ROVANTRA

Operating manual

Live Natsoft timing, track maps, predictions and session reports for your team, on one laptop and every phone in the garage.



Rovantra Timing

Live timing · Track map · Phones · Replays · Reports · Excel

Version 1.0.1 · November 2026
For Rovantra Timing 1.0.1 on Windows

ROVANTRA TIMING

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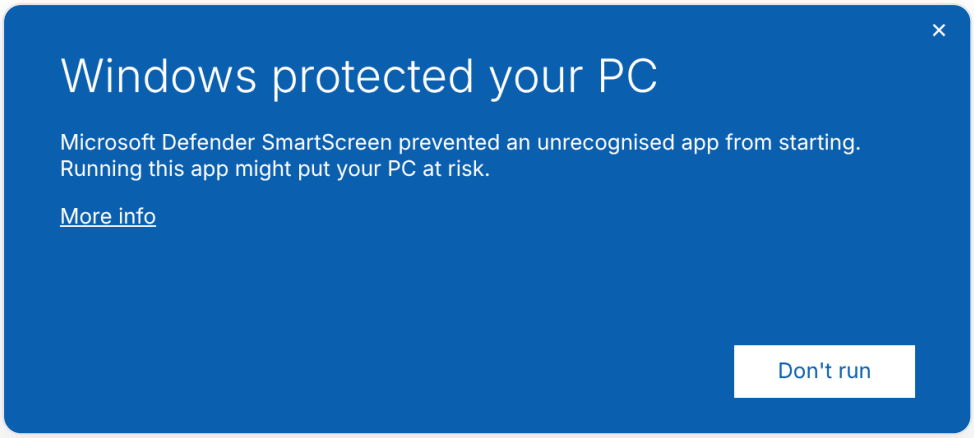
WHO THIS GUIDE IS FOR

Team engineers and timing staff who install and run Rovantra Timing at the track. Chapter 2 is the one to hand to whoever installs it on the team's laptops.

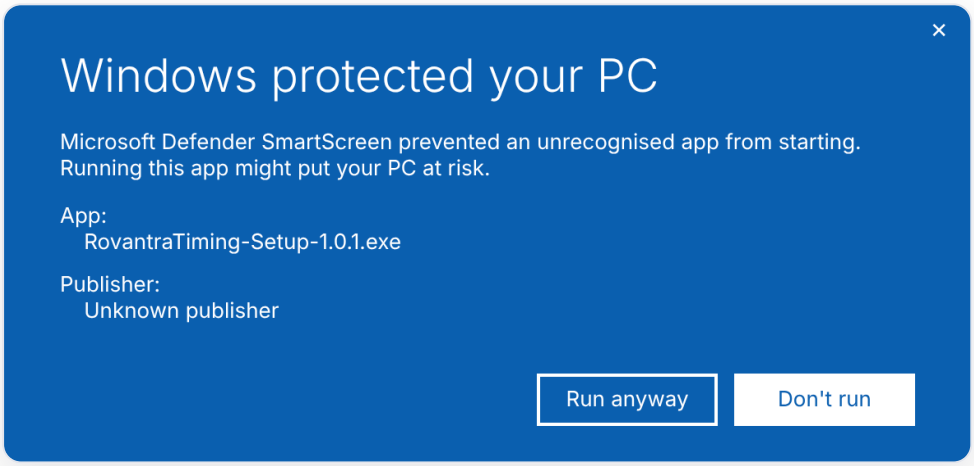
ABOUT THE PICTURES

Screenshots are from Rovantra Timing 1.0.1 playing the built-in demo race, so names and lap times are fictional. Your screens will show your own meeting.

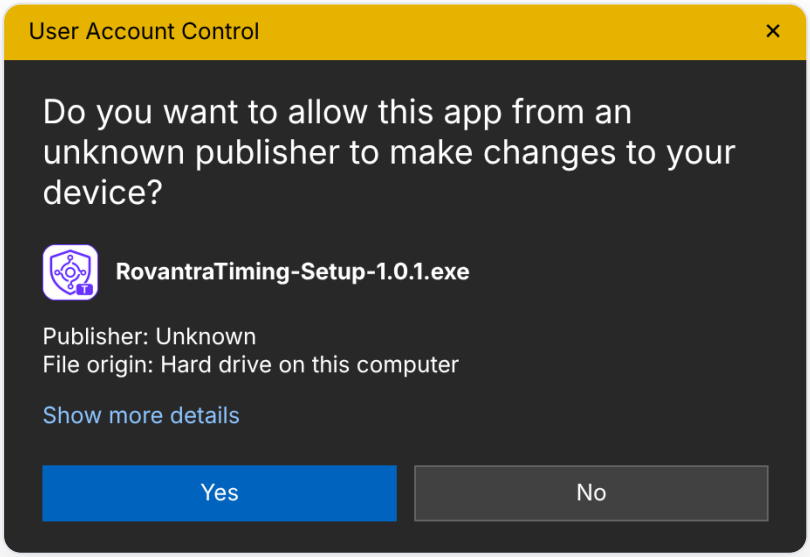
2 **Double-click it.** If SmartScreen says "Windows protected your PC", choose **More info**.



