text that cannot overflow has nothing to scroll.

Sideways scrolling
One line travelling across, not a wrapped paragraph sliding sideways.

Dropping a picture or a clip on a slide

Dragging a file from a media folder or the Finder onto a slide in the Run pane is the quickest way to change what is behind the words. What happens next depends on the kind of deck.

On a song
The picture or clip becomes the background, as it always has, and carries on through the rest of the song. Nothing is asked, because that is what dropping a file on a song means.

On a presentation
A sheet asks whether it should go behind the slide or on it. On the slide is the default, and the picture is sized to the canvas. Fit keeps the whole picture, with margins if its shape differs from the deck's; Fill covers the canvas and crops what does not fit.

Several at once
One answer applies to all of them. Dropped on the slide, they cascade slightly so they do not stack into what looks like one picture.

A sound
Attaches to the slide whatever kind of deck it is, and is never part of the question — there is nowhere on a canvas for a sound to be.

Note Dropping into the gap between two slides makes a new slide from each file, and asks the same question: the picture can be the new slide's background or an object on it. Dropping onto the canvas in the Edit pane still makes an object where it landed, without asking.

Note On the slide is the default, because the commonest thing dropped this way is a page exported from PowerPoint or Canva. A picture put on the slide is sized to the canvas: one the same shape as your deck lands on it exactly, and a different shape gets as much of the canvas as it can with even margins.

Warning A clip *on* a slide arrives heard and playing once; a clip *behind* one arrives silent and looping. That is the difference between content and scenery, and it is why the same file sounds in one place and not the other. Both are settings you can change in the inspector — and a background is silent whatever its Mute says, since a backdrop never carries sound.

Backgrounds

A slide's background is set on the inspector's Background tab, with nothing selected. Choose None, Colour, Gradient, Image, Video or Atmosphere from its row of icons: a circle with a line through it, a filled circle, a shaded circle, a photo, a film strip and a cloud. Hold the pointer over one to see its name. A layout offers Inherit too, the stacked layers. Atmosphere has a section of its own below.

Gradients

1. Choose Gradient as the background type.
2. Pick Linear or Radial.
3. For a linear gradient, set the angle: 0 runs top to bottom, 90 left to right, going clockwise.
4. Set the colours. Add Colour appends another stop, so a three-colour wash is as easy as two.
5. Remove a stop with the minus button beside it — two is the minimum, since one stop is a flat colour.

Gradients are available anywhere a colour is: a slide's background, a shape's fill, and the panel behind a text object.

How a background carries on

A background belongs to the slide that sets it, and by default it persists: every following slide in the deck shows it until another slide sets a different one. A background marked as not persisting is cleared after its own slide — an earlier persisting one does not come back.

- Persistence is scoped to the deck. A backdrop never leaks into the next deck of a show.
- In the slide list and the Run pane, a thumbnail shows only the background that slide sets, so you can see where a backdrop was attached rather than seeing it repeated down the deck.
- The editor canvas and every output show the resolved background — what is really behind the slide.

Note A background takes no part in layout. It is drawn behind everything and sized against the display, so its aspect ratio can never shift the objects in front of it.

Video effects

A clip can be dimmed, softened, drained of colour or broken into blocks on the way to the screen. The file is never touched — the effects are applied as it plays, and clearing them brings the clip back exactly as it was.

Set them in three places, all the same controls: the Video tab of the inspector when a video object is selected, the slide's Background tab when the background is a video, and the Effects block of the video settings sheet, reached by right-clicking a slide in the Run pane.

Brightness, Contrast, Saturation
: The ordinary three. Saturation at nothing is black and white.

Blur
Soft Focus is an even blur. Diffusion makes the bright parts bleed into the dark ones, like a filter in front of a lens. Zoom streaks outwards from the middle.

Pixelate
Breaks the picture into blocks.

Tint
Pulls the clip towards one colour, keeping its light and shade. White is a plain black and white.

Vignette
Darkens the corners — the cheapest way to make words over a bright clip readable.

- Click a dial's name to put it back to normal. A dial that is doing nothing shows a dash rather than a number.
- The effects reach every output — a window, a stream and a card alike — and the thumbnails as well, so a tile shows what the projector will.
- Amounts are a share of the picture rather than a number of pixels, so one setting looks the same on a 1080p screen and a 4K wall.
- A Selectable Media slot keeps its own, so next week's clip arrives already dimmed the same way.

Note Nothing is paid for until something is switched on: a clip with no effects plays exactly as it did before they existed.

Warning The blurs are the expensive ones, and Zoom is the most expensive of the three. On a rig already sending several outputs, watch the processor figure at the foot of the Run pane after switching one on.

Atmosphere backgrounds

An Atmosphere is a slow, soft, cloudy movement of colour made from a picture's colours and nothing else — the picture itself is never shown and never kept. It is for the times a photograph behind the words would be too busy: under a song, between items, behind a reading. You can start from a picture, choose the colours yourself, or both.

1. Choose Atmosphere (the cloud) as the background type, on the slide's Background tab in the inspector or for a deck's cover. The Atmosphere sheet opens.
2. Click Choose Picture…, or drop a picture on the dashed box. Its main colours appear underneath.
3. Change the colours if you want to: click one to choose a different colour, set how much of it there is, leave it out or remove it, and click Add to put in a colour of your own — up to eight.
4. Choose a style — Soft, Watercolour or Oil Paint — and adjust the look with the sliders while the preview moves. Pick one of the six variations under the preview: the same colours, arranged differently. Shuffle offers six more.
5. Click Use.

Cloudiness
From a plain wash of colour to translucent banks of cloud drifting over it.

Softness
From distinct patches with soft edges to everything blended into haze.

Colour
How much of the picture's colour survives. Muted is usually kinder under words.

Speed
How long one loop takes, from five minutes down to twenty seconds. It returns exactly to where it began, so it never jumps.

Style
Soft is cloudy colour as it comes. Watercolour lays it down as washes with darker edges where the pigment pooled, on a paper grain. Oil Paint repaints it in brush strokes that stay where they are while the colour beneath them moves. Texture sets how strongly a style is laid on.

Brightness
How far the darkest colours are lifted off black. A projector cannot show black — it shows the room's own light — so dark colours are lifted to where they still read as colour.

Room
How bright the Atmosphere may get under white words, as the contrast they are guaranteed over it. Dark room, Normal and Bright room are the recommended settings; a bright room washes a projected picture towards grey, so it needs more. The figures are modest because words carry a shadow that does much of the work.

Keep where the colours sat
Holds each colour near where it was in the picture. Off by default, since on it can bring the picture back as a blurred landscape. A colour you added yourself goes anywhere.

Amount
In a colour's own settings: how much of the canvas it covers. The colour with the most is the wash underneath and the others drift over it, so turning one up is how to make it the background colour.

Under the preview, the sheet says what contrast white words will have at the brightest moment of the loop, and what kind of room that is enough for. Show words over it lays a line of a hymn across the preview so you can judge it by eye too — but judge it finally in the room, on the screen it is for.

- It is drawn as it plays, so it cannot go missing the way a file can, and it travels with the deck to another Mac.
- It never restarts on a slide change: where it is in its loop comes from the clock, so every slide that carries it on, every output and the Run pane's preview agree.
- Across an edge-blended wall it is one picture, with no seam.
- It reaches NDI and DeckLink outputs moving, the same as a window.
- Thumbnails and the Edit pane's canvas show it still.

Background Generator

Slide ▸ Background Generator… opens the same sheet to make Atmospheres as video files instead: a seamless 10-bit loop, exactly one loop long, that any background can then use as an ordinary video. Make a handful on a Monday and they are there to pick from on Sunday.

1. Set up the Atmosphere as above.
2. In the footer, give it a name, choose the size — the largest display this library drives is chosen for you — and the folder to save it in. Save to offers your linked media folders, or Atmospheres in the imports folder.
3. Tick All six variations to save one loop of each.
4. Click Save Loop. Each loop takes a few seconds at 1080p.

Note Every colour is softened and brought down so words stay readable, so what you see is gentler than the colour you chose. Colour and Room decide how much.

Note Saved into a folder that is not linked in the library, the footer offers Add Folder to Library, so the loops can be chosen as backgrounds straight away. Nothing is ever overwritten: a second loop of the same name is numbered.

Warning A deck that uses an Atmosphere background opens in an older build of PowerShow with that slide's background missing, and saving it there loses the Atmosphere. Keep decks that use one to this build or later.

Resizing the canvas

A deck's canvas size can be changed after the fact, but the question is not really the number — it is whether the slides come with it.

1. With the deck open, click the canvas size in the toolbar above the slide.
2. Enter the new width and height.
3. Choose whether to scale the contents. Scaling is what a finished deck needs to become another shape; leaving the sizes alone is what you want when the slides are about to be rebuilt anyway.
4. Click Resize.

Note Contents always stay centred: the canvas grows and shrinks about its middle, so widening a deck shows an equal band of new canvas on each side. Scaling is uniform, by the smaller factor — nothing is ever distorted.

How a deck arrives: transitions and timing

Transitions

1. In the Run pane, click the transition icon in the deck's header.
2. Choose a kind — cut, dissolve, or a push or wipe in any direction.

3. Set the duration. The preview loops the chosen transition at that duration, which is the point of the sheet: "push left" and "wipe left" read the same written down.

A transition belongs to the deck, so every slide in it arrives the same way. A confidence monitor never transitions — it shows a layout, mostly the same objects from slide to slide, and sliding that about every time you advance makes the one screen whose job is to be readable the one that will not hold still.

Note A transition plays when a slide arrives, never on a re-send. Clicking the live slide again re-fires its cues without a flicker.

Advancing on a timer

1. For a whole deck: in the Run pane, choose an interval from the dropdown in the deck's header.
2. For one slide: right-click the slide and choose Next Slide After. A slide's own interval overrides the deck's.
3. Choose whether the deck loops back to its own first slide at the end, or stops.

- A slide with video on it holds until the longest clip has played once, then waits the interval. A deck setting can change this to measure the interval from the slide arriving instead.
- Songs cannot be timed. What a song runs is its arrangement, so a timer would step through something other than what you are watching.
- Stopping or clearing the outputs cancels any advance in flight.

Sending the reel somewhere other than the next slide

The repeat button beside the deck's interval decides what the whole deck does when it runs out: loop back to the first slide, or stop. Any single slide can say something different about where the timer goes from it — which is what you want when only part of a reel should repeat.

1. Right-click the slide and choose Next Slide After ▸ Custom…
2. Under Then Go To, choose Stay here, Go to the first slide of the deck, or Go back a number of slides.
3. For the last of those, set how many slides to go back.

The next slide
The default, and what every slide starts as. On the last slide of a deck the deck's own repeat button then decides; the sheet says what that would do.

Stay here
The reel stops on this slide and waits for you. On the last slide that is "the reel has finished"; anywhere else it is a deliberate pause in one.

Go to the first slide of the deck
What a looping deck has always done at its end, and now settable from anywhere in one.

Go back a number of slides
Going back three from slide six lands on slide three, so slides three to six then repeat. Set on slide four instead, slides two to four repeat and the rest of the deck is never reached.

Note This applies every time the slide advances by itself, wherever it sits in the deck — it

is not only an end-of-deck setting.

Note Going back further than the deck is long stops at its first slide, rather than doing nothing.

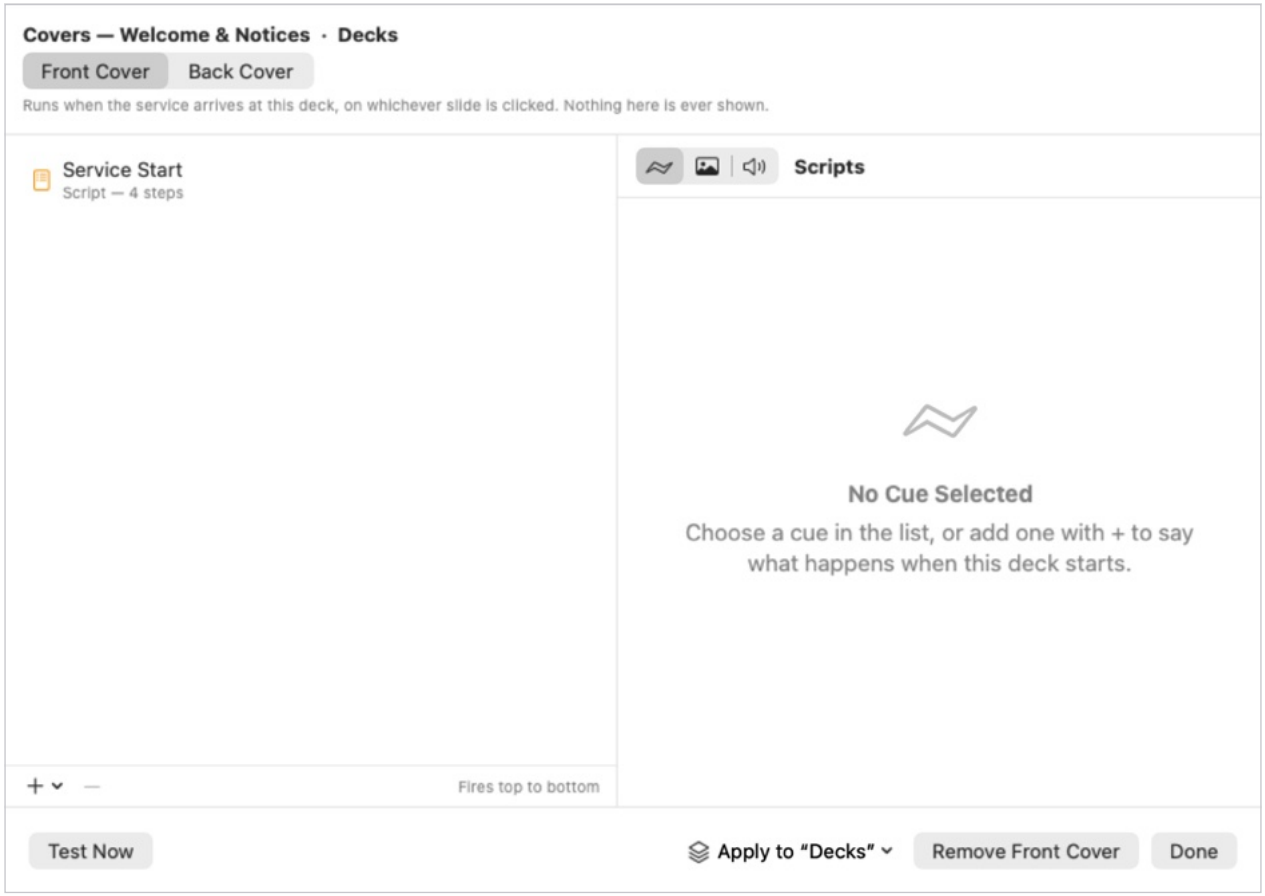
Note From the first slide of a deck, going back and going to the first slide both name that slide itself — so instead of sitting there re-showing it, the reel carries on to the next slide. The sheet says so when that is the case you are in.

Note Disabled slides are not counted. "Back three" means three slides you would actually see.

Note This is about the timer, not the arrow keys. What a key press does at a deck boundary is Settings ▸ General ▸ stopping at the edge of a deck.

Deck covers

A cover is what a deck does the moment the service arrives at it: a backdrop and a list of cues. It is never shown. It exists because the natural place to put those things is the deck's first slide — and that quietly makes the first slide compulsory, so reaching for the third verse means clicking slide 1 and then clicking where you actually wanted to be, in front of a room.



A deck's cover sheet. The cues on the left run when the service arrives at the deck; the buttons above the

right-hand side switch between the cues, the backdrop and the sound.

With a cover, the deck can be entered on any slide and it still starts properly.

1. In the Run pane, click the dashed-rectangle icon in the deck's header.
2. The list on the left is the cover's cues. Add them with +: they are the same triggers a slide can carry, and you can add a script here too. Click one to set it up on the right.
3. Three buttons above the right-hand side switch it between Scripts (the lightning bolt), Background (the picture) and Sound (the speaker). Set a background there if the deck should bring its own — a colour, a wash, a picture, a clip or an Atmosphere — and a sound if it should start one. Clicking a cue in the list goes back to Scripts.
4. Click Test Now to carry them out without waiting for the service to reach the deck.
5. Close it. A cover tile appears before the deck's first slide, saying what the cover holds.

The tile
Its picture is framed in orange — dashed along three sides, with a thick solid edge on the side facing out of the deck — so it does not read as a slide waiting its turn. Clicking it goes to the deck's first slide, exactly as clicking that slide would. Double-click to edit the cover; right-click for Test Now and Remove Cover.

The backdrop
Shows behind every slide of the deck that does not set one of its own, whichever slide you enter on. A slide with its own background still wins, exactly as it would over a backdrop set on an earlier slide.

The cues
Fire when the service arrives at the deck, before that slide's own. Moving within the deck afterwards does not fire them again.

Dropping things on it
A picture or a clip dropped on the cover tile becomes the deck's backdrop. A script dropped on it is added to the cues.

Shrinking it
A cover as large as a slide can be a lot to look past. The small orange tab on its outer edge — the left of a front cover, the right of a back one — shrinks the tile to a narrow strip, just wide enough for its cue and sound badges, with the left-hand side of any backdrop still showing. Click the tab again to bring it back. Dropping a picture or a clip on a shrunk cover brings it back to full size, so you can see what you dropped. The deck remembers each end's choice.

- Nothing live at all counts as arriving. The first click of a service, and the click after a Clear, both run the cover.
- A show that holds the same deck twice runs its cover both times — coming back to an item later in a service is arriving at it again.
- A cover and the slide you enter on fire as one list, so a cue written on both is carried out once. That matters when you make a cover by moving what was already on the first slide and leave a copy behind.
- There is no "continue under following slides" switch on a cover's background. A cover has no slide of its own, so a backdrop cleared after it would be cleared before anything could show it.
- Remove Cover, in the editor or the tile's menu, takes the whole thing off — backdrop and

cues together.

