

SPEEDGFX BY RSDLIVE

Circle Track

Operator Guide

Everything you need to get on air, run a clean broadcast, and hand a polished show to your audience — race night, every night.

Quick Reference

Pin this page next to your broadcast workstation. Everything you need to find in a hurry lives right here.

Where things live

What you want	Where to go
Open the operator panel	<code>http://localhost:3000/</code> in any browser on the broadcast PC
OBS / vMix browser sources	Same hostname, different paths — see below
License key entry	Operator panel → License tab
Stop the server	Close the SpeedGFX console window, or <code>Ctrl</code> + <code>C</code>
Default admin password	<code>admin</code> (change it via <code>ADMIN_PASSWORD</code> env var)

OBS / vMix browser source URLs

All sources are **1920×1080** with **transparent background**. Set "Refresh browser when scene becomes active" to **off**.

Top Ticker `http://localhost:3000/overlay-top`

side tower `http://localhost:3000/side-tower`

Starting Grid `http://localhost:3000/starting-grid`

Results `http://localhost:3000/results`

Lower Third `http://localhost:3000/lower-third`

Title Card `http://localhost:3000/title-card`

Lower Left `http://localhost:3000/lower-left`

Weather `http://localhost:3000/weather`

NETWORKED BROADCAST?

If OBS is on a different machine than SpeedGFX, replace `localhost` with the broadcast PC's IP address (e.g. `http://192.168.1.50:3000/overlay-top`). Make sure Windows Firewall allows incoming connections on port 3000.

Race-night cheat sheet

I need to...	Do this
Connect to the timing system	Connection tab → set RMonitor port or paste a Live Timing CSV URL → Start
Show the starting lineup	Scoreboard → Starting Grid card → Import from MRP, or paste lineup CSV
Put the top ticker on screen	Display card → tick "Show top ticker"
Show race results	Display card → tick "Show results panel" (auto-rotates pages)
Pop a driver interview lower third	Lower Third card → pick driver → toggle Show
Hide everything mid-broadcast	Untick the relevant Show flag — change is instant

First-Time Setup

Twenty minutes of one-time work. Once you've done this, race-night startup is just "double-click the .exe and open the operator panel."

1. Install on the broadcast PC

- 1 Pick a folder.** Anywhere with at least 1 GB free — typically `C:\SpeedGFX\`. Don't put it inside Program Files (Windows blocks writes there, and SpeedGFX needs to save your config and uploaded logos).
- 2 Copy the deliverable in.** You should have:
 - `SpeedGFX- Circle Track - v2.2.exe` (~50 MB, the server)
 - `seed\` folder (default logos, fonts, car numbers)
- 3 Double-click the .exe.** A console window opens with the server URL. Leave it open the whole time you're broadcasting.
- 4 Open the operator panel** in any browser: `http://localhost:3000/`

FIRST LAUNCH: WINDOWS DEFENDER

SmartScreen will probably warn about an unsigned executable. Click **More info** → **Run anyway**. This is one-time per machine.

2. Activate your license

- 1** In the operator panel, click the **License** tab.
- 2** Paste the license key RSDLive sent you and click **Activate**.
- 3** The status badge turns green and shows your tier (Basic / Pro / Pro+AI) and customer name.

NO INTERNET ON RACE NIGHT?

SpeedGFX activates against `activation.rsdlive.com` on first launch, then caches a 30-day offline grace period. Activate at home before you travel; you can broadcast offline for up to 30 days afterward.

3. Wire up OBS / vMix browser sources

Add a **Browser Source** for each overlay you want on air. The same settings apply to every one:

Setting	Value
Width	1920
Height	1080
FPS	30 (or match your broadcast)
CSS	Leave blank
Shutdown source when not visible	Off — keeps state synced even when scene is hidden
Refresh browser when scene becomes active	Off — would reset overlay state every scene change

Use the URLs from the Quick Reference page. Most operators only need **Top Ticker**, **side tower**, **Starting Grid**, **Results**, and **Lower Third** — the rest are situational.

Race Night, Step by Step

This is the cadence most operators settle into. Adjust to your show — this is not a contract.