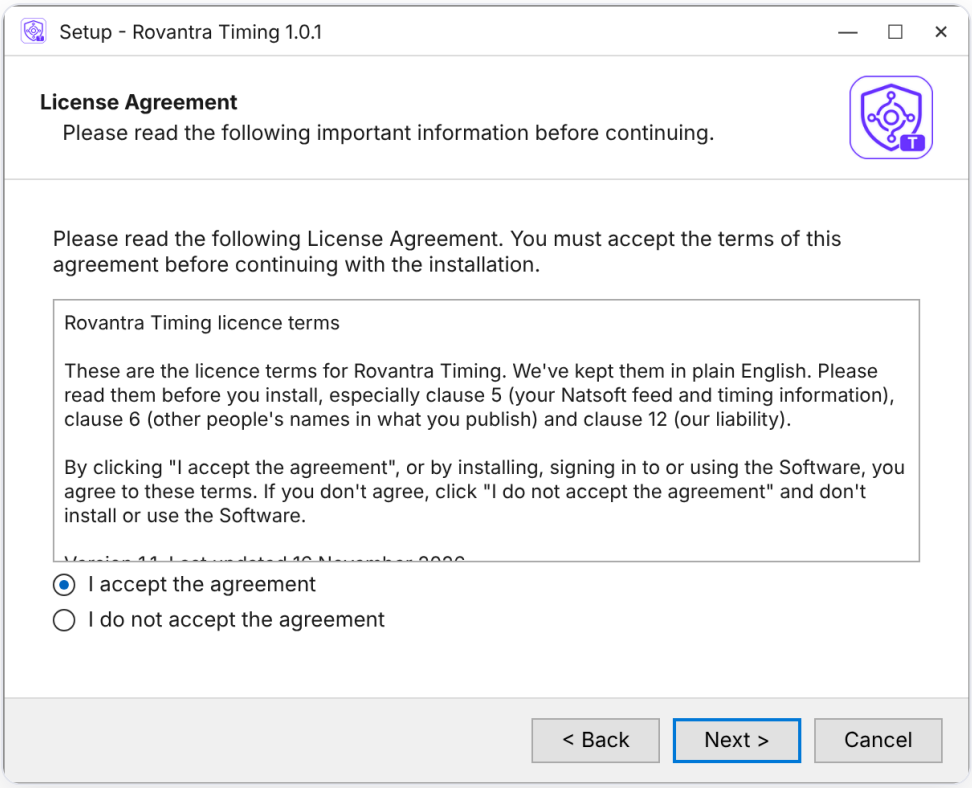
3 **Choose Run anyway.** Check the app name is `RovantraTiming-Setup-1.0.1.exe` first.



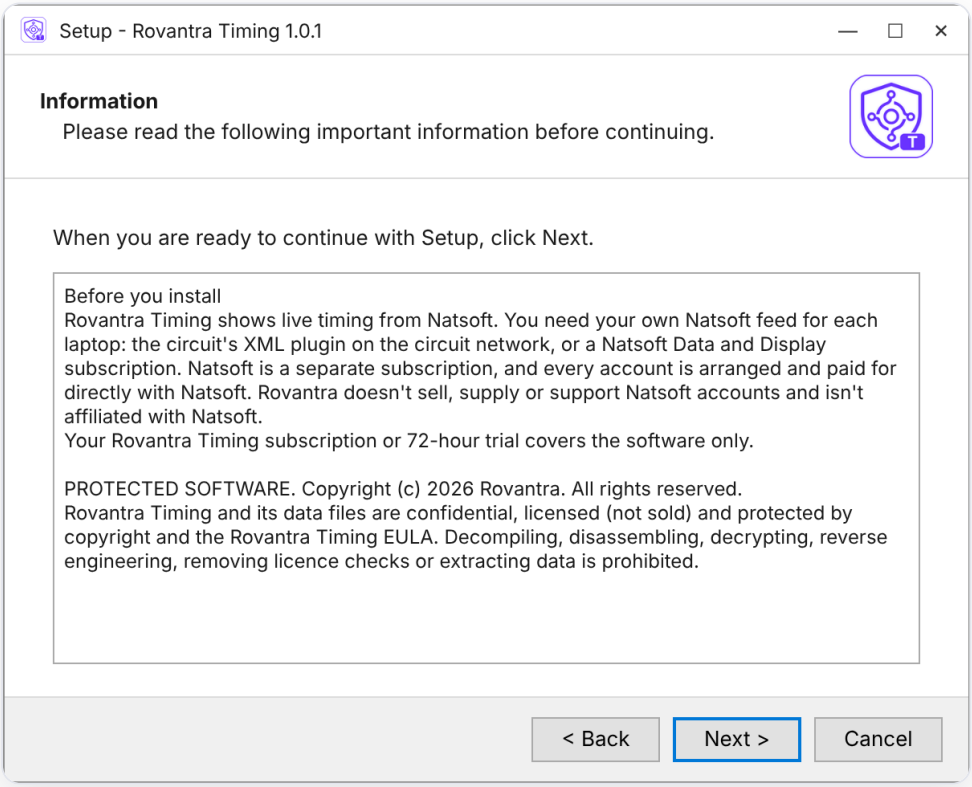
4 **Approve the administrator prompt.** Choose **Yes**. This is the only prompt; the installer also opens the firewall for phones in the same step. If you aren't an administrator, Windows asks for an administrator's password here.