Note A cover holds a backdrop and cues and nothing else. There is no canvas and no way to put an object on one, deliberately: a cover that could hold words would be a slide nobody could ever show.

Back covers: what a deck does on the way out

A deck has a second cover for the other end of the item. A back cover runs when the deck comes off the air — when another deck goes live, when a Clear Deck cue takes it off, or when it loses the last display it was on. It is the same thing a cover is, pointed the other way: a sound and a list of cues, never shown.

It is set up in the same sheet. Open the deck's cover and click the Back Cover tab at the top.

The cues
Fire as the deck leaves, before the cues of whatever is taking its place. House lights up at the end of the songs, the camera back to the lectern, a recording stopped.

The sound
Starts as the deck leaves — the bed under the sermon that the songs leave behind. Anything the incoming slide or its cover says for itself wins instead, and how long it lasts is its own When It Stops setting.

No backdrop
A back cover has no background, and cannot have one. By the time it runs the deck is off the air, and whatever took the air brings its own background with it.

- The deck being left finishes before the deck arriving begins, so a back cover's cues run first.
- A cue written on one deck's back cover and the next deck's front cover is carried out once, not twice — which matters, since the quickest way to build a back cover is to copy the front cover of whatever follows it.
- Clear and Stop Outputs do not run a back cover. Those mean "nothing is going out" rather than "the service has moved on", and each already stops the sound and the timers on its own.
- A deck with only a back cover still lights the icon in its header, and still shows its tile at the end of the deck.
- A picture or a clip dropped on a back cover's tile is refused, and says why — there is no backdrop for it to become. A sound or a script dropped on it is taken.

Note A back cover gets a tile at the *end* of the deck, the way a cover gets one at the start — the two ends of the item, in the two places you look for them. Its thick edge is on the right, so the pair bracket the deck. Clicking it goes to the deck's last slide; double-click to edit it, right-click for Test Now and Remove.

Giving one cover to a whole folder

A cover set up on one deck can be given to every other deck in the same deck folder, from the Apply to “folder” menu at the bottom of the cover sheet, beside Remove Cover.

Replace Every Cover
Every other deck in the folder gets this cover, including decks that already have one of their own.

Only Decks Without One
Decks that already have a cover are left exactly as they are.

Include the backdrop and sound
On, the backdrop and the sound go with the cues. Off, each deck keeps whatever backdrop and sound it already had and only the cues are applied — which is what you want when a folder is already set up and you are changing what its decks do on entry.

Note Each choice says how many decks it would change before you pick it, and reports what it did afterwards. A deck whose cover was opened once but never set up counts as having none.

Note Apply works on the tab you are on. On the Back Cover tab it gives the folder back covers and leaves every front cover alone, and "Only Decks Without One" means without a back cover.

Warning This cannot be undone — the editor's undo covers slides, not covers. Check the number in the menu item before choosing Replace.

Naming things

A slide
Select the slide, click empty canvas so no object is selected, and type in the Name field on the inspector's Slide tab. The name is what the Run pane's tiles read, what the Current and Next Slide Name objects draw, and what the API reports — so it is worth setting on anything you will cue by name.

A deck
Right-click it in the list under the sidebar and choose Rename. Decks are held by reference, so renaming one from inside a show's running order renames the deck itself — there is only one of it.

An object
Right-click it in the object list and choose Rename, or type in the Name field on its Object tab. An unnamed object describes itself instead, so this is for saying what an object is *for*.

Note A layout and an overlay each have a name of their own, set in their own list. The slide inside one is drawn nowhere and named nowhere, which is why the inspector offers no Name field while you are editing one.

Selectable Media: choosing a picture each week

A Selectable Media object is a hole in a slide that shows one picture or video chosen out of a folder. Design the slide once — the frame, the heading, the logo — and then choose what goes in it from the Run pane, without opening the deck. Add one with + ▸ Selectable Media.

1. Add the object and drag it to the size and place you want.
2. In the inspector, click Choose beside Folder and pick the folder the pictures and clips live in.
3. In the Run pane, click the chooser button under the slide's thumbnail and pick one from the list.

The folder
A link to a folder on this Mac, exactly like a media folder in the sidebar. Nothing is copied, and pictures and videos directly inside it are listed — sounds and subfolders are not.

Scaling
Applies to whatever is chosen, so the slide stays framed the way you set it up while the picture changes each week.

Loop, Mute and Volume
Used when the choice happens to be a video. A new slot is heard and plays once, like any other clip on a slide. They belong to the slot rather than to the file, so they still apply after you put next week's clip in.

Nothing
The first row of the chooser. It takes the picture off again and leaves the grey mark.

Note A slide with nothing chosen shows a grey "?" — on the projector as well as in the editor, deliberately. A slot left empty is the one thing about this object that can spoil a service, so it is impossible to miss rather than quietly black.

Note The folder is read when you open the chooser, not watched. If somebody drops a picture in while the sheet is open, click Refresh.

Note Changing the folder clears what was chosen, because a choice only means anything as one of the things the folder offers. Pointing it back at the same folder — after a drive comes back, say — changes nothing.

Note A chosen video plays and sounds exactly like a Video object: it reaches NDI and DeckLink, holds up an auto-advance, and brings up the Run pane's transport bar. What it cannot have is trigger points, since a point is a moment in one particular file and this slot's file changes.

Note If a slide has more than one media slot on it, the triangle becomes a menu naming each one — which is a good reason to name those objects in the object list.

YouTube and Vimeo players

An embedded player puts a YouTube, Vimeo or other video on a slide. Add one with + ▸ Embedded Player, choose the service, and paste the link straight from your browser's address bar.

The link
Paste whatever you have — a watch link, a youtu.be short link, a Shorts or Live link, or a Vimeo address. PowerShow works out which service it is and switches to it, so you do not have to choose first.

Unlisted Vimeo videos
Paste the whole link including the part after the number. That is the video's private key, and without it the player will not load.

Start at
Where in the video to begin. If the link you pasted already has a start time on it, that is used.

Controls
Off by default, so the player's progress bar and logo are not projected. Turn them on if you want to scrub the video by hand.

Warning A video can only start by itself if it is muted — that is a rule of every web browser, not a PowerShow setting. Either turn on Start muted, or leave autoplay on and press play yourself from the Web Page window.

Playing and pausing

1. Put the slide on air.
2. Click Web Page in the Run pane's control bar.
3. Press play on the player itself. It is the real player, not a picture of one — what you do there is what the room sees.

Note The Run pane's own play and pause buttons control video files, not embedded players. Use the Web Page window for those.

Note Looping a YouTube video works, but it reloads the video rather than looping seamlessly. For a clip that has to loop cleanly behind a song, download it and use a Video object instead.

Warning An embedded player is drawn fifteen times a second, thirty while the Web Page Control window is driving it, so it is not as smooth as a video file on a slide, and it needs the network to be working when the slide goes up. If you can download the video, a Video object is better in every way that matters on a stage screen.

Note Nothing is downloaded or copied — the slide shows the service's own player, so views still count and the video stays theirs.

Web pages

A Web Page object shows a live web page on a slide, drawn by the same engine Safari uses. Add one with + ▸ Web Page and type an address in the inspector.

The address

A bare domain is taken as https, so "thegrove.org.au" is enough. Only web addresses work — http and https.

Size

The page is laid out at this deck's canvas size and then drawn into the object's box. So a deck designed at 1920 × 1080 shows the page as it would look in a 1920 × 1080 window, whatever size the object is.

Scaling

Fit shows the whole page, Fill crops it to the box. Fit is the default — a page is read, and losing the edge of a paragraph is worse than a letterboxed one.

Driving the page

1. Put the slide on air.
2. Click Web Page in the Run pane's control bar.
3. Scroll it and click links. What you do in that window is what is on screen — it is the same page, not a copy of it.

- The page is opened once however many places are showing it, so a deck with the same address on several slides is one page, not several.
- It closes when no slide showing it is on screen, so nothing is left running in the background.
- The page is redrawn thirty times a second while the control window is open and fifteen when it is not, so scrolling looks smooth while you are driving it and a page nobody is touching costs almost nothing. Video on a page will still look less smooth than a video object.
- Links that would normally open a new tab or window open in the page itself — there is only one page, and everything on screen is showing it.
- Nothing is remembered between runs — no cookies, no logins. A page needing a login will ask for it each time.

Note If a link does nothing, look at the top of the control window — a page that would not load says why there, in orange.

Note Sound from a page goes to the Mac's own output rather than through Settings ▸ Audio, unlike every other sound in the app. And streaming services that use copy protection — Netflix and the like — will not play.

Shapes

Add ▸ Shape offers the four basic shapes, then two submenus: Flowchart, with every flowchart symbol in the order PowerPoint lists them, and Arrows. Each item carries a small picture of the shape.

Rectangle, Circle, Triangle, Ellipse
Filled, with no outline. A rectangle can have rounded corners. A circle stays round however its box is stretched; an ellipse fills its box.

Flowchart
Process, Decision, Data, Document, Terminator, Connector and the rest — twenty-seven symbols. They arrive the way a diagram's do, filled blue with a white outline. Process, Connector and Extract are the rectangle, circle and triangle under their flowchart names.

Arrows
Block arrows: right, left, up, down, left-right, up-down, four-way, notched, a chevron, a pentagon, bent and U-turn. They arrive filled, with no outline. For a thin line with an arrowhead on it, use a Line instead — see below.

To turn a shape into another, select it and choose from the Shape menu at the top of its Shape tab in the inspector. The menu is grouped the way the Add menu is — Basic, Flowchart, Arrows — with the same pictures. The fill and outline stay as they were, so a box set up in the wrong shape does not have to be built again.

Fill
On or off, a colour or a gradient.

Stroke
The outline: its width, solid, dashed or dotted, and its colour. A width of zero draws none. The outline is drawn inside the shape's box, so adding one never makes a shape bigger.

Note Some flowchart symbols have lines inside them — the bars down the sides of a Predefined Process, the cross in a Summing Junction, the rings of a Database. Those lines are drawn with the outline, so with no outline the symbol shows only its silhouette. The Shape tab says so in orange, with an Add an Outline button under it. Changing a rectangle into one of these does not switch an outline on for you.

Lines

A line is its own kind of object: a rule under a heading, a divider down the middle of a split screen, an underline. Add one with + ▸ Line.

Direction
Horizontal, vertical, or either diagonal. The line is drawn across its box, so resizing the box is what changes its length.

Colour and Thickness
Thickness is in canvas points, like a font size — so a line keeps its weight against the words whatever resolution the slide is shown at.

Style
Solid, dashed or dotted, the same three a shape's outline offers.

Start and End
What sits on each end: nothing, an arrow, a square or a dot. The two are set separately, so a line can have an arrow on one end only.

An end is sized from the line's thickness rather than having a size of its own, so a thicker line gets a bigger arrowhead and there is no second number to keep in step. It is drawn back along the line from the end, which means adding one never makes the line longer.

Thin lines get a proportionally larger end. A hairline with an arrowhead four times its thickness is an arrowhead nobody can make out, so the size grows against the line as the line thins — a 1pt rule gets one about fourteen times its thickness, a 6pt rule five times, a heavy bar under four.

Note For any angle other than the four, hold Option on a corner handle and turn the object — the same gesture that rotates anything else on the canvas. An end turns with the line, so an arrow on a diagonal points along it.

Note On a diagonal the line reaches the corners of its box, so the wings of an arrow there sit a little outside it. That is deliberate: pulling them in would stop the line reaching its own corners.

Sound on a slide

Drag an audio file onto a slide — in the Run pane or the Edit pane — and it attaches to the slide rather than becoming an object. A sound has no position, size or place in the z-order, so there is nowhere on the canvas for it to be.

How long it plays for

Right-click the speaker badge on the slide's tile in the Run pane and choose one of three. This is the single most important setting on a sound, and the one worth getting right before a service rather than during one.

Stop at the Next Slide
For a sting or a countdown — a sound that belongs to one slide and must not outlive it.

Stop at the Next Deck
For a bed under one item of a service. It plays through every slide of the deck and stops when the running order moves on to the next item. A deck that comes round again later in the service counts as somewhere else.

Play Until Cleared
For pre-service music and anything else that should still be going whatever the operator does next. Clear or Clear Audio stops it. This is what every sound attached before this setting existed does, so nothing in an existing library changed.

The rest of the settings

Loop Until Stopped
Off by default. A file that plays forever until somebody notices is the worse surprise.

Fade In and Fade Out
In the badge's Audio Settings… sheet. A second each for a sound attached today; zero is a cut. A sound already in your library keeps its cut until you set one, because a sting that suddenly arrived over a second would be discovered mid-service.

Volume
Per slide, and safe to change while it is playing — the fade follows it rather than arriving at the old number.

- One sound plays at a time. A slide whose audio is already playing does not restart it, so a song deck whose every slide names the same backing track plays it once, continuously.
- A slide with no audio of its own lets the playing track decide, by that track's own setting above.
- Audio comes out of the device chosen in Settings ▸ Audio.
- A missing audio file is treated as no audio rather than as silence, and the badge on the slide's tile turns orange to say so.

Playing a whole folder

Drop a **folder** of audio on a slide instead of a file and it becomes a playlist: the tracks play one after another, in name order, for as long as the setting above says. Pre-service music is what this is for.

1. Drag a folder from Finder onto a slide, or link one with Add ▸ Link Audio Playlist…, at the top of the sidebar, and drag its row onto a slide.
2. Right-click the playlist badge on the tile and choose Edit Playlist…
3. Set whether it repeats, whether it shuffles, and which tracks to leave out.
4. Set the fades, which apply at the start and the stop of the whole playlist rather than between tracks.

- The folder is read again for every track, so a file dropped into it — or taken out of it — while the playlist is running is picked up. Nothing has to be refreshed.
- A video in the folder counts as a track and only its sound is played. Pictures are ignored.
- Shuffle plays every track once before any of them comes round again, and a repeat does not open with the track that has just finished.
- Switching a track off while it is playing lets it finish — it stops being offered from the next track onwards rather than being cut off mid-phrase.
- A folder you link in the sidebar carries its own settings, and a slide you drop it on starts from those and then keeps its own copy. So one folder can be shuffled on one slide and in order on another.

Note A folder with no audio or video in it is not a playlist and dropping it on a slide does nothing — which is what stops a folder of photographs becoming a silent badge. Link it in the sidebar instead if you mean to fill it later.

A sound for a whole deck

Drop an audio file or a folder on a deck's **cover** — the orange-framed tile before its slides in the Run pane — and it starts when the service arrives at that deck, on whichever slide you click. It is the backdrop's idea for the ear: a bed put on the first slide makes the first slide compulsory, and reaching for the third verse skips the music.

- A slide that carries its own sound takes over from the cover's.
- Re-entering the deck while it is still playing does nothing — it carries on rather than starting again.
- It follows the same three stopping rules as any other sound, set the same way: right-click the badge on the cover's tile, or open the cover and use Sound Settings.
- Applying a cover across a folder carries its sound only when Include the backdrop and sound is ticked — giving forty songs one backing track is the same mistake as repainting forty backdrops.

Note A cover's Test Now runs its cues and deliberately not its sound. The sound belongs to the deck starting, not to a cue.

Stopping a track that is still running

Clear Audio, beside Clear in the Run pane's control bar, stops whatever slide audio is playing and leaves the picture where it is. That is the difference between the two: Clear takes the screen and the sound together, which is right when nothing should be going out; Clear Audio is for a bed that has carried across slides and outstayed its welcome while the slide it is under is still wanted.

Note The button is only enabled while something is playing, so it doubles as a way of telling whether a track is still running — worth having in a booth where the bed may not be audible.

Note It stops slide audio only. A video's sound belongs to a picture that is on screen, and holding that is what the transport bar's pause is for.

Chapter 5

Songs, Groups and Flow

Importing a song library, dividing songs into sections, and building lyrics fast with the Flow pane.

Song decks and presentation decks

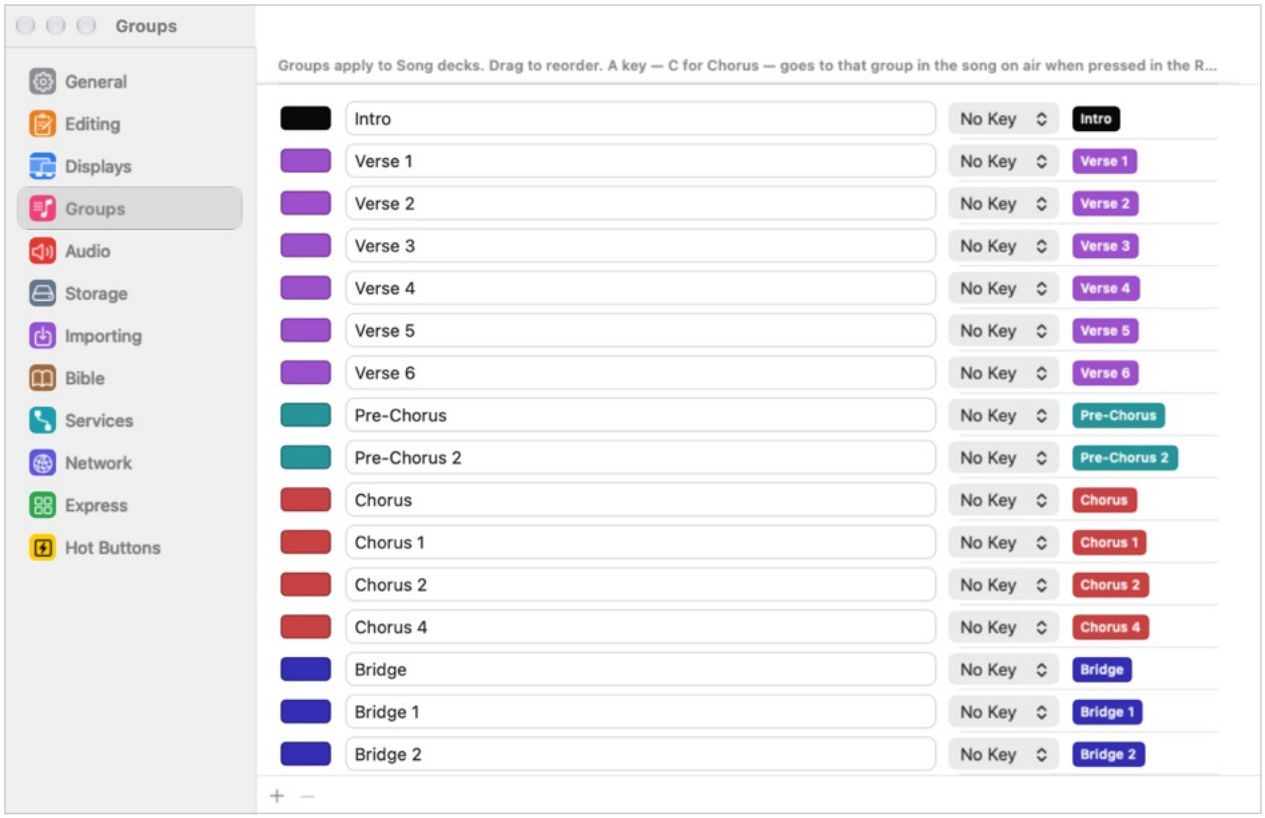
A deck is either a Presentation or a Song, set when you create it and changeable afterwards: right-click the deck in the sidebar and choose Type. The difference is not cosmetic.

