



Downstage

Stage timer for live events — User Guide



HALF GREY BEAR

Version 3.0 · macOS 13+

1 · Overview

Downstage shows a big, clear countdown (or count-up, or time of day) to a presenter on stage, while you drive it from a compact console in the corner of your screen.


It is built for live events: the audience-facing display sits at **screen-saver window level**, so Mission Control, Exposé, notifications and Space-switching can **never** disturb it mid-show. You can drive the same timer onto one or more external screens, out over **NDI**, and onto a **web display** (e.g. an iPad on a lectern) — all at once, perfectly in sync.

Everything can be controlled by hand, over the network (**UDP**), or from a phone/browser.

What you can show



- **Countdown** from a set number of minutes, with amber/red warning colours.
- **Overtime** — keep counting up past zero (shown in red as `-MM:SS`).
- **Time of day** clock, with a blinking colon.
- **Messages** — big text under the timer (“PLEASE WRAP UP”).
- **Running order** — a list of named cues you step through.

2 · Quick start

1. Connect your external screen / projector, then open **Downstage**. The timer automatically appears full-screen on the connected display.
2. The console opens in the **top-right corner** of your main screen.
3. Type a number of minutes in the box and press **GO** (or hit **Return**).
4. Use **Pause / STOP**, or the quick-set buttons (5, 10, 20, 30, 60) and **+1 / -1** to adjust on the fly.
5. Click  to expand the console and reach colours, messages, the running order, and output options.

Tip: The little preview in the console is an exact, live copy of what the audience sees — glance at it to know the room is seeing the right thing.

3 · The console

The console is deliberately small so it can live in a corner of your desktop. It always shows the **live preview**, a **mode switch**, and the controls for the current mode. Press the  button to **expand** it (it grows downward, animated) and reveal the full settings; press  to collapse again. The window never grows past the dock — if there's a lot to show, the settings area scrolls.

Modes

Mode	What it does
Timer	Manual countdown — type minutes, quick-sets, ±1, GO / Pause / STOP.
Cues	Step through your running order — Prev / GO / Next.
Clock	Show the current time of day (the colon blinks each second).

4 · Running a timer

In **Timer** mode:

- **Minutes box** — type a duration (whole or decimal, e.g. `2.5`).
- **GO** (green) starts it; **Return** in the box does the same.
- **Pause** (amber) freezes the count; press again (**Resume**) to continue.
- **STOP** (red) ends the timer and resets the display to `00:00`.
- **Quick-sets** (5 / 10 / 20 / 30 / 60) load that many minutes into the box — they do *not* start automatically, so press GO when ready.
- **+1 / -1** add or remove a minute from a *running* timer, live.

The timer turns **amber** when it drops below the amber threshold (default 5 minutes) and **red** below the red threshold (default 1 minute). Both thresholds and colours are configurable under **Appearance**.

Overtime

Tick **Overtime** (in the expanded settings) and, instead of stopping at zero, the timer keeps counting *up* in red as `-MM:SS` — so the presenter can see how far over they are. Leave it off and the timer simply stops at `00:00`.

To run a pure count-up (elapsed time) from zero, GO with the minutes box set to `0`.

5 · Time-of-day clock

Choose **Clock** mode to show the current time of day on the output. The colon blinks once a second, like an alarm clock. Switch back to Timer or Cues to leave clock mode.

6 · Output displays



The audience display — big, monospaced digits on black.

Open the expanded settings → **Output**. Every connected screen is listed; tick the ones the timer should appear on (you can drive several at once). Displays are detected live as you plug and unplug them.

The “ignore Exposé” trick: each output is a borderless window pinned at screen-saver level across all Spaces. That’s why Mission Control, Exposé, notification banners and Space switches never cover or move the timer during a show. Avoid putting the output screen into macOS “native” full-screen for other apps on top of it.

Automatic second screen

When you launch Downstage with an external display connected, it **automatically** sends the timer to that display — no clicks needed.