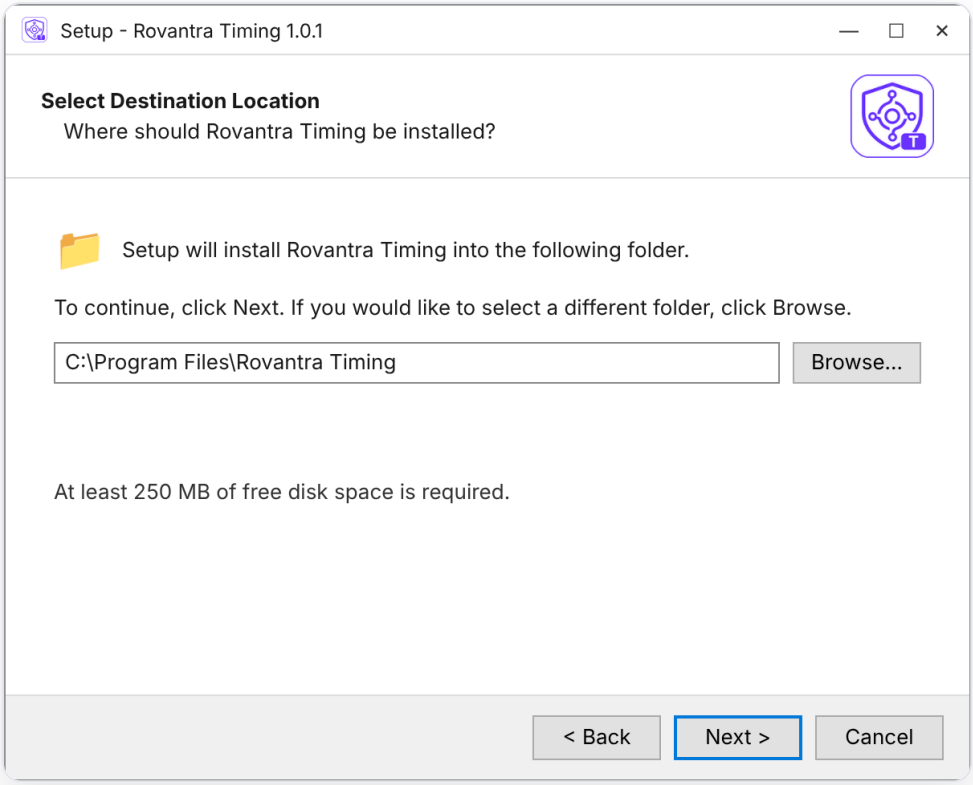
5 **Accept the licence terms.** Read them, choose **I accept the agreement**, then **Next**.