- Only a song has grouped slides — verses, choruses, bridges — and only a song has an arrangement.
- A song is run by its arrangement, so a chorus sung three times is three slides to pass through.
- Song slides cannot be reordered, deleted or timed from the Run pane, because what runs is the arrangement rather than the list.
- A presentation deck has none of that: its slides are separate points, run in order.

Note Turning a song into a presentation deck keeps its groups rather than clearing them, so turning it back restores everything.

Groups

A group is a named, coloured section: Verse, Chorus, Bridge. Groups are library-wide rather than per-deck, which is the whole point — Chorus is the same colour in every song, so an operator learns the colours once and can read any deck at a glance.



Settings ▸ Groups. Every library starts with this set; the colour on the right is how a section looks in the Run pane, and the menu beside it gives the section a key.

1. Open Settings ▸ Groups.
2. A new library starts with a full set of sections — Intro, Verse 1 to 6, Pre-Chorus, Chorus 1 and 2, Bridge and the rest, each numbered family sharing a colour. Add, rename, recolour or remove as you like.
3. Pick colours that are told apart across a dark room, not on a bright screen at arm's length.

Assign a slide to a group on the Slide tab of the Edit pane's inspector, with nothing selected, or by right-clicking slides in the Run pane and choosing Set Group. Several slides can be set at once.

In the Edit pane's list of slides, a slide's group shows as a bar of its colour down the left edge of its thumbnail.

- In the Run pane, a slide's tile is painted its group's colour with the group name in the corner.
- The label colour is chosen automatically — black or white, whichever reads against the colour you picked.
- Deleting a group clears it from every slide that used it, so no slide is left pointing at a section that no longer exists.

Warning A song slide with no group is not reachable by any arrangement and will never come up. If a song is missing lines when you run it, an ungrouped slide is the first thing to check.

A key for a group

A group can have a key — C for Chorus, B for Bridge — chosen from the Key menu beside its name in Settings ▸ Groups. Most groups do not need one; it is for the few you reach for in a hurry. Pressing the key in the Run pane goes to that group in the song on air.

- It goes to the next time the group comes round in the song's arrangement — mid-verse, C goes to the chorus about to be sung.
- On or past the last time, it goes to the start of that last one again — the chorus sung once more, which is the commonest thing a band does that nobody planned.
- A key only ever moves within the song on air. If the song has no such group, nothing happens, and the status strip says so.
- Several groups can share a key, and usually should: give Chorus, Chorus 1 and Chorus 2 all C, and C goes to whichever chorus the song has next — songs imported from different places name their choruses differently.
- The key shows as a small badge in the bottom-left corner of the first slide of each run of the group in the Run pane.
- Keys work in the Run pane and in Express Mode, and not while you are typing into anything. They need the outputs live, like the arrow keys.

Note Control surfaces can do the same: Companion's Go to group action, or /api/goto-group — see chapter 12.

Arrangements

An arrangement is the order a song is sung in: a list of sections, where a chorus sung three times appears three times. The words are held once and the arrangement says how often each section comes round, so a song can have a full version and a short one without a line being duplicated.

Every song has one whether or not anybody has set it up — the default is every section once, in the order the slides are in. The bar under the deck's name in the Run pane is where you choose and manage them.

Copy Arrangement
: Duplicates the one you are on, without asking anything. The copy is named after its source — "Full Copy", then "Full Copy 2" — and becomes the one you are working on. Rename it from the same menu if the automatic name is not what you want. This is the usual way to make a second arrangement, which is why it is first.

New Arrangement…
: Asks for a name and makes a standard arrangement: every section once, in the order the slides are in. The song as it was written, whatever is currently on screen.

Rename…
: Renames the arrangement in force.

Delete
: Removes it. The last one cannot go: a song always has an order, even if it is the default.

- Each arrangement owns its own occurrences, so removing a chorus from one does not

take it out of the other.

- A slide with no group is in no arrangement and will never come up — see the warning under Groups.
- The Run pane steps through the arrangement, not the deck, so "Slide 3 of 11" counts what is actually being sung.

Choosing an arrangement for each place in a show

When a show is being run, the arrangement you choose in a song's bar is for that place in the running order only. The same song later in the same show, or in another show, keeps its own. So a song can open the service in full and come back at the end as a short reprise, or be sung in full in the morning and shorter in the evening.

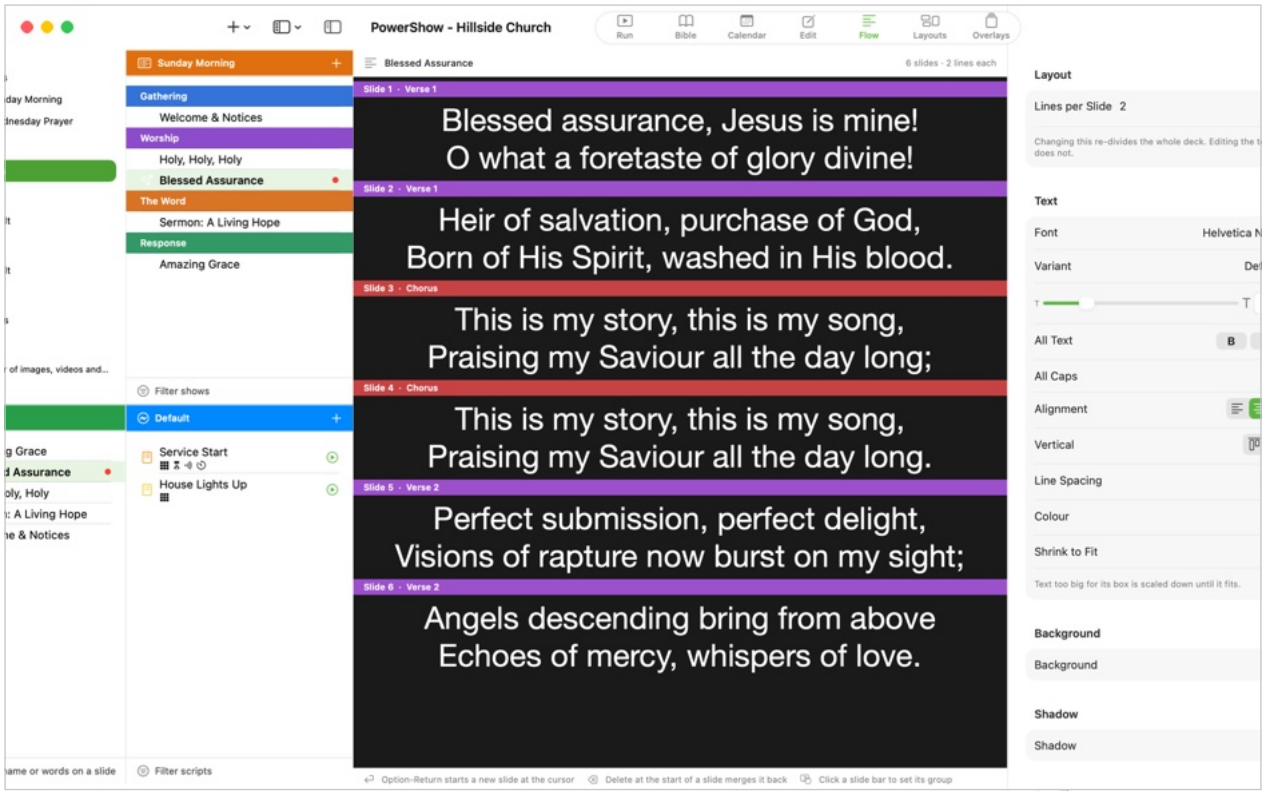
- A place where nobody has chosen follows the song's own arrangement. The song's own is what you choose with no show running, when the song is open in the Run pane on its own.
- Copy Arrangement and New Arrangement… made in a show are chosen for that place only.
- Duplicating a song's row in a show's running order keeps the row's arrangement.
- Deleting an arrangement sends every place that had chosen it back to following the song.
- A song running inside another deck follows the song's own arrangement, since it has no place in the show to choose for.

Note Choosing is per place; editing is not. Adding or removing a section changes that arrangement wherever it is chosen. To change one place without touching the others, use Copy Arrangement first and edit the copy.

Hover over the arrangement's name in the bar to see whether that place has its own choice or is following the song.

The Flow pane

Flow is the fastest way to build a song. You type or paste one body of text and it is flowed across as many slides as it takes; the text is the source of truth and the slides are derived from it.



A song in the Flow pane. Each bar marks where a slide begins and which section it belongs to; the inspector on the right styles every slide at once.

Flow is for song decks only. On a presentation deck the Flow pane says so and offers the Edit pane instead, because flowing text would take over the words on every slide. To build a deck in Flow, make it a song first: right-click it in the sidebar and choose Type ▸ Song.

1. Create a song deck and switch to the Flow pane.
2. Type or paste the lyrics into the editor on the left.
3. Set the lines per slide if two is not right for this song. The slides regenerate as you type.
4. Press Option-Return where you want a slide to end. A blue bar appears across the editor at that point, and it is exactly where the slide breaks.
5. Adjust the typography in the inspector on the right — one set of attributes applies to every slide in the deck.
6. Switch to the Edit pane if you want to add anything the flow does not produce, such as a logo or a backdrop.

How breaks behave

- A slide break is an invisible character in the text, not a line number, so it stays attached to the words when you edit around it.
- Option-Return at the end of a line moves the next line to the next slide rather than inserting a blank one.
- Option-Return at the very end of the song adds an empty slide straight away — for an Ending or an Instrumental — with its bar ready to name the section. Backspace on it takes it away again without leaving a blank line behind.
- Deleting the character merges the slides back together — plain Backspace at the start of a slide just works.

- Slides are added and removed where the edit happened, so splitting the last slide of a chorus keeps the new half in the chorus.

Note A new song starts at two lines per slide. To start every new song — including songs you import — at a different number, change Settings ▸ Editing ▸ Lines per slide for new songs. Songs that already exist are not changed; re-divide one with Lines per Slide in the Flow pane's inspector.

Note The editor previews the slide's typography — family, size, weight, colour, alignment, line spacing and shadow — and scales the font so wrapping in the editor approximates wrapping on the slide. It is clamped to a readable range, which is safe because a Flow deck has exactly one size.

Warning Only the first text object on each slide is managed by Flow. Images and anything else you add in the Edit pane are left alone — but if the text reflows to fewer slides, the surplus slides go, and anything on them goes with them.

Importing songs from files

PowerShow reads four openly specified formats and normalises all of them to the same shape. Use File ▸ Import ▸ Song Files… for a handful, or Song Folder… for a whole library.

Plain text
: An optional title line, then sections. Headings in square brackets — [Verse 1], [Chorus] — or, as CCLI SongSelect writes them, bare on their own line. A heading is recognised whether or not it ends in a colon, and whether or not there is a blank line above it; blank lines between sections are ignored rather than becoming empty slides.

ChordPro
: Recognised by its brace directives. Titles, choruses and comment-style section markers become headings; inline chords are stripped and chord-only lines are dropped.

OpenLyrics
: Parsed as XML. Verse names become headings, line breaks are honoured, and chords and comments are not treated as words to project.

OpenSong
: Leading dots mark chord lines and leading digits mark verse lines; [V1], [C], [P] and [T] become headings.

Note The format is decided by what is in the file, not by its name. OpenSong exports often have no extension at all, and in ChordPro a square bracket is a chord rather than a section heading — reading the file is the only way to tell.

1. Choose File ▸ Import ▸ Song Files… and select one or more files.
2. Review the sheet. It shows what was found and which group each section will go in, with any group the import will add to your library marked in orange.
3. Choose the folder the new decks go in, the canvas they are built on, and whether to skip

songs you already have.

4. Import. A single song opens in the Flow pane ready to adjust; a bulk import selects the folder and reports what it did.

Note Imported songs are built on the canvas set in Settings ▸ Importing ▸ Imported Songs — 1920 × 1080 unless you change it. The sheet starts from that setting and offers the standard sizes and your displays' own canvases, so a song can be made for a wide wall without being resized afterwards. Changing it in the sheet is for that import only. The words are laid out for the canvas: the type is a set proportion of its height and the text box of its width.

Section headings are matched against your library's groups. A heading finds a group of the same kind and the same number, ignoring case and spelling — Pre-Chorus, Pre Chorus and PreChorus are one kind, and Refrain is a Chorus — and "1" and no number count as the same, so Verse finds Verse 1 and Pre-Chorus 1 finds Pre-Chorus.

A section your library has no group for gets one of its own, added to the library once and reported when the import finishes. It is named after the heading, so a slide reading Chorus 3 is never filed under Chorus, and it takes the colour of its family — a new chorus is coloured like your other choruses. A heading of no family you have, such as Rap, takes the colour the file gave it, or grey. A section is never put in a group of a different kind: a Tag is never filed as a Vamp.

Instructions

A line that only tells the band what to do — (REPEAT), Repeat Chorus x2, (x2) — is left out. A lyric that merely begins with the word, like Repeat the sounding joy, is kept, and so are backing vocals in brackets.

Line breaks

A soft return — the line break inside a paragraph that ProPresenter, Word and Pages all have — starts a new line, so it counts towards lines per slide like any other.

Spacing and letters

Runs of spaces become one. A Cyrillic or Greek letter that looks exactly like an English one, inside an otherwise English word, is replaced with the English letter, so the word can be searched for. Words written wholly in another alphabet are left alone.

From SongSelect, and importing automatically

File ▸ Import ▸ From SongSelect… opens CCLI SongSelect in your web browser, where you are signed in to your church's account. PowerShow cannot reach into SongSelect itself — its songs reach PowerShow as the files you download — so the way to make that quick is to have PowerShow import whatever lands in a folder.

1. Open Settings ▸ Importing.
2. Turn on Import new song files automatically.
3. Choose the Watched Folder — the folder your browser saves downloads into, or a folder of its own that you tell the browser to use.
4. Choose the deck folder imported songs go Into. Nothing is imported until one is chosen, so a song always lands somewhere you will find it.
5. Download songs from SongSelect as text or ChordPro. Each is imported within a few

seconds of arriving, and the Run pane's status strip says so.

- Songs are imported with the import sheet's own defaults: the canvas from Settings ▸ Importing ▸ Imported Songs, the starting lines per slide from Settings ▸ Editing, and a song you already have is skipped rather than imported twice.
- Nothing on screen changes while it happens — no pane switches and nothing is selected — so it is safe during a service.
- A file still downloading is left alone until it has finished arriving.
- Every file is moved out of the watched folder once it has been dealt with, into the Imported Files folder, with the date and time added to its name — Amazing Grace 20261009-143012.txt — so the same song downloaded twice is two files. A file that could not be imported is moved too, so it is not tried again and again.

Warning Imported files are deleted after 30 days, along with the import log. If you want to keep one, copy it somewhere else.

Warning If you watch your Downloads folder, any text or ChordPro file that lands there is taken as a song. A folder kept for SongSelect downloads is the safer choice.

The import log

Settings ▸ Importing lists every import from the last 30 days — from the watched folder, from File ▸ Import, and PowerPoint presentations — newest first. One that had a failure is marked in red, one with something worth reading in orange. Click an import to see each song or file in it: what it became, what was skipped as already in your library, and why anything failed. Entries older than 30 days are removed when PowerShow starts.

Importing from ProPresenter

A ProPresenter 7 .pro file can be imported the same way. A hundred files is an ordinary migration and takes well under a second to read and build.

- The arrangement is read from the file, not guessed from the order the cues happen to be stored in — so verses and choruses come across in the order they are actually sung.
- Every arrangement in the file is brought across, not just the one in force, so a full version and a short version both survive.
- A repeated chorus becomes one section and several entries in the arrangement, rather than the words being duplicated. So does a group that was duplicated in ProPresenter with the same name and the same words.
- Two groups with one name and different words are two sections. The second is named apart — a second Bridge becomes Bridge 2, a second Verse 2 becomes Verse 2b — and where only one of them is sung, the one that is sung keeps the plain name.
- Groups with no words in them — Intro, Instrumental, Ending — come across as sections with one blank slide, because the band plays them and the operator steps through them. One that no arrangement uses is left out, since nothing would ever play it.
- A group with no name at all is still imported, as Section, with its words.
- The deck is named after the file, which is the name ProPresenter's own library shows. The name stored inside a .pro file is not changed when the presentation is renamed, so a song

made by copying another can still carry the original's name inside.

- The CCLI block is read: author, title, copyright, year and song number are stored with the deck.

Note ProPresenter files store the lyrics twice — once as the slide text and once in a notes field that usually has chords above the words. PowerShow takes the slide text. If you see chord lines on your slides after an import from another tool, that is the mistake it is avoiding.

Duplicates are found by CCLI number first and by name second, because two decks called the same thing may be different arrangements while one CCLI number is one song. Skipping duplicates is on by default: running an import twice is usually somebody checking whether the first one worked.