30 minutes before air

- 1 Start the server.** Double-click the .exe. Wait for "Server is running" in the console. If you see a license warning, fix that first — overlays won't render without one.
- 2 Open the operator panel.** <http://localhost:3000/>
- 3 Load your preset.** If you've broadcast at this track before, load the saved preset — it pulls in your sponsor logos, track name, color scheme, and series settings in one click. See *The Admin Panel* for how to save presets.
- 4 Connect to timing.** Pick one:
 - **RMonitor** (MyLaps Orbits, MRP Live, etc.) — Connection tab → enter the timing PC's IP and port → Start. Status badge should turn green within 2-3 seconds.
 - **Live Timing CSV** (MyRacePass, etc.) — Connection tab → paste the CSV URL into a feed slot → Save → ▶ Start active. Status badge should say "polling" within a second.
- 5 Sanity check.** Open <http://localhost:3000/overlay-top> in a regular browser tab. You should see drivers populating the strap. If you don't, timing isn't connected yet — re-check the source.

10 minutes before air

- 1 Set the lineup.** Scoreboard tab → Starting Grid card. If your timing system publishes a CSV, paste the URL in **MRP auto-poll** and click Start — lineups update live as MRP reorders cars. Otherwise, click **Import lineups** and pick your file.
- 2 Pick the right race.** Once lineups are loaded, the Starting Grid card lists every (class, race) combo. Click the row for the heat or feature that's about to run.
- 3 Stage your overlays.** In the Display card, the "Show" checkboxes control what's on air right now. Most operators leave Top Ticker on for the whole broadcast and toggle Starting Grid / Results for pre-race / post-race.
- 4 Test a lower third.** Lower Third card → pick a driver from the dropdown → click Show. Confirm it lands on the OBS scene where you want it. Click Hide. Now you know it works.

During the race

- 1 Top Ticker stays on.** Drivers, positions, gaps, flag color — it all updates from the timing feed. You don't touch it.

- 2 **Use the Battle Dropdown** for spot focus. In the Top Ticker card you can lock on to a specific battle (P3 vs P4, etc.) — the strap drops a 5-row mini-list under those positions. Untick to return to the full strap.
- 3 **Lower Third for interviews.** Pick the driver, hit Show. Hit Hide before the next.
- 4 **Caution flag?** Nothing to do — the flag color automatically updates the top ticker's flag bar and the side tower's "LAPS TO GO" text. Trust the feed.

After the race

- 1 **Results panel.** Display card → tick Show results panel. The overlay paginates automatically through the field (5-15 rows per page; configurable on the Results card).
- 2 **Save your work.** If you tweaked anything you want to keep — sponsor logo rotation, color scheme, series name — open **Presets** and save it. Next event, one-click recall.
- 3 **Disconnect.** Connection tab → Stop on whichever timing source you used. Then close the server console window.

AI AUTOMATION (PRO+AI TIER)

If your license includes AI Automation, the server can toggle overlays on its own based on the session name and flag status — Starting Grid pre-race, Top Ticker during green, Results after the checkered. Enable it on the Connection tab. You can still manually override anything; AI just handles the routine cuts.

The Operator Panel, Tab by Tab

Five tabs. Each one groups related controls into cards. Changes are saved automatically — no "Apply" button to remember.

CONNECTION

Timing source & AI

RMonitor

Connect to a timing PC over TCP. Enter the host IP and port from your timing software (Orbits, MRP Live, etc.). Most setups use port 50000. Status badge turns green once data starts flowing.

Live Timing CSV

Three feed slots so you can save URLs for multiple events without retyping. Click the radio button next to a feed to make it active, then ► Start active. Switching radios while polling hot-swaps the URL with no Stop/Start dance.

AI Automation (Pro+AI tier)

Server-side state machine that auto-toggles overlays based on session name and flag. Configurable post-finish delay (how long Results stays up after the checkered) and Results duration (how long the panel cycles through pages before hiding).

SCOREBOARD

Day-to-day overlay controls

Display

Master Show / Hide for each overlay (sidebar, top ticker, side tower, results panel). Track Name, Topview Stage (auto-fills from the session name; type to override), Series Name, Social Tag, and the brand **Color scheme** picker (yellow / orange / red / green / blue / purple / gray).

Starting Grid

Import lineups from MRP CSV (one-shot or auto-poll), or paste your own. Once loaded, pick the (class, race) combo to display. The selection is preserved across polls so the overlay doesn't snap back to "Heat 1" every second.

Results

Number of rows (max 20), transfer count override, rotation timing, and the per-page paginator. Logos rotate independently from the main logo rotation — see Logos tab.

Lower Third

Driver picker (auto-populated from current scoreboard) and a Bottom-line dropdown — the second line of the lower third can show hometown, current running position, started position, finished position, or your own custom text.