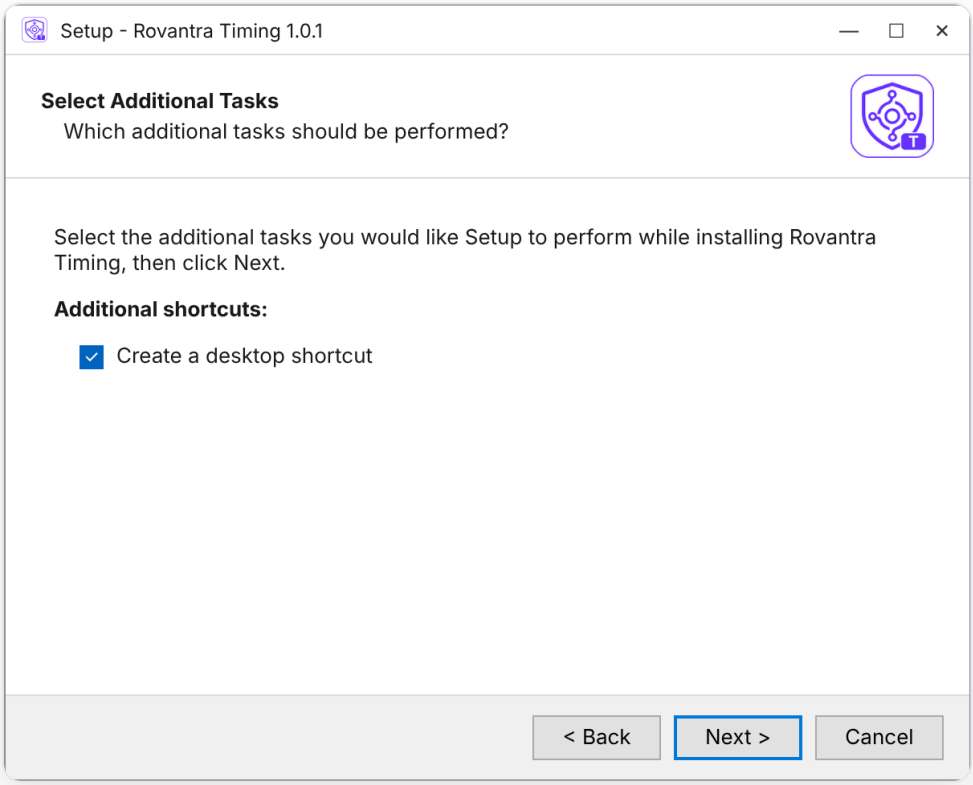
6 **Read Before you install.** It explains that your Natsoft feed is a separate subscription arranged directly with Natsoft, then the protection notice. Choose **Next**.



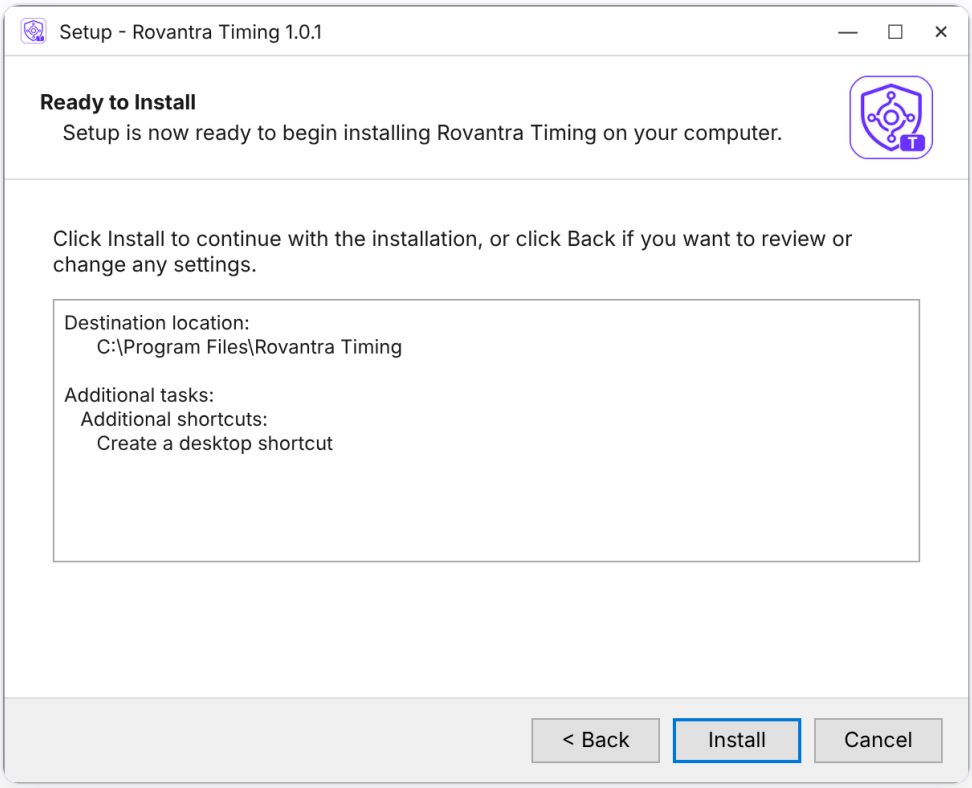
7 **Keep the install folder.** Leave `C:\Program Files\Rovantra Timing` and choose **Next**. On an update this page is skipped.