Importing a PowerPoint file

File ▸ Import ▸ PowerPoint File… turns a .pptx into a deck — one slide per slide, drawn by Keynote so that everything PowerPoint can draw comes out looking right.

1. Choose File ▸ Import ▸ PowerPoint File… and pick the presentation.
2. Give the deck a name. The pictures go in a folder of the same name.
3. Choose which deck folder it lands in, and press Import.
4. The first time, macOS asks whether PowerShow may control Keynote. Say yes — without it the slides cannot be drawn.

Where the pictures go
A folder named after the deck, inside your imports folder — ~/Documents/PowerShow/Imports unless you change it in Settings ▸ Storage. The deck follows that folder, so moving or deleting it leaves the deck full of grey question marks.

The canvas
Taken from the presentation itself, so a 4:3 deck imports as 4:3 rather than being squeezed into a widescreen canvas.

Importing twice
Nothing is ever overwritten. Importing the same presentation again makes a second folder — Notices 2 — and a second deck, so the first is left exactly as it is.

Note The slides come in as pictures, not as text and shapes. You can reorder them, put them in a show, add triggers and set an auto-advance, but you cannot edit the words on them — for that, rebuild the slide in the Edit pane.

Warning Only .pptx files can be imported. The older .ppt format is a completely different kind of file — open it in PowerPoint or Keynote and save it as .pptx first.

Note Keynote must be installed; it is free from the App Store. PowerShow leaves it exactly as it found it — if Keynote was not already running, it is quit again once the slides are drawn.

Song details and CCLI numbers

A song deck keeps who wrote it, its copyright line and year, and its CCLI song number. An import fills these in wherever the file states them — SongSelect downloads put them in the licence footer, and ProPresenter files carry them in a CCLI block — but plenty of files carry none of it, so you can enter and correct them by hand.

1. Right-click the song in the sidebar's list — in a deck folder or in a show's running order, either works.
2. Choose Song Details…
3. Fill in what you know. Changes are saved as you type; there is nothing to confirm.

The same sheet opens from Edit Song Details… on the Dynamic tab of a CCLI object, while you are editing one of the song's slides — see the next section.

- The CCLI song number is the identity a licence is reported against, and it is what an import uses to tell one song from another.
- Paste the number with its words attached if that is what you have copied — CCLI Song # 7104226 — only the digits are read.
- Clearing every field takes the details off the deck entirely, which is the state a deck starts in.
- The line at the foot of the sheet is how the details read together, worded exactly as the CCLI objects show them on a screen.

Note Song Details is offered on song decks only. A presentation deck has no writers and no CCLI number, so the item is simply not there. Changing a deck's type never throws its details away — turn it back into a song and they are still there.

Warning PowerShow does not report to CCLI for you. It keeps the numbers so you have them; working out which songs a service used is still yours to do.

Putting a song's CCLI credit on screen

A song's details can go on a screen with its words — who wrote it, the copyright line and the CCLI song number. Add ▸ Dynamic ▸ CCLI Fields puts them on a slide, a layout or an overlay, filled in from Song Details for whichever song is on air, so one object serves every song.

Writers
Who wrote it, as entered in Song Details.

Copyright
The copyright line with a © and the year in front — © 2019 Some Music Publishing. A © or the word Copyright already in what was entered is not written twice.

Year
The year alone: the Year field, or failing that the year written in the copyright line.

Song Number
The song's number as a licence footer writes it — CCLI #7104226.

All Three Lines
Writers, copyright and song number, one to a line and in that order, the way a licence footer is written. A line the song has nothing for is left out rather than left blank.

1. Open one of the song's slides in the Edit pane — or a layout in the Layouts pane — and choose Add ▸ Dynamic ▸ CCLI Fields ▸ All Three Lines.
2. Drag it to the foot of the slide. It arrives as small print, three lines deep. A single field arrives one line deep at the same size, so a credit and a field beside it match.
3. Style it on its Text tab like any other text.
4. If the song's details are missing, choose Song Details… from the song's right-click menu in the sidebar — or, while you are on one of the song's slides, click Edit Song Details… on the object's Dynamic tab.

- On air, a field the song has nothing for is empty, and every field is empty while anything other than a song is on air — a sermon deck, a Bible reading. Nothing is made up: a © with nothing after it would be worse than no line at all.
- In the editor each one shows a sample — Song Writers, © 2019 Copyright Holder, CCLI #1234567 — so there is something the length of a real credit to lay out against.
- It shows the song on air, not the slide it sits on, so the same object copied onto one slide of each song — the first, or the last — shows each song's own credit. On a stream's layout or an overlay it follows whatever song is running.
- Like the other objects that read the running order, it has a Follows picker on its Dynamic tab, for a rig running several decks on different displays.

Note Change a song's details while it is on air and the credit on screen changes with them.

Where lyrics come from

Warning PowerShow does not download lyrics. There is no service that will license them to a presentation app this way, and scraping a lyrics site breaches both its terms and the publisher's copyright.

Import from files your church is already licensed to have: CCLI SongSelect downloads, and libraries exported from other presentation software. Both are covered above.

Chapter 6

Layouts, Confidence Monitors and Lower Thirds

Arrangements of live information for the team, and restyled lyrics for a stream.

What a layout is

A layout is a slide in everything but where its content comes from: objects on a canvas, edited with the same canvas, object list and inspector as a deck slide. What makes it a layout is that most of its objects are dynamic — they resolve against whatever is on air rather than carrying fixed content.

A layout is used in two quite different ways, depending on the role of the display it is given to.

On a confidence monitor
: The layout replaces the slide. The band sees the lyric, what is coming next, the section name and the time, all on the layout's own canvas.

On any other display
: The layout wears the slide's words: the text of the slide is dropped into the layout's first text object and everything else on the slide is left behind. This is how a lower third for a stream is made.

Creating a layout

1. Switch to the Layouts pane.
2. Click + below the layout list.
3. Set the canvas size in the toolbar to match the screen it is for — a confidence monitor is often a different shape from the stage screen.
4. Add objects with the Add menu, exactly as you would on a slide.
5. Name the layout something that says which screen it is for.

> **Note** A new layout is blank. It used to arrive with four objects already on it, which is helpful exactly once — from the second layout onwards it is four things to delete before the real work starts.

Dynamic objects

Add ▸ Dynamic offers everything that comes from what is on air. All of them are legal on an ordinary slide too — a deck may perfectly well want a clock on it.

Current Slide (rendered)
: A miniature of the slide itself, drawn exactly as the room is seeing it.

Next Slide (rendered)
The same for the slide that is coming.

Current Slide (text)
The words on the current slide, as text this object styles itself. Use this for the big lyric on a confidence monitor.

Next Slide (text)
The words on the next slide.

Current Slide Notes / Next Slide Notes
The notes written in the box under the slide in the Edit pane — for the slide on air, or the one after it. Notes are never drawn on the slide itself, so this is how they reach the team. See Slide notes in chapter 4.

Current Group / Next Group
The song section's name, optionally painted in that group's own colour with a legible colour on top.

Deck Progress
A row of small squares, one per slide the deck on air actually runs, with the live one boxed in white. On a song the squares take their slides' group colours.

Timer
A countdown or count up from the library — see chapter 10.

Deck Name
The name of the deck on air.

CCLI Fields
A submenu at the foot of Add ▸ Dynamic: a song's Writers, Copyright, Year or Song Number, or All Three Lines as a credit. See "Putting a song's CCLI credit on screen" in chapter 5.

Date / Time
A clock, with a format picker and a custom pattern field.

A dynamic object that draws words carries exactly the same text attributes as an ordinary text object, so it can be styled however you like.

Which deck it describes

Everything above answers a question about the deck on air — and with several decks running on different displays at once, that question has more than one answer. The Follows picker is where you say which one.

This Display
The deck that is on whatever display this object is drawn on. The default, and what you want on a stage screen: an object on a slide describes the slide it is on.

A named display
The deck on that display, wherever this object is drawn. This is how a confidence monitor follows the auditorium while a notice reel runs on the foyer screen.

Warning On a rig where the decks name their displays, a confidence monitor no deck has named is claimed by nobody and shows nothing. Point its objects at the display you want

it to monitor.

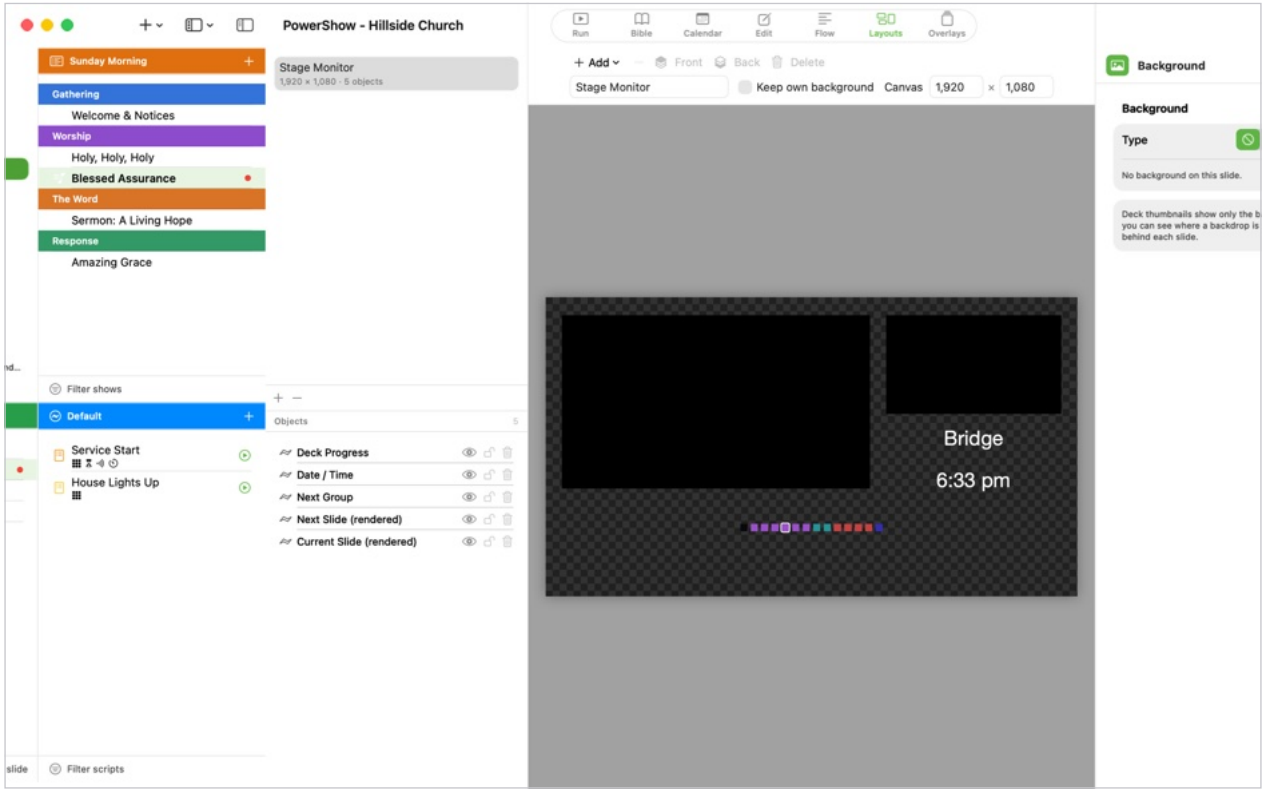
Note Follows is offered only for the objects that read the running order. A timer and a clock say the same thing whatever is on any screen, and Video Time Remaining follows whichever deck the transport controls are driving.

Note Next Group is the group of the next slide, not the next different group. Inside a four-slide chorus it therefore reads Chorus — that is correct. It changes on the last slide of a section, which is the slide where somebody actually needs to know what is coming.

Deck progress in detail

- The squares are in running order, so a chorus sung three times is three squares to pass through.
- The square size is set on the inspector's Dynamic tab, in canvas points. What the object's size decides is how many fit.
- When there are more squares than fit, the row holding the live slide is drawn at the top.
- A presentation deck's squares take the object's own colour, since its slides have no groups.

Setting up a confidence monitor



A confidence monitor layout in the Layouts pane: the current slide, the next slide, the next section, the time and the deck's progress, all filled in live during a service.

1. In Settings ▸ Displays, add a display for the monitor and set its role to Confidence

Monitor.

2. Point its segment at the screen the team can see.
3. Build a layout at that screen's resolution, with a large Current Slide (text) object and whatever else the team needs — the next slide, the time, Current Slide Notes for anything written under the slides.
4. Set the display's layout to the one you built.
5. Go live. The monitor shows the layout, updating as you advance, while the room sees the slides.

Note Changing which layout a display shows takes effect immediately, without blinking the output — so you can try layouts during a rehearsal while everything is live.

Warning A confidence monitor never transitions. It shows mostly the same objects from one slide to the next, several of them updating continuously, and sliding or dissolving that means the clock and the section name move every time the operator advances.

Fields and labels

Every text object in a layout is one of two things, chosen with the Shows switch at the top of its Text tab in the inspector.

Field
: A hole the slide's words are poured into. It shows what the slide it is applied to gives it — and nothing at all when there is nothing to give, which is what stops a layout showing placeholder text on air.

Label
: Carries its own words: a heading, a caption, a note. It is untouched by whatever slide the layout is applied to.

A new text object in a layout is a field, since that is what a layout is mostly made of. The first field takes the slide's words; a Bible reading puts its verses in the first field and its reference in the second.

- While you are designing, a field shows the text you typed into it — otherwise there would be nothing on the canvas to position or set type against. On air it shows only what it is given.
- A layout with no field at all is shown exactly as authored.
- Text on a slide or an overlay is always a label. There is nothing above those to give them anything, so the switch is not offered.

Note Existing layouts were set up for you when this arrived, from how each was being used: one on a presenter display got a field for its first text object, the Bible layout got two, and one on a confidence monitor kept all its labels. A layout not assigned to any display was judged by whether it has live objects on it. If a layout of yours has stopped showing the words, its text object needs switching to Field.

Lower thirds and restyled lyrics for a stream

Give a layout to a display whose role is Presenter and it works the other way round: the layout is the frame, and the slide's words are dropped into it.

1. Build a layout at the stream's resolution with an ordinary text object where the words should appear — positioned as a lower third, say — plus any furniture you want around it.
2. In Settings ▸ Displays, select the stream's display and set its layout to that one.
3. Leave the role as Presenter.

- Only the string crosses over. Font, size, colour, alignment and shadow stay the layout's — restyling is the whole point.
- The words come from the slide's first visible text object. A presentation slide with several text boxes keeps only the first.
- The background comes from the slide, not the layout, because the backdrop is what the room is looking at and the layout is only a frame for the words.
- Unless the layout sets a background of its own, which then wins. Set the layout's background to Inherit to ask for the slide's explicitly, or leave it as None for transparency over a camera.

Note Inherit is only offered while editing a layout, because a deck slide has nothing to inherit from.

What goes behind a layout

A layout on an ordinary display shows the slide's words in the layout's own styling. What sits behind it depends on the layout — and, for a song, on the slide.

The layout's own background
: What a layout normally brings with it, and what a sermon or notices deck wants: the layout is the design.

Inherit
: A background kind offered only while editing a layout. It asks for whatever the slide behind it has, which is what a restyled lyric usually wants.

A song's own picture or clip
: On a Song deck, an image or video background set on the slide shows through the layout — it beats a background the layout sets, and it appears even when the layout sets none.

That last one exists for the way songs are actually run: the words are the constant and the backdrop is what gets swapped, often minutes before a service, by dropping a clip on the slide. A layout that ignored it would take away the one part meant to change.

Note Only an image or a video. A flat colour or a gradient on a song slide still defers to the layout, because a layout's own panel is part of its design where a slide colour is usually just what it was left as.

A backdrop set on a song's cover is the exception: a colour or a gradient there shows through the layout just as a picture does, on every slide that sets no backdrop of its own. A cover's

backdrop is only ever chosen on purpose.

Warning Never on a confidence monitor, whatever the deck is. That screen shows the layout instead of the slide and exists to be readable — a motion background behind the words is exactly what it does not want.

When a layout should keep its own background

Tick Keep own background in the layout's toolbar and a song's picture or clip is ignored, so the layout's own background is what shows. That is for the layout whose background is the design — a stream overlay, a sponsor's frame, anything where the panel behind the words is the point. A lyric layout leaves it off.

Note It turns off the automatic rule and nothing else. A layout whose background is set to Inherit still inherits, because that is asking for the slide's outright rather than a rule deciding on your behalf.

Sending a key and fill for a switcher

A display can send a second output carrying its alpha as a black-and-white matte, so a vision switcher can composite lyrics over a camera.

1. In Settings ▸ Displays, select the display and turn on Alpha Key.
2. Point the key at its own destination — a second DeckLink output, or a second NDI® stream.
3. Set the display's layout to one with no background, so the words sit over transparency rather than over black.

Turning the key on also makes the fill carry alpha. A slide drawn over black is opaque everywhere and its key would be a plain white rectangle, which is useless.

Note Overlays appear on the key as well as the fill, so a matte never stops matching the picture it cuts.

Chapter 7

Bible Readings

Fetching a passage, dressing it in a layout, putting it on the screen, and turning it into a deck.

How readings work here

The Bible pane fetches a passage from API.Bible, flows it across slides using a layout you choose, and puts it on the screen. Nothing is written to your library until you ask for it.

That is deliberate: a reading announced from the front two minutes before it happens has no time to become a deck first. Create Deck is for the times it was planned in advance, and from that moment the slides are ordinary slides.

Note A reading is not part of the running order. Presenting one clears whatever the Run pane had on air, and the arrow keys step through the reading instead — so exactly one of the two ever holds the screen.

Setting up an API key

Scripture text comes from API.Bible, which is free for the public-domain and Creative Commons translations and licensed for the rest. You need your own key.

1. Sign up at scripture.api.bible and create an application to get a key.
2. Open Settings ▸ Bible in PowerShow.
3. Paste the key in and click Check Key. It reports how many translations the key can reach.
4. Choose the translations you actually use, ticking them in the list.