NDI output

Tick **NDI output** to publish the timer as an **NDI** network video source named in *NDI source name* (default “Downstage”, 1920×1080). Any NDI receiver on the network — a vision mixer, OBS, Resolume — can then pull it in. NDI works even with **no external display** attached, so you can run the Mac headless and feed the timer straight to the mixer. See Appendix D.

Web display (lectern)

Tick **Web remote**, then open the **Display** URL shown (e.g. `http://192.168.1.20:8080/display`) on an iPad or any browser. It mirrors the output exactly — colours, thresholds, message, blackout, attention strobe. Tap the ↗ button (bottom-right, it auto-hides) for full-screen. On iPad you can also *Add to Home Screen* for a chrome-free app, and it requests a wake-lock so the tablet won’t sleep. See section 11.

7 · Appearance

In the expanded settings → **Appearance**:

- **Text** and **Background** colours — pick any colour, or use the preset swatches.
- **Warning colours** — turn the amber/red urgency colours on or off.
- **Amber at / Red at** — set the thresholds (in minutes and seconds) at which the timer changes colour.

All colours and thresholds are shared by every output (screen, NDI and web) so they always match.

8 · Messages, Blackout & Attention

Message

Type into the **Message** box and press **Show** to display large text beneath the timer (the timer shrinks to the top and the message animates in). Press **Hide** to remove it, or **Clear** to empty the box.



A message under the timer — the timer shrinks to the top and the message fills the rest.

Blackout

Blackout instantly hides the timer and message, leaving only the background — handy between segments.

Attention

Attention flashes the whole output bright for about a second — a one-shot strobe to grab a presenter who has stopped watching the clock. (It is not a constant flash.)

9 · Running order (cues)

A **cue** is a named segment with a duration (e.g. “Keynote 20:00”). Build your show as a list of cues and step through them.

- **Add** — type a title and minutes at the bottom of the Running order box and press Add.
- **Reorder** — use the up/down chevrons. **Delete** — the X.
- **Load & start** a cue — press its ►, or use **Cues** mode and **GO**.
- **Prev / Next** — step the **on-deck** cue. Only the small cue label changes; the running output keeps playing until you press **GO**.

Cues only trigger manually. A cue finishing does *not* jump to the next one unless you tick **Follow**. With Follow on, when a cue’s timer runs out the next cue loads and starts automatically. Manual timers never touch the running order, and respect Overtime.

Save & import

Press **Save...** to write the running order to an `.dscue` file, and **Import...** to load one back. Use this to prepare shows in advance and reload them on the day, or to move a running order between machines. See Appendix C for the format.

The running order is saved and **restored on every launch**. To start fresh, press **Clear All** (it asks you to confirm first).

10 · Remote control

UDP (port 6969)

Downstage always listens for UDP text commands on port **6969** — drive it from QLab, a show controller, a stream deck, or a script. Example (Terminal):

```
printf 'G05' | nc -u -w1 <mac-ip> 6969
```

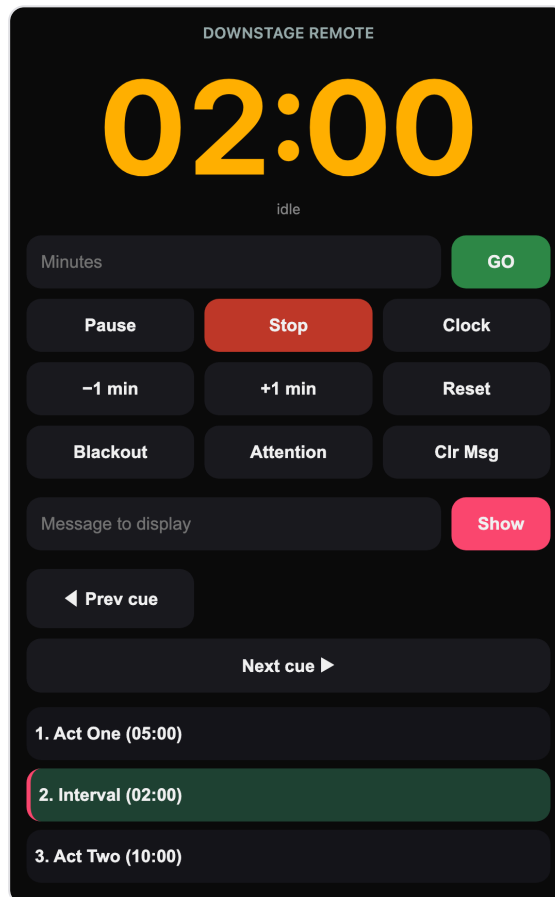
The full command set is in **Appendix A**.