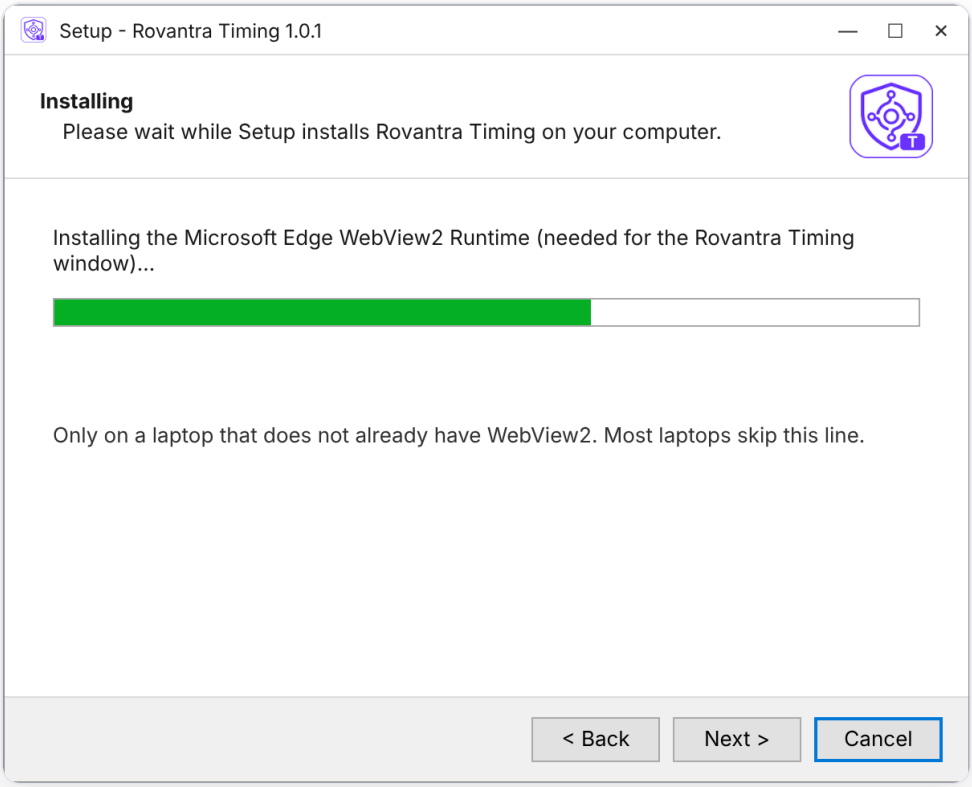
8 **Choose a desktop shortcut.** Tick **Create a desktop shortcut** if you want one (it starts unticked), then **Next**.