The shortlist matters more than it looks. API.Bible returns every translation your key can reach — which is every public-domain and Creative Commons version as well as anything you license — and nothing in the response says which is which. A church with three licensed translations would otherwise be picking them out of a hundred every week.

Note With a shortlist set, PowerShow asks the API for exactly those translations rather than fetching the whole catalogue. Leaving it empty means every translation the key can see.

Warning The key is stored in plain text in Bible.json in your library. That is a deliberate trade: it is a free, rate-limited, read-only key for public scripture text, and putting it in the Keychain would give you a library that works on one Mac and silently fails on another.

Putting a reading on the screen

1. Switch to the Bible pane.
2. Choose a translation, then a book, then a chapter.
3. Choose the first and last verse from the lists beside the chapter. Each list holds only the verses that chapter has. To run on into a later chapter, click the arrow after the last verse and choose where the reading ends. Then click Look Up.
4. Choose a layout. The layout does all the styling — see below.
5. The passage is flowed into slides in the grid. Click any of them to put it on air, exactly as you would a slide in the Run pane.
6. Use the arrow keys to move through the reading.

Note The verse lists use the numbering almost every English translation shares, built into PowerShow so no request is needed to fill them. Where a translation numbers a book differently — a different number of chapters, as some translations have for Malachi, Joel or Daniel — or has a book PowerShow does not list, you type the verse numbers instead.

The publisher's copyright line is shown in the pane. It is never put on a slide — a copyright notice projected over a reading is not what anybody means by attribution.

Going back to an earlier passage

The History menu beside Look Up lists the last 25 passages fetched, newest first. Choose one and its translation, book, chapter and verses are put back and it is fetched again.

- Looking up a passage already in the list moves it to the top rather than listing it twice.
- The same verses in two translations are two entries, so going back to a comparison is one click.
- A passage in a translation the pane no longer offers — because the list in Settings ▸ Bible has changed — is shown but cannot be chosen.
- The history is kept with the library, so it is there on any Mac that opens it. Clear History at the foot of the menu empties it.

Choosing a layout for readings

A layout is required, and it does the whole of the styling. The reading's verses go into the layout's first text object and the reference into its second.

- A layout with no text object cannot carry a reading at all and is not offered.
- A layout with one text object can show the words but not the reference, so that switch is disabled rather than silently ignored.
- Hidden objects do not count — switching one off says it is not part of the layout.

The Layouts editor is shown below the reading grid so you can adjust typography against real verses and watch the breaks move.

How the passage is divided

Verses are added to a slide until the layout's own text box would overflow — so changing the font, the box or the line spacing changes where the breaks fall. That is what "given the formatting" has to mean if it means anything.

- Measurement is against the authored font size, not the shrunk one. Otherwise a box that shrinks text to make it fit would always answer yes and the whole reading would land on one slide at four points.
- A single verse too long for the box still gets its own slide rather than vanishing.
- The fill is greedy: each slide takes as much as it holds. A reading is sequential and whoever is following it wants each slide as full as it goes.

Verse numbers

Verse numbers are shown inline and raised as superscripts by default, so a reading arrives looking like scripture rather than like a paragraph of prose — and anybody following along in their own Bible can find the place. Both switches are in the pane's controls if you would rather not have them. A raised number is drawn as a smaller font with a baseline offset computed from the two fonts' cap heights, so the line does not grow taller and the text does not reflow around it.

Turning a reading into a deck

1. Fetch and lay out the passage as above.
2. Type a name beside Create Deck, or leave it and the deck is named after the passage.
3. Choose the deck folder it goes in. The folder used last is chosen already.
4. Choose where it goes once it exists: added to the end of a show, put at the end of another deck to run inside it, or nowhere.
5. Click Create Deck.

The layout is baked in once. From then on the slides are ordinary slides in an ordinary deck, with no memory of where they came from — so you can edit, reflow and re-style them like anything else.

Where it goes

- The menu remembers what it was last set to, and lists the last 10 shows and decks a reading was actually sent to at the top — the same few tend to come round every week.
- Add to the End of a Show lists every show. Put at the End of a Deck lists decks by folder; a song is not offered, because a song runs its arrangement and cannot hold another deck.
- A reading put inside a deck runs at the end of it, under the deck's green line and name tab, and arrives locked: it can be moved by dragging its tab, but not changed from inside that deck. Click the padlock on the tab to unlock it — see chapter 3.

Note Check the menu before clicking Create Deck if a new show is made each week: it keeps last week's show until you choose this week's. Hover over Create Deck to see where the deck will land.

What is not built yet

- There is no typed reference box: you cannot yet type "John 3:16-18" and have it fetch that. Choose the book and chapter from the menus.
- There is no phrase search.

Both are endpoints API.Bible offers; neither is needed to put a reading on a screen, so both are waiting.

Note No table of book names ships with PowerShow. Books, chapters and passage ids all come from the API itself, which is what lets it work in whatever languages your key can reach.

Chapter 8

Overlays

Objects laid over whatever is on air — a speaker's name, a notice, a logo — switched on and off without moving the running order.

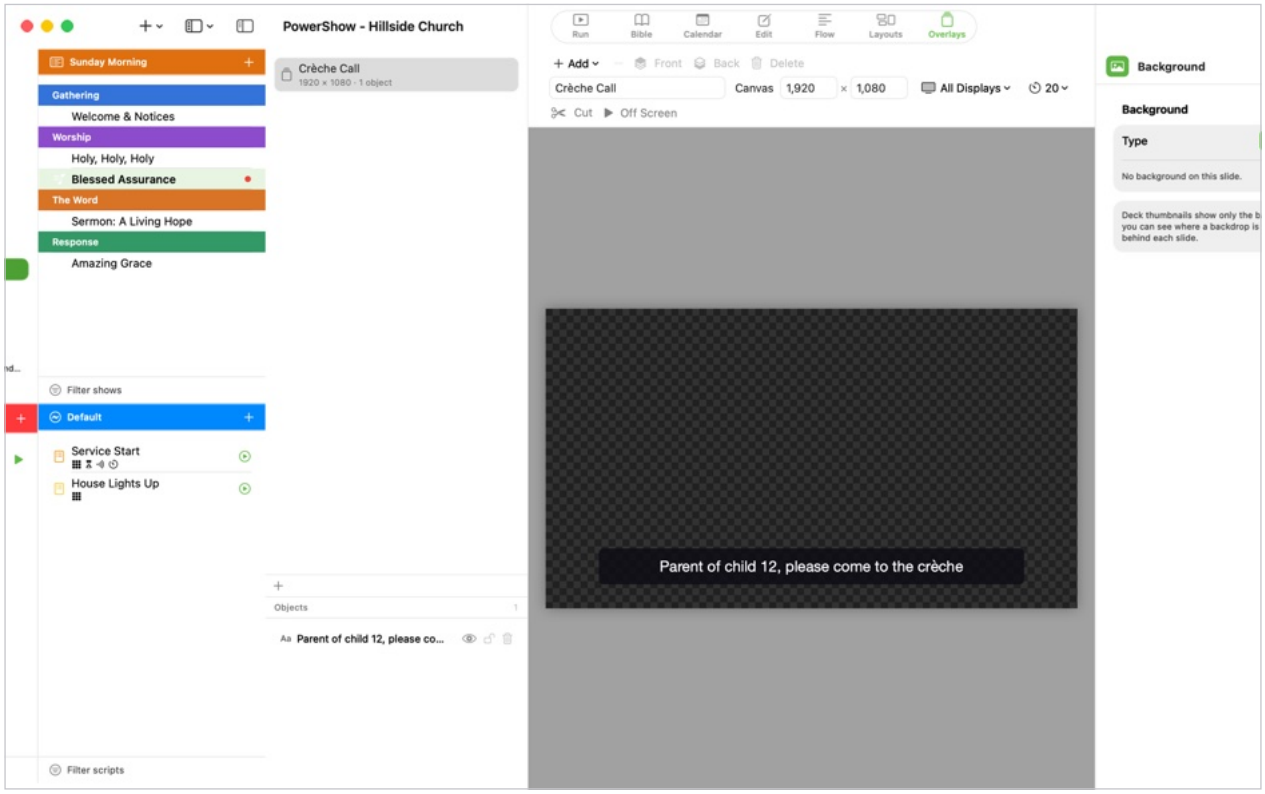
What an overlay is

An overlay is a set of objects drawn on top of whatever is showing: a speaker's name, a message asking a parent to come to the crèche, a logo in the corner. You switch it on, it appears; you switch it off, it goes.

> **Warning** An overlay never becomes the current slide. Switching one on does not move the programme, so Next still goes to the slide after the one that was showing. That is the whole point of them.

An overlay is edited with the same canvas, object list and inspector as a slide or a layout, so every object kind and every attribute applies unchanged.

Creating an overlay



An overlay in the Overlays pane. The toolbar above the canvas sets which displays it goes on, how long it stays up and how it arrives.

1. In the sidebar, click a folder under Overlays. Its overlays are listed below.
2. Click + above the list, or use the + below the list in the Overlays pane.

3. The overlay opens in the Overlays pane. Name it in the toolbar.
4. Set the canvas size to the display it is meant for.
5. Add objects with the Add menu — text, shapes, images, or dynamic objects such as a timer or clock.
6. Choose which displays it goes on, using the display menu in the toolbar.

Note Add folders under Overlays the same way you add deck folders, from the Add menu at the top of the sidebar. There is always at least one.

Choosing which displays an overlay goes on

The display menu in the overlay toolbar has three answers.

All Displays
Every routed display, whatever it is for.

All Except Confidence Monitors
Every display except the ones the team watches. This is the one that earns its keep: a note for the room belongs on the stage screen and must not cover the words the band is singing from.

Chosen Displays
Exactly the ones ticked. Tick a display in the menu and the scope moves here automatically.

Note Ticking displays, switching to All, and coming back keeps the displays you ticked — so trying a blanket answer costs nothing.

A display that is not targeted never has the overlay in its frame at all, so the Run pane's preview shows exactly what each screen is really sending.

Switching overlays on and off

- In the sidebar's overlay list, click the play button beside an overlay. It turns into a stop button and the row turns orange while the overlay is on.
- In the Overlays pane, use the On Screen / Off Screen button in the toolbar, or right-click the overlay in the list.
- From a slide, using an overlay trigger — see chapter 9. That is how a speaker's name appears automatically when their slide comes up.

Several overlays can be on at once. The one switched on last is drawn on top, which is the only order that can be predicted without a control nobody asked for.

Warning Which overlays are on is not saved. An overlay left on when you quit comes back off, so the app never starts a service with something on the screen from last week.

Note Editing an overlay that is currently on screen updates the output immediately, so

you can adjust a notice while it is up.

Taking itself off, and how it arrives

Two settings in the overlay toolbar decide how long an overlay stays and how it comes and goes. Both are optional: left alone, an overlay stays until you take it off and appears instantly, which is what every overlay did before these existed.

Stays Up
The default. The overlay is there until you switch it off, or until a trigger does.

A time
The overlay takes itself off after that long — twenty seconds for a message asking a parent to come to the crèche. Pick one of the presets or Custom… for anything else.

Taking it off by hand cancels the clock
So an overlay put back up moments later gets its full time again rather than being taken down part way through by the first appearance's countdown.

Transition
How it arrives and leaves — a cut, a dissolve, a push or a wipe, with a duration. The picker loops the one you have chosen so you can see it before you use it.

Note An overlay leaves the way it came: pushed in from the right, it goes back out to the right. On NDI® and DeckLink outputs an overlay cuts rather than transitioning — the movement is on screens and in the preview panel.

Switching an overlay on that is already on does nothing, including restarting its time on air. Take it off and put it back if you want the clock to start again.

Where an overlay is drawn

An overlay belongs to the display, not to the deck. It is fitted to the display's own canvas, exactly as a background is — because a logo belongs in the corner of the screen rather than in the corner of a letterboxed slide, and an overlay knows nothing about whatever deck happens to be on air.

- An overlay authored at the display's own shape lands on it exactly, one to one.
- One of a different shape is centred and letterboxed, never cropped: losing the end of "please come to the crèche" is the one outcome nobody wants.
- On a spread across several projectors, the overlay is placed against the whole wall — so author it at the wall's size if you want it to span.

Note Overlays are drawn on the alpha key as well as the fill, so a matte never stops matching the picture it cuts.

Practical patterns

A speaker's name

1. Create an overlay at your stream or stage resolution.
2. Add a rectangle as a lower-third bar and a text object with the name.
3. Set targeting to All Except Confidence Monitors.
4. Add an Overlay trigger to the slide where the speaker starts, with the action Show, and another with Hide on the slide where you want it gone.

A crèche notice

1. Create an overlay with the message on a panel.
2. Set targeting to All Except Confidence Monitors, so the band is not covered.
3. Switch it on by hand from the sidebar when it is needed, and off again after.

A permanent logo

1. Create an overlay containing just the logo, positioned in a corner.
2. Target the stream display only.
3. Switch it on at the start of the service and leave it.

Note An overlay with nothing on it — or with every object hidden — is called out in the pane as "Nothing on it yet" and its play button is disabled, because one that switched on and showed nothing would read as a fault.

Chapter 9

Triggers and Scripts

Making a slide do something as it goes on air, and building named sequences you can reuse.

Triggers and scripts, and the difference

Trigger
: One action, added directly to a slide and belonging to that slide alone. Nothing is filed anywhere.

Script
: A named list of triggers, filed in the library, that any number of slides can run. Editing a script changes it everywhere it is used.

Use a trigger when the cue is for this slide: black the screen here, start the sermon timer here. Use a script when the same sequence is wanted in several places: everything that should happen at the start of a service, dropped on the first slide of every show.

A slide fires its own triggers first, then its scripts, each in the order it was added.

A script can also run another script, as one of its steps — see "One script inside another" below.

Adding a trigger to a slide

From the Run pane

1. Right-click the slide's tile.
2. Choose Add Trigger and pick a kind.
3. The trigger is added and its editor opens. Set it up and click Done.
4. A bolt badge appears in the tile's corner. Right-click the bolt to edit, test or remove what is on the slide.

Note With several slides selected, the menu reads Add Trigger to N Slides and puts the cue on all of them. Only the slide you clicked opens an editor — six sheets would be six sheets to dismiss.

From the Edit pane

1. Select the slide and click on empty canvas so nothing is selected — the inspector then belongs to the slide.
2. Click the Cues tab, the lightning bolt at the top of the inspector, and click Add Trigger under Triggers.
3. Pick a kind, and set it up in the sheet that opens.

What a trigger can do

Change Layout
Point a confidence monitor — or any display — at a different layout. Choose the display and the layout; choosing no layout clears it back to the slide.

Clear
Clears one of four things, chosen in the trigger: All, which is exactly what the Clear button does; Display, which blacks one display or all of them without stopping the outputs and leaves the running order where it is; Audio, which stops whatever sound is playing and leaves the picture alone; and Overlays, which takes every overlay off.

Stop a Deck
Take a named deck off the air, wherever it is showing. Its back cover runs, exactly as if the service had moved on.

Stop the Deck on a Display
Take whichever deck is on one display off the air — useful when several decks are running at once (chapter 3).

Go to a Slide
Move the running order to a named slide and put it on air, going live first if the outputs are shut. See "Going to a slide" below.

Overlay
Show, hide or toggle an overlay.

Timer
Start, stop, resume or reset one of the library's timers.

Stop and Reset All Timers
Every timer in the library back to its start, in one step.

Show or Hide an Object
Offered on a timer breakpoint only: shows or hides one object on the slide the timer is on, as the timer passes that point. See chapter 10.

Companion Button
Press a button on a Bitfocus Companion surface, by page, row and column, optionally held for a number of milliseconds.

OSC Message
Send an OSC message to a console, media server or mixer.

MIDI Message
Send a note, control change or program change to a MIDI destination.

RossTalk Command
Send one line of RossTalk to a Ross switcher, router or graphics system — GPI 1, CC 1:1, MEM 1:1 and so on. Which commands a device understands is in its own manual.

Run a Script
Run another script here, as though its triggers were written out in this one.

Pause
Wait a set number of seconds before the next step. Offered inside a script only, since that

is the only place with a next step to hold up.

Companion, OSC, MIDI and RossTalk need a service configured in Settings ▸ Services — see chapter 11. The editor says so, with a button that takes you there.

Note Every trigger keeps every kind's settings while you switch between them, so trying Companion and coming back to Change Layout does not lose the layout you had chosen.

When triggers fire

A slide's triggers fire whenever the slide is asked for — which is not the same as whenever it is sent.

- Clicking a slide fires its triggers, including clicking the slide that is already live. Clicking a slide again means fire the cue again; a button that does nothing is worse than one that does its job twice.
- Re-sending the same slide does not fire them. Dropping a backdrop on the live slide, or using Restart Slide, changes the picture without pressing a Companion button a second time.
- Advancing with the arrow keys, the API, or an auto-advance timer all count as asking for the slide.
- A deck cover's cues fire as well, but only when the click arrives at that deck from somewhere else — see Deck covers in Decks and Slides.

Warning Slide audio follows a different rule on purpose: it starts on arrival only. Clicking the live slide again re-fires its cues without taking a music bed back to the top.

Note A failed trigger is reported in the Run pane's status strip rather than swallowed — a Companion that has gone off the network is exactly the thing that otherwise gets discovered late.

Choosing a clip's thumbnail

Wherever a clip is shown still — its slide's tile in the Run pane, the slide list, the editor's canvas — it shows one frame of itself. By default that is a second into the part that plays; you can choose the frame instead, so the tile shows something that says which clip it is.

1. Open Video Settings on the slide's clip.
2. Find the frame with the scrub bar. The preview shows each frame as you drag, so you can see where you are; the buttons with the arrow and bar then step back or on by exactly one frame, beside the ones that step a second.
3. Click the photo button in the same row. It fills in once the preview is on the chosen frame, and a small mark under the scrub bar shows where that frame is.