Title Card / Weather / Lower Left / Stage

Context-specific overlays for pre-show, sponsor reads, etc. Each has its own card with content fields and a Show toggle.

Metrics

Pick which metrics rotate through the side tower's pill column (Total Laps, Last, Best, Gap to Ahead, Gap to Leader, Class Name). Rotation interval is in seconds.

LOGOS

Sponsor and series imagery

Header Logos

Top-left of the Top Ticker. Rotate through several sponsors; set the rotation interval to taste.

Sponsor Logos

Used in the Starting Grid and Results overlays' sponsor strip.

Results Logo

Used only by the Results overlay's footer. Leave empty to fall back to your first Header Logo.

Uploaded Logos library

Anything you upload appears here. Hover any logo to reveal three buttons: **+ Header**, **+ Sponsor**, **+ Results** — one click adds the logo to that rotation.

LOGO FORMAT TIPS

Use **PNG with transparent background**. Aim for at least 400px on the long edge — they get scaled down. Avoid dark logos on dark backgrounds; the overlay strap is dark gray.

PRESETS

Save your event setup

Save current

Captures every config field — colors, series name, sponsor rotation, AI delays, lower-third defaults, the lot — into a named preset. Each track / series gets its own.

Load

Restores everything in one click. Good for "I'm back at this track three weeks later, get me to where I left off."

Export / Import

Move presets between machines. The export is a JSON file you can email or drop on a USB stick.

LICENSE

Activation status

Current status

Activated, in offline grace, or locked. Shows tier and customer name.

Activate / Deactivate

Activate moves the license seat to this machine. Deactivate releases it so you can move to another machine. Don't lose track — some plans have a seat limit.

Tier-locked features

Cards for features above your tier show a small lock badge with an "Upgrade to use" prompt. The cards still render so you can see what's available; activation just unlocks them.

Troubleshooting

The fast answers to the problems we see most often. If you're stuck beyond this list, email RSDLive support with the console window's contents.

The console window closed by itself

A fatal error happened too fast to read. Open Command Prompt, navigate to the SpeedGFX folder, and run the .exe by name (in quotes). Now the error stays on screen.

OBS shows a blank or black browser source

Three things to check, in order:

1. Is the SpeedGFX console window still open? (No console = no server.)
2. Does the URL in OBS match what the console printed? (Localhost vs the LAN IP, port number.)
3. Open the URL in a regular browser. If it works there but not in OBS, right-click the source → **Refresh**.

Drivers aren't appearing in the strap

Connection tab — is the timing source's status badge green? If it's red or "stopped," the feed isn't connected. Re-check the IP/port (RMonitor) or URL (Live Timing CSV). On the timing PC, make sure the server is broadcasting and Windows Firewall isn't blocking the port.

Custom car number PNG isn't showing

Filename must match exactly: `FirstName_LastName_Number.png`. Underscores between words; no spaces. After dropping a new file in, restart the .exe — file lookups cache.

License says "expired" or "invalid"

Open the License tab. If your license has actually expired, contact RSDLive for renewal. If you've moved to a new machine, you'll need to deactivate from the old one first (License tab → Deactivate). If the machine has been offline more than 30 days, connect to the internet once and the grace period refreshes.

Overlay text looks tiny or huge in OBS

Make sure your browser source is exactly **1920x1080**. SpeedGFX is designed at 1920px reference width and scales uniformly to fit the source. Different aspect ratios cause distortion.

"Port 3000 is already in use"

Something else on this PC is using port 3000 (a dev server, another copy of SpeedGFX). Either close that program, or change SpeedGFX's port by setting an environment variable before launch:

```
set PORT=3030
"SpeedGFX- Circle Track - v2.2.exe"
```

Don't forget to update the URLs in OBS to match the new port.

The flag colors aren't matching

If the flag-aware overlays (Top Ticker band, side tower banner) seem stuck on yellow even when the timing system shows green, your timing source isn't reporting flag status. Most RMonitor systems do; some Live Timing CSV feeds don't. Confirm the feed is publishing a `FlagStatus` column.

Getting more help

RSDLive Productions · activation.rsdlive.com

When emailing support, include:

- Your license key (or customer name from the License tab)
- The SpeedGFX version (shown in the console window header)
- The contents of the console window — copy-paste, don't screenshot
- What timing system you're using and how it's connected
- What you were doing when the problem appeared

— End of Operator Guide —

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