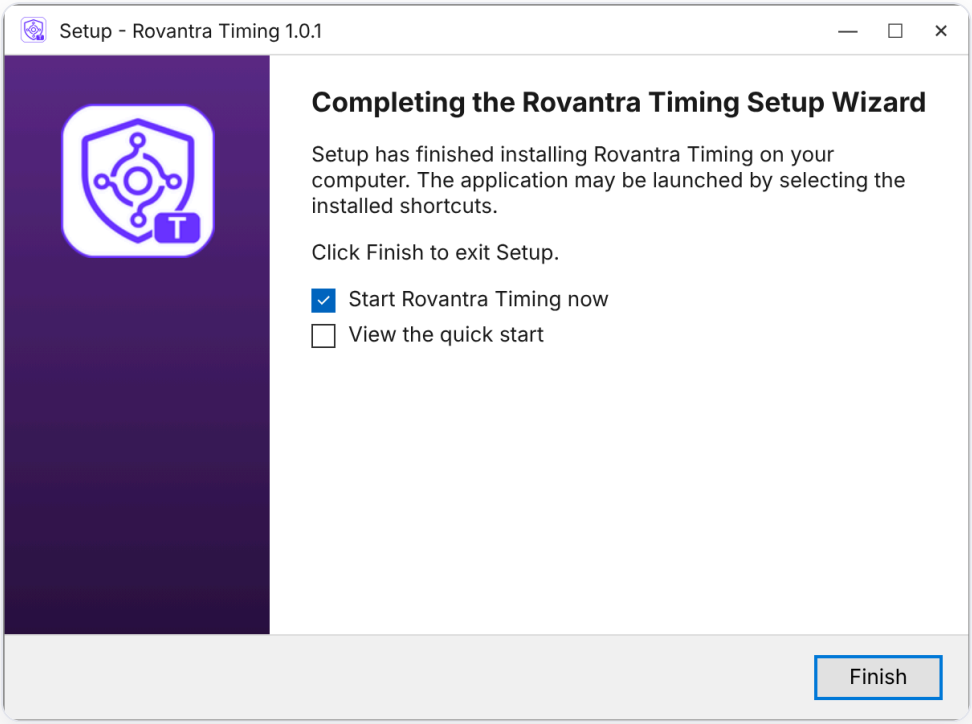
9 **Choose Install.**



10 **Wait about a minute.** On a laptop without the WebView2 Runtime a status line says the installer is fetching it from Microsoft; this needs internet. No separate Microsoft window appears.



11 **Finish.** Leave `Start Rovantra Timing now` ticked and choose `Finish`. The licence screen opens next (chapter 3).



If the laptop has an older "for me only" copy of Rovantra Timing, the installer removes it first. Your recordings, reports, settings and licence stay.

Phones and the Windows Firewall

The installer lets phones reach the laptop on **Private** and **Domain** networks only; Public networks stay blocked. If the trackside Wi-Fi is marked Public, change it to Private in Windows Settings, or use `Allow phones on this Public network` in **Connections › Phones**, which opens only the timing port to your local subnet.

Where your files go

FOLDER	WHAT IT HOLDS
`Documents\Rovantra Timing\`	One folder per meeting with its recordings and reports, plus `recordings\`, `tracks\` (what your laptop has learned), `exports\` and `logs\` (14 days kept).
`%LOCALAPPDATA%\Rovantra Timing\`	Settings: team name, cars, Natsoft address and port, output folders. Never synced to OneDrive.

If your Documents folder is backed up to OneDrive, recordings and reports are copied there too. That is your team's choice and your team's data. Uninstalling or upgrading never touches either folder.

Uninstalling

Windows Settings › Apps › Installed apps › Rovantra Timing › Uninstall removes the program and the firewall rule. Sign the laptop out first (chapter 3) so its place is free, and delete the two folders above yourself if you are handing the laptop on.

CHAPTER 3

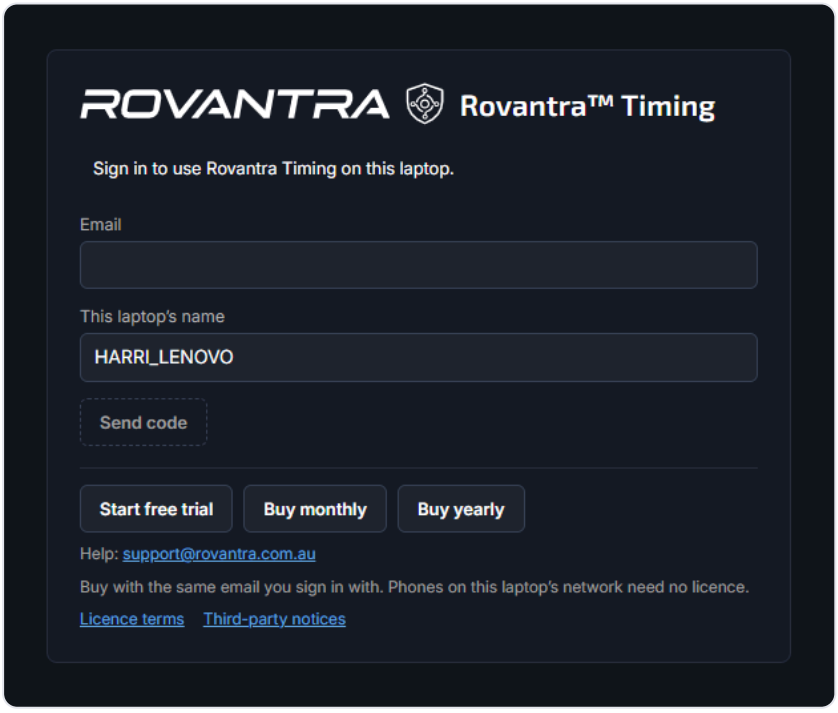
3 Licence and trial

A paid licence covers up to 3 timing laptops; a free trial runs for 72 hours on 1 laptop. Phones never need a licence, and there are no licence keys: you sign in with your email.