- Once a frame is chosen, the same photo button appears again beside it in red. Click that to stop using a chosen frame, and the thumbnail goes back to the default.
- The Thumbnail block on the right — the picture button above it — shows the frame chosen, and the sheet switches to it when you click either photo button. Show It takes the

preview back to the frame, and Use the Default does what the red button does.

- Effects you have set on the clip are on its thumbnail too, as they are on the projector.
- A chosen frame is kept with the clip on that slide, so the same file on two slides can show two different frames.

Playing only part of a clip

In and out points say which part of a file plays. The rest is left alone on disk — nothing is cut, converted or copied, and clearing the points brings the whole clip back.

1. Open Video Settings on the slide's clip, and click the scissors above the right-hand side for the In and Out block.
2. Play or scrub the preview to where it should start, then tick In and click Set To.
3. Do the same for Out where it should stop.
4. The scrub bar dims the parts that no longer play, and the block says how much of the file is left.

- A looping clip loops the trimmed part, not the whole file.
- Restarting a clip — from the transport bar or a remote — goes back to the in point, not to the beginning of the file.
- An auto-advance set to follow the video waits for the trimmed length.
- The Run pane's scrub bar shows the same dimming, and will not scrub outside the part that plays.

Note The points are times into the file, so a trigger point outside them is one the clip never reaches. The Trigger Points block marks any such point rather than leaving it to be discovered mid-service.

Warning An out point that is not after the in point is ignored, and the clip runs to the end of the file. The block says so — a clip that played no frames at all would look exactly like a broken slide.

Trigger points on a video

A trigger fires as a slide arrives. A trigger point fires part way through a clip on that slide — bring the lights up eight seconds in, black the side screen a second before the last frame, press a Companion button on the cut.

1. Right-click a slide with a video on it in the Run pane and choose Video Settings. Where a slide has more than one clip, the menu names each by its file.
2. Play or scrub the preview to the moment you want. The arrows either side of the transport step a second at a time when a drag is too coarse.
3. Click the flag above the right-hand side for the Trigger Points block — the sheet opens on it if the clip has points already — and click Add Trigger Point. The button says which moment it will use.
4. A marker in its own colour appears above the scrub bar, and a row appears in the list: the

point's colour and time, with what it fires beside them.

5. Click Add Trigger in the row and choose what to fire. Add as many as you like — they are the same kinds a slide's own triggers offer, and they fire top to bottom.

The markers appear on the Run pane's scrub bar too, in the same colours, so an operator can see what is coming while the clip plays. A row's time can also be typed in directly — m:ss, h:mm:ss, or a plain number of seconds.

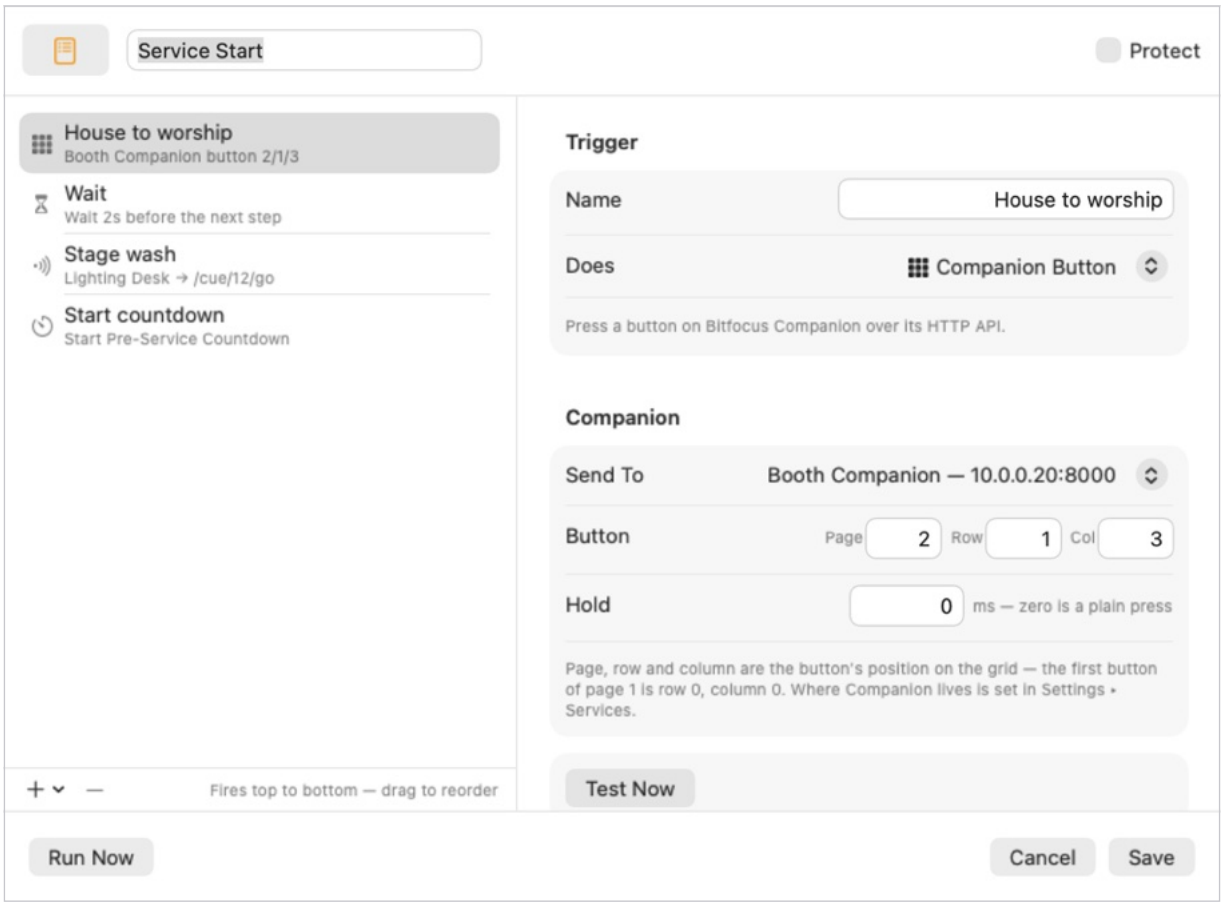
- To move a point, drag its marker along the scrub bar in Video Settings. The preview and the time beside the bar follow it, and it settles on the nearest tenth of a second when you let go. Click a marker instead and the sheet switches to Trigger Points with its row highlighted, and the preview jumps to it. The Run pane's bar leaves the markers alone, so nobody moves a cue by accident during a service.
- To change a marker's colour, click the colour in its row; the minus to its left removes the point. Hover a marker to see its time and the triggers on it.
- Points fire as the clip passes them, and only while the slide is on air.
- A looping clip fires its points again each time round.
- Scrubbing past a point does not set it off. A point skipped over was skipped over deliberately, and firing a clip's worth of cues at once because somebody dragged the bar would be much the worse failure.
- Stopping or clearing the outputs stops them, like everything else that is live.

A point fires within a twentieth of a second of the clip reaching it. On an NDI® or DeckLink output the clip starts as the slide arrives, even when the deck has a transition: you see the picture once the transition has finished, but the clip has been playing under it, as it does on a screen, so the cue and the picture stay together.

Note Trigger points belong to the clip, not to the slide, so the same file used on two slides carries its own points on each. A background video has none: a backdrop stays up across slides, so there is no arrival for a point to be measured from.

Note Test Point carries out everything on a point now, exactly as the clip would — the same thing a trigger's own Test Now button does.

Building a script



The script editor: the steps on the left fire top to bottom, and the selected step is set up on the right.

1. In the sidebar, click a folder under Scripts.
2. Click + above the list.
3. Name the script in the sheet's header, and choose its folder. Give it an icon if you like — see below.
4. Click + below the trigger list on the left and choose a kind. The trigger appears in the list and its settings fill the right-hand side.
5. Add as many triggers as the script needs. Drag a row up or down to reorder them — they fire top to bottom, so the order is the whole of what a script says.
6. Use Run Now to try the whole thing, and Test Now inside a trigger to try just that one.
7. Click Add or Save.

Giving a script an icon

Click the icon button at the left of the script's header and choose a symbol and a colour. A library grows a few dozen scripts and they are all reached for by eye, mid-service, from rows that otherwise differ only by a name — a red bolt and a blue speaker are told apart at a glance where four words are not.

The symbols

Grouped by what they are for: Lighting, Audio, Video, Screens, Network, Control, Timing and Service. Around ninety in all.

The colour
: Default, or any colour from the grid of colour families and shades that every colour control in PowerShow shows, with a colour well under it for anything else. Default means the colour the list would use anyway, which is what every script starts on.

Where it shows
: The script list in the sidebar, the slide inspector's Cues tab, a cover's cue list, and the run pane's bolt menu. A menu draws its symbols in one colour, so the symbol carries there and the colour does not.

Note A Run a Script step is named after the script it runs, and choosing a different one renames it again — the name of that step is which script it runs, so it is not somewhere to write a note of your own.

A script's row in the sidebar shows its steps as a row of small icons under the name — the order they fire in. Hover them to see the steps by name. A step that runs another script shows that script's icon, so a script built out of others reads as the ones it is made of.

Note The button in the header is the preview — it shows the icon at the size and colour it will be, so you are choosing by looking at the thing itself. Closing the popover is the whole of accepting it.

Running one from the list

Every script in the list carries a play icon on the right. One click runs it, which is what you want for a cue reached for mid-service — no right-click, no editor first. The icon fills green for a second afterwards, so you can tell it fired even when everything it does happens on another machine.

Protect
: A checkbox in the script's own header. It greys out that play icon, so the script cannot be fired by a stray click. Meant for the handful whose cue is expensive to fire by accident — a blackout, a house-lights change, anything that starts a recording.

A protected script is kept off every one-click path: the icon, the row's Run Now, and Run All Now over a selection, which says how many it left alone. It can still be run from the Run Now button inside its own editor — that takes opening the script first, which is the deliberate act the setting is protecting against doing by accident.

Note A padlock appears beside the greyed icon, so a disabled control reads as a decision somebody made rather than as a fault.

Waiting between steps

Add a Pause where something else needs a moment to finish before the next cue goes out — a video hub switching sources, a moving head getting into position, a recorder spinning up. Set how long in tenths of a second.

- Only the steps after it wait. Anything already sent has gone.
- Two pauses of the same length are two waits, not one — a script that says wait a second twice waits two seconds.

- A script with no pause in it fires exactly as it always did, in one instant.

Warning Advancing again during a pause starts a second run of the script alongside the first, the same as pressing a button on a desk twice. Keep pauses short enough that this does not surprise you mid-service.

A script's triggers exist only inside it. There is no library of loose triggers to go hunting through, and nothing else can be changed by editing one.

One script inside another

A step of a script can be another script. Choose Run a Script as the kind and pick the one to run. Its triggers happen where that row sits, in this list's order — so a script is a step like any other and "fires top to bottom" still means what it says.

Use it for the sequence that keeps turning up inside larger ones. A "House to Black" script of three cues can be a single step of the service opening, the offering, and the end of the night, and changing what blacking the house means is then one edit rather than three.

Loops and repeats are handled for you

- A script cannot be put inside itself, and one that already runs the script you are editing is not offered either — however many scripts deep the route is.
- A script reached more than one way in a single run happens once. Two scripts that both include a third do not run the third twice.
- One instruction fires once, however many scripts carry it. The same Companion press written by hand into two different scripts is one press.

Warning The last rule applies inside a single list as well: an instruction written twice in one script fires once. Two identical presses sent in the same instant were never a reliable way to ask for two of anything — if you need a button pressed twice, give the desk two cues to press.

Note A step pointing at a script that has since been deleted is removed with it, the same way deleting a script takes it off every slide that ran it.

Note Protect guards a script's own play icon against a stray click. It does not stop a script that includes it from running it — no more than it stops a slide the script is attached to — because both of those are things somebody set up deliberately.

Nesting is by reference, like putting a script on a slide: editing the inner script changes it everywhere, including inside every script that runs it.

Putting a script on a slide

- Drag the script from the sidebar list onto a slide's tile in the Run pane, or onto the canvas in the Edit pane.
- Drag several at once by selecting them first — they attach in the order they were listed.

- Drag a script onto another row of the same list instead, and a line shows where it will land: that puts the scripts in the order you want them. Several selected scripts move together and keep their order.
- Dropping the same script on a slide twice does nothing: firing it twice on one slide change is never what a second drop means.

A slide's scripts are listed on the Cues tab of the Edit pane's inspector, in a Scripts section below its own Triggers, each with a button to edit it and one to take it off this slide.

Warning Editing a script changes it everywhere it is used. Taking a script off a slide removes only that reference; deleting a script removes it from every slide that ran it.

Note Upgrading from an older library: every trigger that was in your library became a script of its own, keeping its identity, so slides that referred to a trigger now run the script that replaced it. Trigger sets became scripts holding what they used to fire.

Going to a slide

A Go to a Slide trigger moves the running order somewhere and puts that slide on air. It is the one trigger that changes what is on screen rather than what is around it — everything else acts on a display, a device or a timer while the programme sits still.

Three pickers, each narrowing the last, which between them give five ways to name a slide:

A show on its own
The first slide of that show's first deck.

A show and a deck
The first slide of that deck in that show.

A show, a deck and a slide
Exactly that slide.

A deck on its own
The first slide of that deck.

A deck and a slide
Exactly that slide, in that deck.

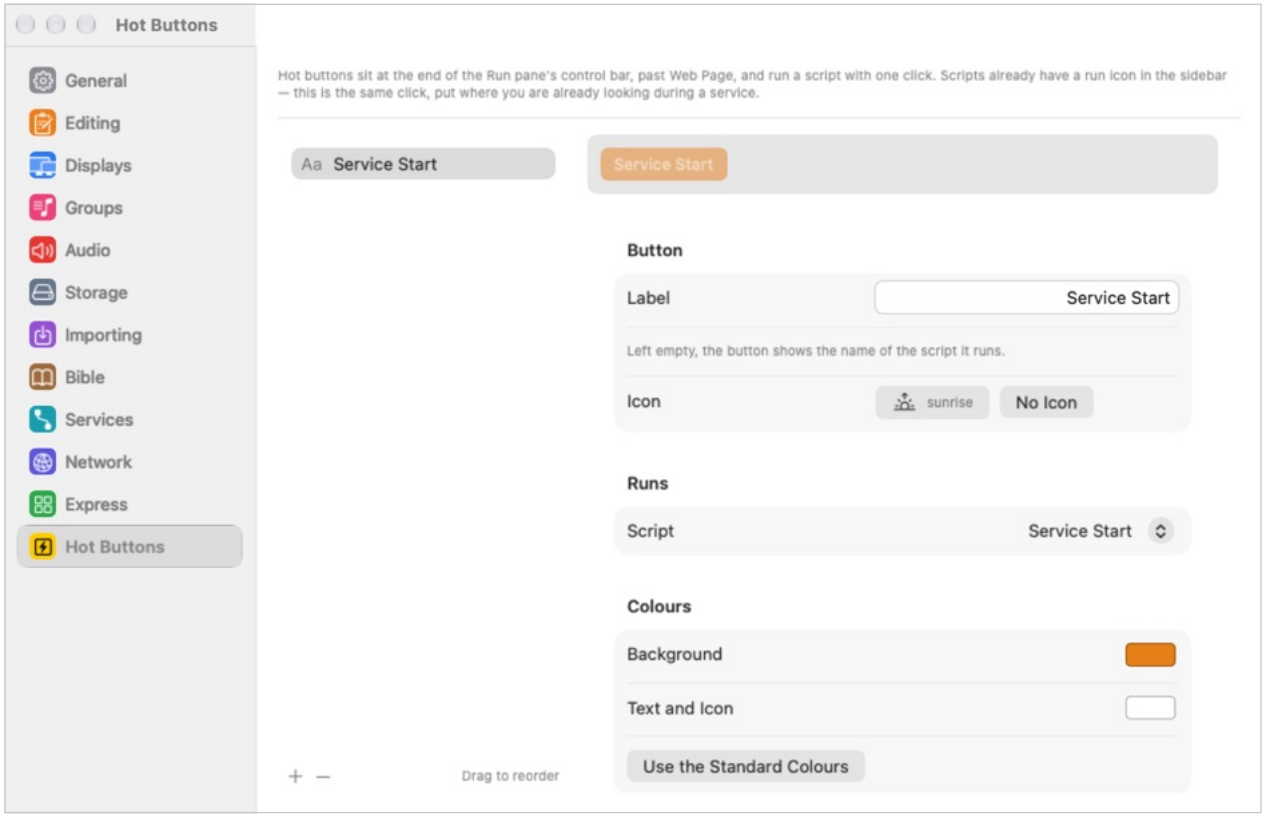
- Choosing a show lists that show's own decks, because a deck that is not in the show is not somewhere this can land.
- Leaving the deck out means the first deck; leaving the slide out means the first slide. Left out is not unfinished — it is one of the five.
- Naming a deck with no show keeps the running order you are in if that deck is part of it, and drops it if it is not. A jump to a deck of the service you are running must not tear the service down.
- If the outputs are not open it opens them, the same reading starting a show from the command line or the calendar gives.
- A deck that appears twice in a show is landed on at its first appearance — choosing from a list of deck names cannot say which.

Warning A Goto cannot lead to another Goto. The slide it lands on fires its own cues like any other, so two slides pointing at each other would go round for ever — the second jump is refused and says so.

Note If the deck or slide it names has been deleted, it goes to the beginning of what it can still find and says so in the Run pane's status strip, rather than doing nothing.

Hot buttons

A hot button sits at the end of the Run pane's control bar, past Web Page, and runs a script with one click. Scripts already have a run icon in the sidebar — this is the same click, put where you are already looking during a service.



Settings ▸ Hot Buttons. The preview at the top is the button exactly as it will appear in the Run pane.

1. Open Settings ▸ Hot Buttons.
2. Click + to add one.
3. Choose the script it runs.
4. Give it a label, or leave it empty to show the script's own name.
5. Choose an icon, or leave it as text only.
6. Choose a background and a text colour — the point is to find it without reading.