Web / phone remote

Tick **Web remote** in the Output settings. Two URLs appear:

- **Control** (`http://<ip>:8080`) — a phone-friendly page of big buttons: GO / STOP / Pause, ± 1 , message, blackout, attention, and your cues.
- **Display** (`http://<ip>:8080/display`) — the read-only audience mirror (section 6).

Both work from any device on the same network — no app to install.



The phone control page.

11 · Settings & tips

Your colours, thresholds, ports, selected outputs and the running order are **saved automatically** and restored next launch.

- **Keep console on top** — keeps the console above other windows while you work.
- **Finish buzzer** — plays a sound at zero (off by default).

Live-show checklist

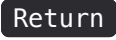



1. Plug in the display, open the app, confirm the preview matches the output.
2. Set your text/background colours and warning times.
3. Build or Import your running order; decide whether to use **Follow**.
4. If using a tablet on the lectern, open the Display URL and go full-screen.
5. Keep the console in the corner and glance at the preview through the show.

Appendix A · Remote command reference

Send as UTF-8 text in a UDP datagram to port **6969**, or via the web remote. Commands are case-insensitive.

Command	Action
SET<n>	Load <i>n</i> minutes without starting (e.g. SET10).
GO<n>	Load <i>n</i> minutes and start (e.g. GO5).
GO / START	Start the currently loaded time.
STOPTIME	Stop and reset to 00:00 .
PAUSE	Pause / resume.
+1 / -1	Add / remove a minute, live.
TIME / TIMEOFDAY	Toggle the time-of-day clock.
BLACK	Toggle blackout.
FLASH / STROBE / ATTENTION	One-second attention strobe.
MSG<text>	Show a message (e.g. MSG Doors in 5).
CLEARMSG	Hide the message.
RESET	Stop and clear message / blackout / strobe.
NEXT / PREV	Step to the next / previous cue.
CUE<n>	Load and start cue number <i>n</i> (1-based).

Appendix B · Keyboard & menu

Key	Action
 Return	GO (when the minutes box is focused).
 H	Hide Downstage.
 M	Minimise the console.
 Q	Quit.

Appendix C · The .dscue file

Running orders are saved as `.dscue` files — plain UTF-8 JSON with a small header so the app can recognise them. Example:

```
{
  "format": "DownstageCues",
  "version": 1,
  "cues": [
    { "id": "...UUID...", "title": "Keynote", "seconds": 1200 },
    { "id": "...UUID...", "title": "Q&A", "seconds": 600 }
  ]
}
```

Importing a file **replaces** the current running order. Files are portable between machines.

Appendix D · NDI notes

- NDI uses the system NDI runtime. If NDI tools (e.g. **NDI Tools**) or the NDI SDK are installed, output works automatically. If the runtime isn't present, the NDI tick simply does nothing and the rest of the app is unaffected.
- The source name and resolution are set in settings; default **1920×1080 @ 30 fps**.
- Lower the resolution if you need to reduce CPU use.

Appendix E · Troubleshooting

Symptom	Try
Timer doesn't appear on the external screen.	Open settings → Output and tick the screen. Confirm it's connected (it's listed).
UDP commands have no effect.	Check the sender targets the Mac's IP on port 6969, and that they're on the same network.
Web pages won't load on the phone.	Make sure Web remote is ticked, and the phone is on the same Wi-Fi as the Mac.
NDI source not seen by the receiver.	Install NDI Tools on the Mac, tick NDI output, and check both machines are on one network.
Console scrolls instead of growing.	That's expected when the settings would be taller than the screen — it stays above the dock.