	TRIAL	PAID LICENCE
Laptops	1	Up to 3
Length	72 hours from the first sign-in on a laptop	While your subscription is active
Price	Free	See rovantra.com.au/timing/
Excel export	Not included	**Included**
Watermark	**TRIAL** in the laptop's top bar and on every report	**None**
Offline use	Must stay in date; no grace period	Works offline; connect at least once a month
How to get it	**Start free trial** in the app, or rovantra.com.au/timing/trial/	**Buy** in the app, or rovantra.com.au/timing/buy/

Sign in

1. The first time Rovantra Timing opens, it shows the licence screen.



The licence screen

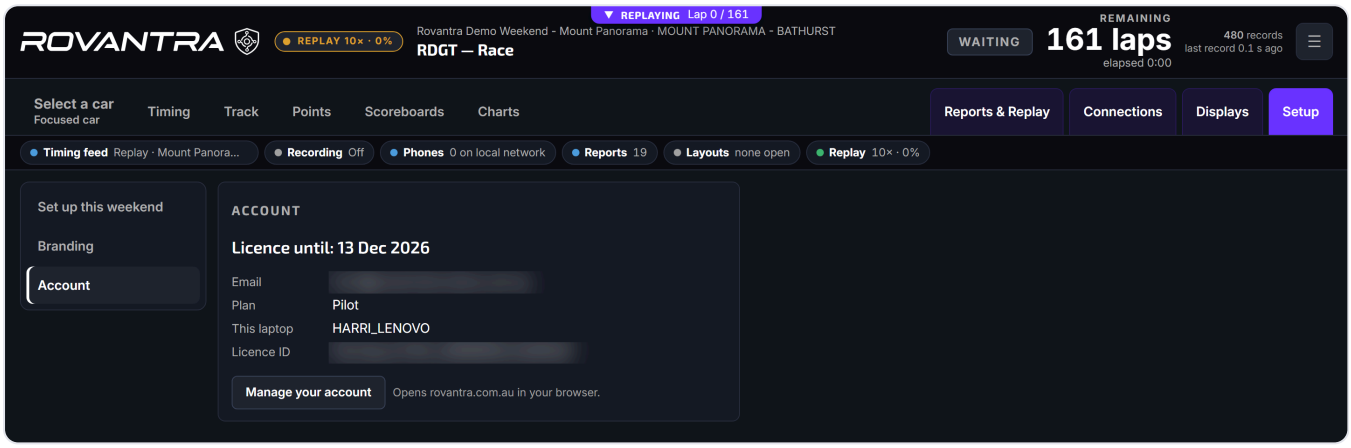
1. Change the laptop name if you like (it starts as the Windows computer name). This is the name you see in your account.

2. Type your email and choose **Send code**.
3. Type the 6-digit code from the email. It works for 15 minutes.
4. Just signed up for a trial or bought? Click the link in your confirmation email first, then sign in.

Buy with the same email you sign in with. One trial is allowed per team; a second trial on the same email, company or laptop is refused.

Your account in the app

Setup › Account shows your plan. On a trial it shows the time left and **Purchase**; on a paid licence, the renewal date and **Manage your account**. **Sign out this laptop**, in the Licence panel at the bottom of **Set up this weekend**, frees its place for another laptop.



Setup › Account on a paid licence (details blurred)

To remove a lost or replaced laptop, use your account page at rovantra.com.au/account/. Within a minute an idle laptop goes to the sign-in screen; one running a session shows **This laptop was removed from the licence. You'll be signed out when this session ends.**

> **NEVER CUT OFF MID-SESSION**
>
> If a trial or subscription runs out during a live session, the session carries on to the end. Afterwards, new feeds, replays, reports and Excel exports won't start until the licence is renewed.