- Drag the rows in Settings to reorder them; the bar draws them in that order.
- Pressing one flashes it green for a second. A script whose cues are all on other machines gives no other sign that anything happened.
- A button with no script chosen is not shown in the bar at all, and the settings row says so

— a button that does nothing when pressed is worse than its absence.

- Deleting a script deletes any hot button that ran it.

Warning A protected script cannot be run from a hot button: the button is shown with a padlock and greyed out. Protection is a rule about one-click paths, and a hot button is the most one-click path there is — turn protection off in the script itself if you want it there.

Note Hot buttons appear in Express Mode too, which is often exactly where they are wanted: a volunteer pressing House Lights needs no more instruction than that.

Worked example: a service opening

Suppose the start of every service should put the band's layout on the confidence monitor, black the foyer TV, and start the countdown.

1. Create a script called "Service Start".
2. Add a Change Layout trigger: display Confidence Monitor, layout Band Layout.
3. Add a Clear trigger: what Display, display Foyer TV.
4. Add a Timer trigger: timer Pre-Service Countdown, action Start.
5. Save, then drag the script onto the first slide of the show.
6. Test it with Run Now before the service rather than during it.

Next week, drop the same script on next week's first slide. If the band's layout changes, edit the script once.

Chapter 10

Timers

Countdowns and count ups, how they are shown, and how they change colour as they run.

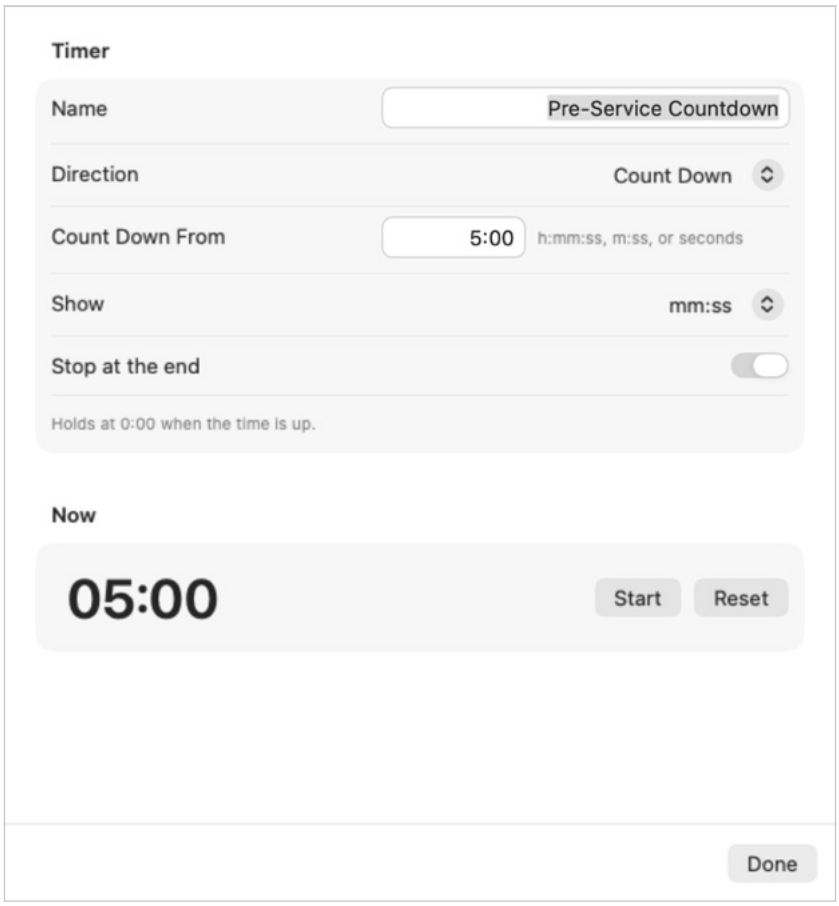
What a timer is

A timer is defined once in the library and shown by as many slides, layouts and overlays as you like. A countdown runs from a set time towards zero; a count up runs from zero towards a set time.

- The definition — direction, duration, format, and whether it stops at the end — lives in the library.
- How far through it is belongs to this session and is deliberately not saved.
- The same timer can look completely different on two screens at the same instant, because the colours belong to the object showing it rather than to the timer.

Warning A timer that came back from disk half elapsed, hours after the service it was for, would be worse than one that came back ready. So a relaunch always gives you a timer at its start.

Creating a timer



A timer's settings. The reading at the bottom is live, so a timer can be tried before it is put on a slide.

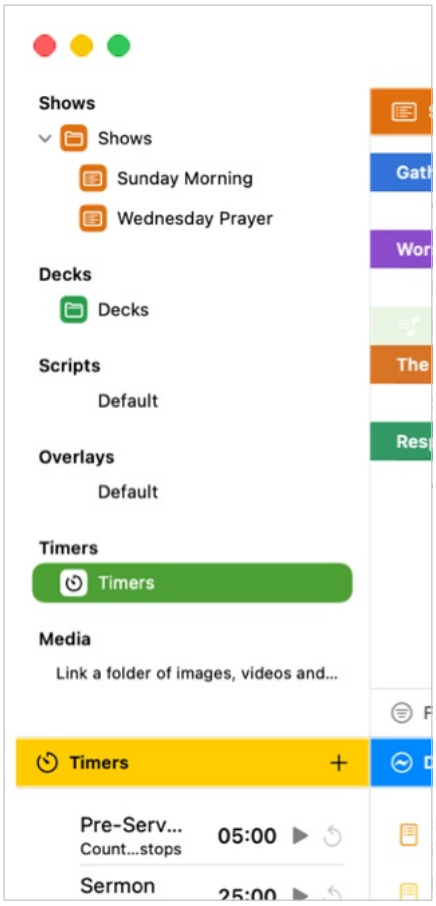
1. Click Timers in the sidebar. The library's timers are listed below.
2. Click + above the list. The editor opens.
3. Name it — "Pre-Service Countdown", "Sermon".
4. Choose Count Down or Count Up.
5. Set the time. Type it as h:mm:ss, m:ss, or just a number of seconds — "90" and "1:30" are the same minute and a half. For a countdown this is where it starts; for a count up it is where it is going.
6. Choose the format: h:mm:ss, mm:ss, m:ss, h:mm, mm or ss. The two minute-and-second formats differ only in the leading zero — mm:ss reads 05:07 and m:ss reads 5:07.
7. Decide whether it stops at the end or keeps going.
8. Click Done.

Stop at the end
The timer holds exactly at its destination — 0:00 for a countdown — rather than freezing wherever the last redraw landed.

Keep going
A countdown runs past zero and reads with a minus sign, which is how "seven minutes over" gets onto a confidence monitor. A count up keeps climbing past the set time.

Note Formats fold what is above them into their largest unit: 90 minutes in mm:ss reads 90:00, not 30:00. A timer that silently lost an hour would be worse than a wide one. Seconds are truncated rather than rounded, so a timer never shows 0 while there is still time on it.

Running a timer



The Timers list in the sidebar, each with its live reading and a play button.

- In the timers list, the play button starts a timer that has not run and resumes one that was stopped. The reading beside it turns orange while it is running.
- The circular arrow puts it back to the beginning.
- Right-click for Start, Stop, Resume and Reset explicitly.
- Drag a row up or down to put the timers in the order you want them. A timer that is running carries on counting while you move it.
- From a slide, use a Timer trigger — see chapter 9.

Warning A trigger's Start always begins again from the top. A slide carrying a timer trigger is somebody saying "start it now", and coming back to that slide during a service starts it again rather than finding it already half gone. Resume is the other reading, and is its own action.

Note The timers pane's play button resumes a stopped timer, because that is what a play

button means there. The difference between the two is deliberate and both are labelled.

Stop and Reset
A Timer trigger's Reset action stops the timer as well as putting it back to its starting point — it is labelled Stop and Reset for that reason. There is no separate action for one without the other; Stop on its own keeps the time run so far, which is what makes Resume mean anything.

Stop and Reset All Timers
A trigger kind of its own, with nothing to choose. It stops every timer in the library and puts each one back to its starting point — useful at the end of a service, or on the first slide of one, so nothing is left half run from last week.

Showing a timer on a screen

1. Open the slide, layout or overlay that should show it.
2. Choose Add ▸ Dynamic ▸ Timer.
3. Click the Timer tab in the inspector and choose which timer it shows.
4. Style it like any other text, on the Text, Background and Effects tabs — font, size, colour, alignment, background panel, shadow.
5. Size the object so the digits are as big as they need to be from the back of the room.

A timer object with no timer chosen shows a placeholder rather than an empty box, so you can see where it is and how big its digits will be while you are laying a layout out.

Note A timer on an output that is rasterised — NDI® or DeckLink — is redrawn continuously rather than being captured once, so a countdown on a stream keeps counting.

Breakpoints: changing colour as it runs

A breakpoint changes the timer's colours at a point on the way through. They belong to the object showing the timer, not to the timer itself — so the sermon timer can be plain on the confidence monitor and shouting red on the stage screen at the same moment.

1. Select the timer object.
2. On the inspector's Timer tab, under Breakpoints, click the + button.
3. Set the point. Type it as h:mm:ss, m:ss, or a number of seconds. For a countdown this reads "At"; for a count up it reads "After".
4. Under Text, choose the style — bold, italic, underline — and the colour. A style button shows what the text will look like from that point; leaving it as the object already is changes nothing.
5. Under Background, turn on Change Background if the panel behind should change too, then choose a colour or a gradient, its opacity and its corner radius, just as for the object itself.
6. Add as many as you need with +. The minus button in a breakpoint's heading removes it.

The point is the timer's own reading
Not a fraction and not a wall-clock time — so "amber at five minutes" means the same thing whichever way the timer runs and whatever it was set to.

The last one crossed wins
A list of several is a sequence of colours rather than a fight between them, and the order you add them in does not matter.

No background means leave it alone
Turning the text amber does not fill a panel behind words that never had one.

Under Breakpoints is a row of small buttons, one for each breakpoint, each showing its time, in the order the timer reaches them — then a + to add another. Click a button to see and change that breakpoint's settings below the row; hover over one to see what it changes and what it fires. A breakpoint you have just added is the one showing.

A typical sermon timer: amber at five minutes remaining, red at one minute, and set to keep going so the overrun is visible.

Note Because breakpoints are per object, a second timer object showing the same timer with different breakpoints is a perfectly ordinary thing to build.

Cues: firing something as a timer passes a point

A breakpoint can also fire a trigger as the timer passes it — black the screen when the countdown reaches zero, press a Companion button at two minutes to go, put an overlay up as the sermon runs over. Setting one is optional, and a breakpoint that only changes colour fires nothing.

1. Select the timer object, click the Timer tab in the inspector, and click the breakpoint's button.
2. Beside Fires, choose what it should do. Nothing is the default.
3. Click Edit… to set the trigger up — the same settings a trigger on a slide has, Test button included.
4. Close the sheet. The cue fires the next time the timer passes that point.

It fires as the point is passed
Not while the timer is beyond it. Starting a timer that is already past a cue does not fire it, and neither does adding a cue behind where the timer has already got to.

Only while the object is on air
A breakpoint on a slide nobody is showing is not a cue that failed — it was never up. That includes a layout on a confidence monitor, which counts as on air.

The same thing asked for twice fires once
Two objects showing one timer and both asking for the same thing at the same moment fire it once between them. Two different things at the same moment both fire.

Stopping and resuming does not re-fire
A cue already passed stays passed. Resetting the timer arms them all again, so running it a second time fires them a second time.

Note A cue is carried out exactly as a trigger on a slide is, so anything a slide can fire a timer can fire: change a layout, clear a display, Companion, OSC, MIDI, an overlay, or another timer.

One kind is offered here and nowhere else: Show or Hide an Object. It shows or hides one object on the same slide as the timer — a notice that appears at five minutes to go, or a line that goes when the countdown reaches zero. It works in both directions, so an object you authored hidden can be revealed by a cue.

Same slide only
The picker offers the objects on the slide the timer is on, because that is the slide that will be on air when the cue fires.

The deck is not changed
It applies while the outputs are live and is forgotten when they stop, so an object hidden by a cue this week is back to normal next week.

Toggle flips what is showing
Not what you authored — so two toggles put it back where it started.

Housekeeping

- Duplicate a timer from its right-click menu — the copy takes the clock settings, not the objects that show it.
- Deleting a timer clears it from every trigger that pointed at it, so no trigger fails silently at the moment it was needed.
- A dynamic object left pointing at a deleted timer draws its placeholder, which is visible.

Note The timer editor writes changes as you make them rather than holding them until you close it. A countdown adjusted five minutes before a service may well be on a screen already, and a sheet that held its changes back would show you one thing and the room another.

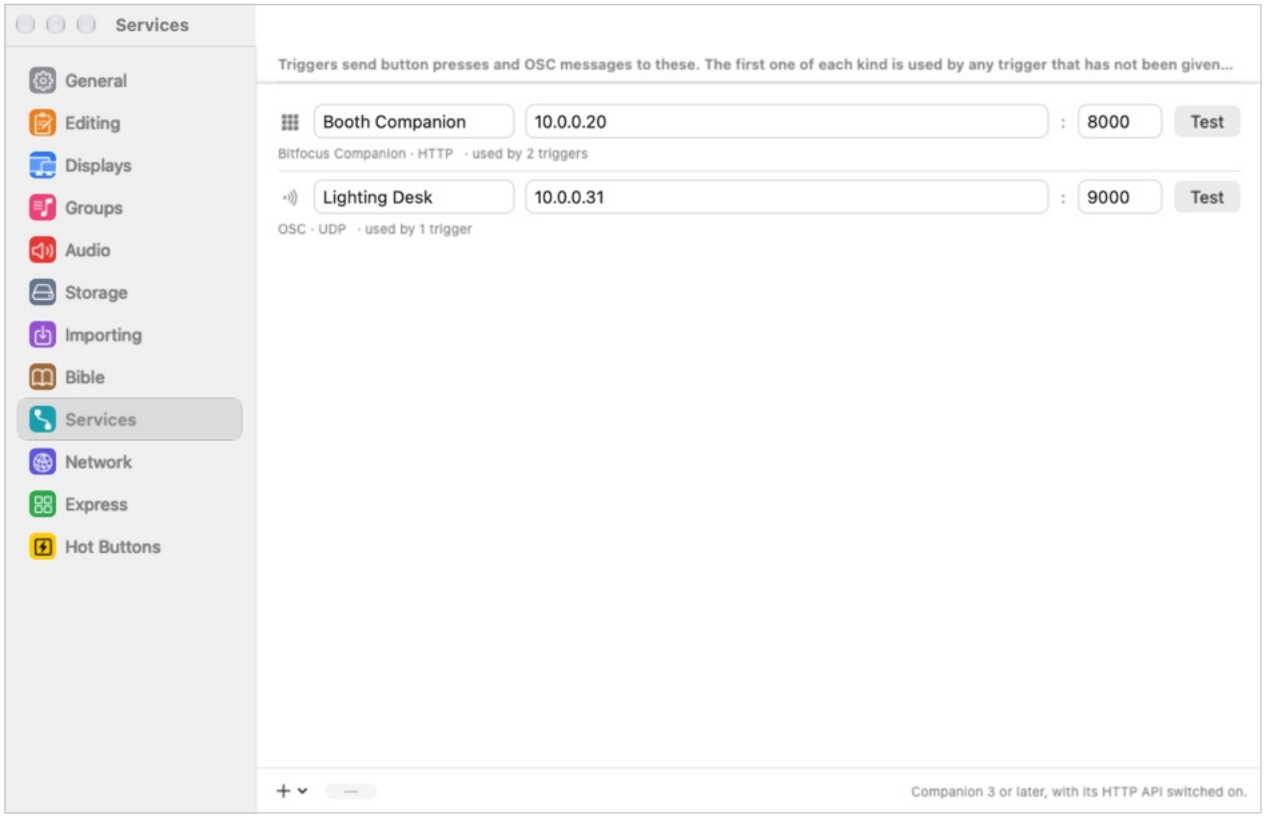
Chapter 11

Talking to Other Systems

NDI®, Blackmagic Design DeckLink, Companion, OSC, MIDI and audio routing — everything PowerShow sends outside itself.

Services

A service is something on the network or the MIDI bus that PowerShow sends instructions to. Services are configured once, in Settings ▸ Services, and triggers refer to them — so several triggers share one address and moving a machine is one edit rather than twenty.



Settings ▸ Services, with a Companion and an OSC lighting desk set up. Test proves an address by using it: for Companion that is a real press of page 1, row 0, column 0.

1. Open Settings ▸ Services.
2. Click + and choose the kind: Companion, OSC, MIDI or RossTalk.
3. Give it a name that says which machine or device it is.
4. For Companion and OSC, enter the host and port. For MIDI, choose a destination from the list.
5. Use the row's Test button to check it before a service rather than during one.

Note The first service of a kind is the default. A trigger that names none — or names one you have since deleted — uses it, so a single-Companion setup never has to choose.

Warning Services are stored in the library alongside your displays, because the triggers that reference them are in the library too. A library moved to another Mac will need its services checked, the same as its displays.

Bitfocus Companion

PowerShow presses Companion buttons over Companion 3's HTTP API, addressed by page, row and column — the button's position on the grid, which is what you can actually see on the surface.

1. In Companion, note the page, row and column of the button you want.
2. In PowerShow, add a Companion service pointing at the Companion machine's address and port (8000 by default).
3. Add a Companion trigger to a slide or a script and enter the page, row and column.
4. Leave the hold at zero for a plain press. A hold sends the down, waits, and sends the up.

Note A plain press is a single request, so Companion does the down and up itself — one round trip, and no way to leave a button stuck down if the second request is lost. A hold has to be two requests, and the release is sent even if the hold was cancelled.

Requests time out after two seconds. This runs as a slide goes to air, and a control surface that is not answering must not hold anything up.

OSC

OSC messages go out over UDP, which is what consoles, media servers, QLab and mixers listen on.

1. Add an OSC service with the receiver's host and port.
2. Add an OSC trigger and type the address pattern, such as /cue/1/go.
3. Type the arguments as you would write them: 1 2.5 "go now" true.
4. Check the parsed result shown below the field — it says which types will actually be sent.

Whole numbers
Sent as 32-bit integers.

Numbers with a point
Sent as floats.

true and false
Sent as OSC booleans, which carry no payload.

Quoted runs and anything else
Sent as strings. A number too large for a 32-bit integer becomes a float rather than being silently clamped.

Warning Nothing acknowledges a UDP datagram. A successful send means the packet left this Mac, not that anything received it — which is why every message the app shows says "sent" rather than "taken". A test that passed with the console switched off would

be worse than no test.

MIDI

PowerShow can send note on/off, control change and program change messages to any CoreMIDI destination: a USB interface, the IAC bus, or a network session.

1. Add a MIDI service and choose the destination from the list.
2. Add a MIDI trigger and choose the message type.
3. Set the channel — 1 to 16, as people write them — and the numbers.
4. For a note, set the hold. The note off is always sent afterwards.

Note The editor shows the actual bytes that will go out, so channel 1 reading 90 rather than 91 is visible rather than surprising. Values out of range are clamped rather than wrapped, since a wrapped channel is a different message sent silently.

- A destination that is unplugged stays in the picker marked "(not connected)" rather than vanishing, so a service does not silently read as unconfigured.
- A destination is remembered by its unique id first and its name second, so a rename or a driver reinstall usually still finds it.
- Like OSC, nothing acknowledges MIDI: the bytes go to the MIDI server, and a device that is switched off receives them into the void.

RossTalk

RossTalk drives Ross Video gear — a Carbonite or Vision switcher, an Ultrix router, an XPression graphics system. It is a line of plain text sent over the network to port 7788, and it is how PowerShow fires a GPI, runs a custom control or recalls a memory as a slide goes to air.

1. Add a RossTalk service with the device's address. The port is 7788 unless it has been moved.
2. Press Test. It connects and sends a command the device will not recognise, so nothing is fired.
3. Add a RossTalk trigger and type the command, or pick one from Common Commands and edit the numbers.
4. The Sends line shows exactly what goes out.

GPI 1
Fires a GPI. Switchers and XPression both take this one.

CC 1:1
Runs a custom control — bank, then number.

MEM 1:1
Recalls a memory — ME, then memory number.

AUX 1:1
Puts a source on an aux bus — aux, then source.

SEQI 1
Takes a numbered item in the XPression sequencer.

TAKE
Takes the current XPression item to air.

Warning Those are a starting point, not a list of what will work. Ross devices do not all understand the same words — a switcher's custom controls are not an XPression's sequencer — so check the manual for the device you have.

Note Unlike OSC and MIDI, RossTalk goes over TCP: a command that sends without an error was accepted by the device. What that still cannot tell you is whether the device understood it — an unrecognised command is ignored in silence, with nothing sent back.

NDI®

NDI sends a display's picture as a video stream over the local network, which is how PowerShow feeds a stream encoder, a switcher, or another machine running an NDI receiver.

1. Install the NDI runtime — either the NDI SDK or the free NDI Tools. Chapter 2 says which versions this release needs and where PowerShow looks for it.
2. In Settings ▸ Displays, add a display and set a segment's target to NDI.
3. Give the stream a name; it is what receivers will see.
4. Set the display's frame rate. This is asked for only when a segment is NDI or DeckLink, because macOS owns a screen's timing.
5. Go live. The source appears to receivers on the network.

Warning PowerShow never bundles the NDI runtime — it is Vizrt's to distribute — so it must be installed separately. If NDI reports as unavailable, use the Locate… button in Settings to point at the runtime; NDI Tools installs it inside its own application bundles rather than in the documented place.

- The first time PowerShow publishes, macOS asks for permission to use the local network. Without it, the source is published to nobody while everything looks correct — so grant it.
- Tally and the number of connected receivers are shown in the Run pane's status strip.
- NDI compression is lossy and saturated colours clip to video-legal range. Irrelevant for lyrics; worth knowing before matching colours against it.

Blackmagic Design DeckLink and UltraStudio

A DeckLink or UltraStudio device sends a display's picture down SDI or HDMI as a real video signal, at a video mode the card supports.

1. Install Blackmagic Design Desktop Video, at least the version chapter 2 gives for this

release.

2. In Settings ▸ Displays, set a segment's target to DeckLink and choose the device.
3. Choose the resolution and frame rate. Only modes the card will actually accept in the format PowerShow sends are offered.
4. Go live. The card starts scheduled playback.

- The card is the clock: it asks for each frame as the previous one completes, at the mode's exact rate.
- Frames are sent as 8-bit YUV at video levels, which is what every DeckLink output supports.
- The status strip reports frames sent, frames late, and whether the picture has content — so "sending black" and "sending a picture nobody sees" can be told apart.
- Right-click the status row for diagnostics, read at the moment you ask rather than sampled.
- When a slide has a video on it, the diagnostics go on to list each layer of the picture from the bottom up — a still layer says how much of the screen it covers and how bright it is, and a video layer how big its frames are, where it is placed and how much of this output it covers. A projector that has gone black reads as one layer covering everything at brightness 0, or a video covering 0%, which says where to look.

Note Devices are remembered by their persistent id rather than by name or enumeration order, so adding a second card does not repoint the first.

Note A card can capture as well as play out — see "Live inputs on a slide" below.

Live inputs on a slide

A slide object can be a live picture rather than a file: a camera, an NDI source on the network, or a DeckLink or UltraStudio with a cable in it.

1. Add ▸ Live Input, and choose Camera, NDI or DeckLink / UltraStudio.
2. Pick the device or source on the inspector's Live Input tab.
3. For a camera, mirroring is a switch on the same tab.

Capturing from a card

Only devices that can actually capture are offered — plenty of hardware does one direction and not the other, and a picker that listed a monitor-only card would be offering something that cannot work.

- The video mode is detected, not chosen. A capture is a cable somebody plugged in, and asking which of forty modes is coming down it is asking you to diagnose the signal before you can see it.
- Changing the signal — a camera switched from 1080i50 to 1080p50 — is followed automatically on any card that supports format detection, which is most of them.
- With nothing plugged in, the object says "No signal" rather than going black. A capture showing plain black on a stage screen is indistinguishable from a slide meant to be black.

The card's sound

A DeckLink or UltraStudio capture can play the sound arriving on the cable — channels 1 and 2 of the embedded audio — through the main output chosen in Settings ▸ Audio, for as long as a slide showing it is on air.

1. Select the live input on the slide.
2. On the inspector's Live Input tab, turn on Play its sound, and set the volume.
3. If the card is patched in Settings ▸ Audio from an earlier setup, remove that patch, or the sound will be heard twice.

- The sound is taken from the card with the picture, the way other presentation software does it. Patching the card's own audio device in Settings ▸ Audio comes out garbled, because that device hands over its sound in video-frame-sized bursts.
- It is off until you turn it on. A capture very often carries the room's own mix back from a switcher, and playing that into the room is feedback.
- The sound waits a tenth of a second before it starts, so a late packet from the card is still in time. If the card and the output still run it dry, the wait grows a little each time, up to half a second, so it can end up that far behind the picture. It shows on the level meter like any other sound PowerShow plays.
- It stops when the slide leaves the air, and when the outputs are cleared or stopped.

A live input reaches every kind of output — screens, NDI and DeckLink alike — including a blended spread, where the two projectors share the one capture between them. It is drawn in the slide thumbnails too, in the Run pane and the slide list, so you can see a camera is pointing at the right thing before you put it on the screen.

Note A video file on a thumbnail still shows a still frame rather than playing. A live input is the exception because liveness is all it has to show: frozen to a marker it would look exactly like an input that is not working.

Note The first time you use a camera, macOS asks for permission — the prompt appears as soon as a camera is put on a slide. Without it capture silently returns nothing, so grant it. The object says "Waiting for camera access" until you do.

Warning An input with no picture says so rather than going black: no driver, nothing found, or a device with nothing plugged into it. A black rectangle on a stage screen looks exactly like a slide meant to be black.

Audio

Where video sound comes out

1. Open Settings ▸ Audio.
2. Choose the main output device. Leave it as the system default unless you have a reason otherwise.

This is where a slide's own audio and the sound from video objects play. Background videos are always silent — scenery does not sound — and when a clip is on several outputs at once,

exactly one of them is allowed to make sound.

The audio matrix

The same pane can patch audio inputs to audio outputs: a desk feed into a stream encoder, for example, across two different interfaces.

1. In Settings ▸ Audio, add the input devices and output devices you want to patch.
2. Click a cell in the grid to send that input channel to that output channel.
3. Adding an output device maps channels 1 and 2 across automatically, which is what almost every patch wants.

An output carries one input
: Clicking a cell whose output already carries something takes it over. The grid shows a hollow dot there first so it is not a surprise.

An input feeds any number of outputs
: Fanning one source out to several destinations is normal and needs nothing special.

System Output
: A placeholder resolved when the patch is built, so routing aimed at it follows the Mac — plug in headphones and the routing moves with it.

Warning Reading an audio input needs microphone permission, exactly as a camera does, and fails the same way without it: no prompt, and a routing that carries silence.

Note Changing the patch while it is running rewrites the routing without tearing the devices down, so building a patch does not click through the speakers.

Chapter 12

The Remote Control API

Driving PowerShow from a phone, a browser, a control surface or a script over HTTP.

What the API is for

PowerShow runs a small HTTP server that lets something else drive it: a phone in a preacher's pocket, a Stream Deck, a Companion button, a browser on the sound desk, or a shell script.

It is deliberately small. One request line, no body, one response, connection closed. A control surface makes a handful of requests a minute, and a connection per request cannot get its message boundaries wrong.

Note Every route accepts GET as well as POST, because a control surface on a closed network is very often a browser address bar or a curl typed one-handed.

Turning it on

In the app, this is where the manual shows whether the remote control server is running and the address to reach it on. The same is shown in Settings ▸ Network.

1. Open Settings ▸ Network.
2. Turn on the API.
3. Note the port — 7477 by default — and the address shown beside it.
4. Try it from another machine on the same network by opening the remote page in a browser.

The port is stored in this Mac's preferences rather than in the library, because a port is a fact about the machine rather than about your decks.

Warning There is no authentication, by decision rather than by omission. Anything that can reach the port can put a slide on the screen. Run it on a network you control, and leave it off when you do not need it.

The built-in remote page

Opening the server's address in a browser gives a simple remote control: Previous and Next, each labelled with the slide it goes to, the slide that is on air, and a row of video controls — Play, Pause, Restart Video and Back 5s. It has no Go Live, Clear or Stop: those stay at the desk.

```
http://<this-mac>:7477/
```

The page is entirely self-contained — nothing is fetched from the internet, because the

network it is served on very likely has no route to it.

1. Turn the API on as above.
2. Find this Mac's address in Settings ▸ Network.
3. Open that address in a browser on any device on the same network.
4. Bookmark it on a phone for a preacher, or leave it open on a tablet at the desk.

The progress page

The other page is read-only: the running order down the screen, the section headers in their own colours, and a row of squares on the deck that is on air showing how far through it the service is.

```
http://<this-mac>:7477/progress
```

Nothing on it changes what is on screen, which is the point — it is the page you can hand to a musician, a preacher or somebody at the back of the room without wondering what they might lean on.

- Tap any other deck to open its squares, and tap again to close them. The live deck always shows its own.
- What you have open is your own view and is sent nowhere, so two people reading it can have different decks open.
- A song's squares run in its arrangement order, so a chorus sung three times is three squares to pass through.

Note Settings ▸ Network shows both addresses with Copy, Open and Share beside them. Share uses the system share sheet, so the link can go by AirDrop, Messages or Mail like any other link.

Warning Both addresses use this Mac's current IP, so they work only on this network and change when it does. The page was called /plan before and that address still answers, so an old bookmark keeps working.

Conventions

- Every route is under /api.
- Responses are JSON.
- A route that needs the outputs to be live and finds them stopped answers 409 with a sentence saying so, rather than failing quietly.
- Parameters are query parameters: /api/present-deck?id=…
- GET /api returns the whole route list, so a client can discover what this version supports.

Note The route list below is generated from the same table that drives Settings ▸ Network and GET /api, so this page can never describe a version of the API that does not exist.

Every endpoint

Navigation

- `/api/next-slide` — Advance one slide
- `/api/previous-slide` — Back one slide
- `/api/next-deck` — First slide of the next deck
- `/api/previous-deck` — First slide of the previous deck
- `/api/goto-group?id=…&key=…` — Go to a group in the song on air — its next occurrence — by id, name or key; ignored if the song has none
- `/api/restart-slide` — Show the current slide again, from the start

Video

- `/api/video/play` — Resume video everywhere
- `/api/video/pause` — Hold video everywhere
- `/api/video/restart` — Play video from the start
- `/api/video/skip?seconds=…` — Move the clip on air by a number of seconds, negative to go back

Presenting

- `/api/present-deck?id=…` — First slide of a deck
- `/api/switch-show?id=…` — Make a show the running order
- `/api/run-script?id=…` — Run a script now, by id or name

Decks on air

- `/api/live-decks` — Every deck on air, with the displays each one has
- `/api/clear-deck?id=…` — Take one deck off the air, by id or name
- `/api/clear-display?id=…` — Take whatever is on a display off the air, by id or name

Library

- `/api/decks` — Every deck in the library
- `/api/shows` — Every show in the library
- `/api/show-decks?id=…` — The decks in one show, in order
- `/api/scripts` — Every script in the library
- `/api/groups` — Every song group, with its colour, its key and whether the song on air has it

Outputs

- `/api/go-live` — Open the routed outputs
- `/api/clear` — Blank the outputs, staying live
- `/api/stop` — Close the outputs

Status

- `/api/status` — What is on air right now
- `/api/slide-names` — The names of the previous, current and next slides

`/api` — This endpoint list, as JSON

`/api/plan` — The running order: decks, section headers, and progress through the live deck

`/remote` — A web remote control panel

`/progress` — A read-only web view of the running order and where it has got to

Examples

Advance a slide

```
curl http://localhost:7477/api/next-slide
```

Go live and show a deck

```
curl http://localhost:7477/api/go-live

curl 'http://localhost:7477/api/present-deck?id=<deck-uuid>'
```

Find a deck's id

```
curl http://localhost:7477/api/decks
```

Ask what is on air

```
curl http://localhost:7477/api/status
```

Run a script

```
curl http://localhost:7477/api/scripts

curl 'http://localhost:7477/api/run-script?id=House%20Lights'
```

A script can be named by id or by name, and runs whether or not the outputs are live — most of what a script does has nothing to do with what is on the screen. A script protected in PowerShow still runs from here: protection keeps it off the paths somebody can hit by slipping, and a request you wired up is not one.

Blank the screen without losing your place

```
curl http://localhost:7477/api/clear
```

Clear blanks the outputs and stays live. The running order does not move, so the next advance goes to the slide after the one that was showing.

Restart Slide and video

/api/restart-slide
Re-sends the slide and takes any video on it back to its first frame. For a slide with a clip on it those are one action, which is why they are one route.

/api/video/restart
Takes the video back to the start without disturbing the slide.

/api/video/play and /api/video/pause
Hold or resume video everywhere at once. Moving to a different slide clears a hold by itself, wherever the move came from.

Note Re-sending a slide does not fire its triggers again, so a remote Restart Slide cannot press a Companion button a second time.

Using it from Companion

There is a **PowerShow module for Bitfocus Companion**, and it is much the better way in: it gives you named actions instead of hand-written URLs, dropdowns listing the decks, shows and scripts actually in your library, ready-made buttons, feedbacks that colour a button by what is happening, and variables carrying the current and next slide names onto the surface.

Installing the module

It is not in Companion's module store, so it is installed by hand, from a copy PowerShow carries. Each version of PowerShow carries the module that matches it, so after an update, import it again.

1. Choose Help ▸ Save Companion Module to Downloads (or Save to Downloads in Settings ▸ Network). It is saved as a .tgz file and shown in the Finder. The release download has the same file beside the app.
2. In Companion, open Modules ▸ Import module and choose that file.
3. Add a connection of type MU Systems: PowerShow.
4. Set the host to the Mac running PowerShow and the port to the one in Settings ▸ Network — 7477 unless you have changed it.
5. The connection turns green when PowerShow answers. Drag a preset onto a button to start.

Note A connection made with a module older than 1.2.0 is listed as The Grove: PowerShow, the module's name until then. Import the new one, open the connection, and choose MU Systems: PowerShow at the top of its module version list: it keeps its name, its settings and every button that uses it. The old module can then be removed under Modules.

Note If you are working on the module itself, point Companion's Developer modules path at the Companion folder of the repository instead and it appears in the connection list marked Dev. The module's own README covers both, and Tools/package-companion-module.sh puts a newly packaged module into the app.

What it gives you

- Actions for everything in the list above, grouped the way this chapter groups them.
- Dropdowns listing your decks, shows, scripts and song groups by name, refreshed every minute — so a song added this morning is pickable this afternoon without restarting anything.
- A Go to group action — Chorus, Bridge — that moves within the song on air and quietly does nothing when the song has no such group.
- A button per script, ready made, under Presets ▸ Scripts.
- Feedbacks: whether the outputs are live, whether video is held, whether there is anywhere to move.
- Variables for the current, previous and next slide names, the deck on air, the decks running and how far through a deck you are.

Without the module

Any HTTP client will do, since every route answers to a plain GET. In Companion that is the Generic HTTP module with the base URL http://<this-mac>:7477 and a GET action per button. It works, and it is what to reach for on a machine you cannot install a module on — you just write the URLs yourself and get no dropdowns, feedbacks or variables.

This is the opposite direction from a Companion trigger in chapter 9 — there PowerShow presses a Companion button; here Companion drives PowerShow. Both are useful, often in the same rig.

For people reading the repository

Docs/API.md in the source repository carries the same reference in long form, for anyone reading the code rather than running the app. A script in the repository checks that it lists every route the catalogue has, so the two cannot drift apart unnoticed.

Note This manual is compiled into the app and ships with it. When a feature changes, the chapter changes with it in the same commit — which is the only way documentation stays true.