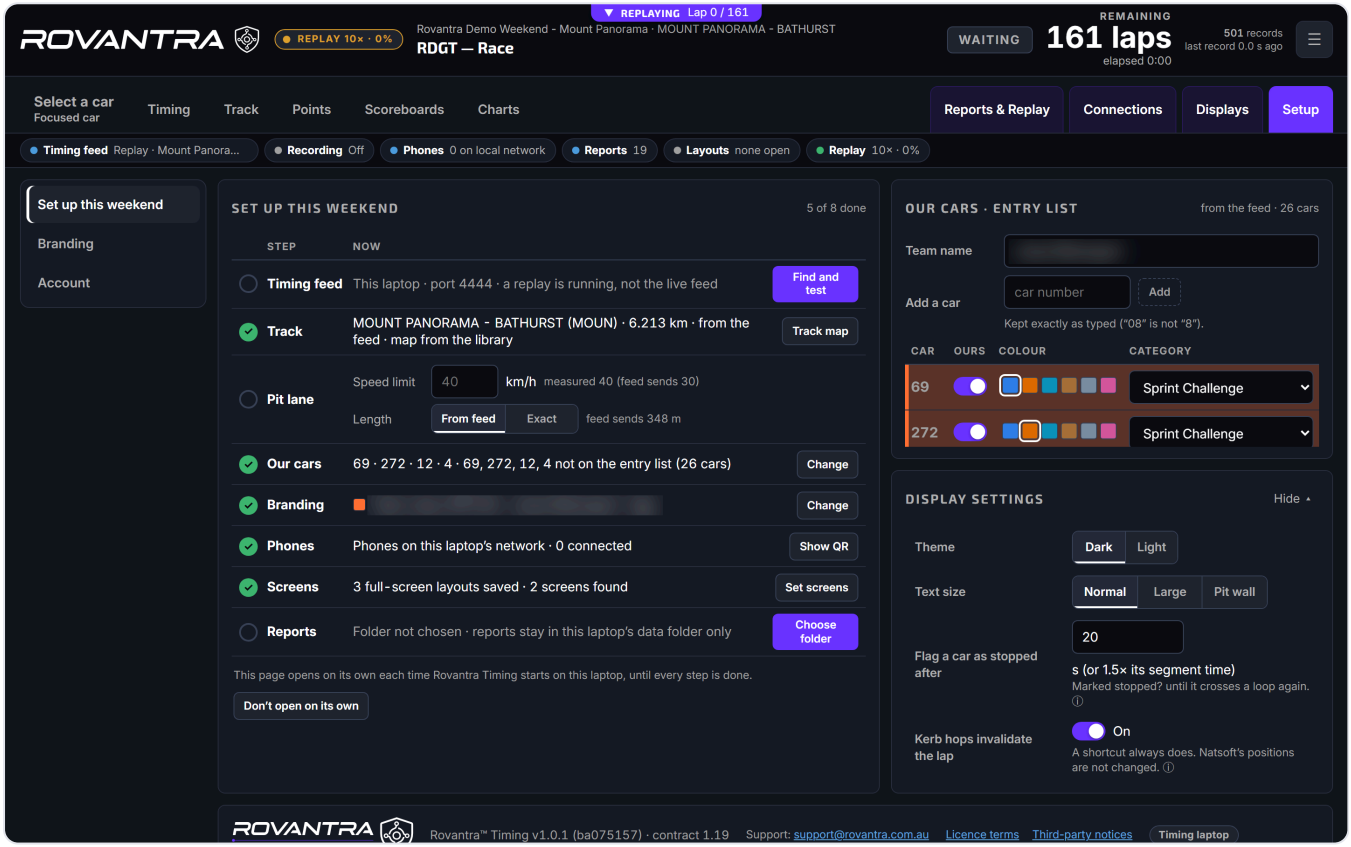
CHAPTER 4

4 Connect Natsoft and set up the weekend

Once Natsoft Display is sending on its local data port, Rovantra Timing connects in under a minute and follows every session of the meeting by itself. Do this on Thursday or first thing Friday.

The weekend checklist

On first start, **Setup › Set up this weekend** shows a checklist down the left: Timing feed, Track, Pit lane, Our cars, Branding, Phones, Screens and Reports. Work down it once per meeting; each line turns done when it's set.



Setup › Set up this weekend, with Our cars on the right (team details blurred)

Connect the feed

1. **In Natsoft Display:** open **Config › Local Data Port Configuration**, set a port (for example 4444) and save. Turn **Record sessions** on so Natsoft keeps its own copy too.
2. **In Rovantra Timing:** open **Connections › Timing feed** and choose **Find**. If Natsoft Display runs on another PC, type its address in **Feed address** and the same port in **Feed port**.
3. Choose **Test**. It answers in plain words: connected, refused, timed out or unknown host.
4. Choose **Connect**. The top bar shows **NATSOFT LIVE** within a few seconds of the next timing record.

QUIET DAYS SHOW "REFUSED"

Natsoft Display only sends on its port while it's connected to a live meeting. Its own replays don't send. To practise at the workshop, use Rovantra's replays (chapter 8).

Our cars, categories and track

- **Our cars** (Setup › Set up this weekend): add each team car's number and, if you run in more than one category, its category. A #88 set to Supercars won't make a different #88 in Super2 "ours". Leave **Any category** if your numbers are unique.
- **Track:** Rovantra picks the circuit from the feed's track code, then by name and length. Check the Track tab names the right circuit.
- **Pit lane:** each circuit ships with a pit entry and exit loss (Sandown 7.2 s, Gold Coast 6.4 s, Bathurst 5.4 s, otherwise 5.5 s). Type your own value to override it.

Choosing sessions

You don't pick sessions one by one. Rovantra records every session the feed sends and switches to the next as soon as it starts. Two settings decide what happens around them:

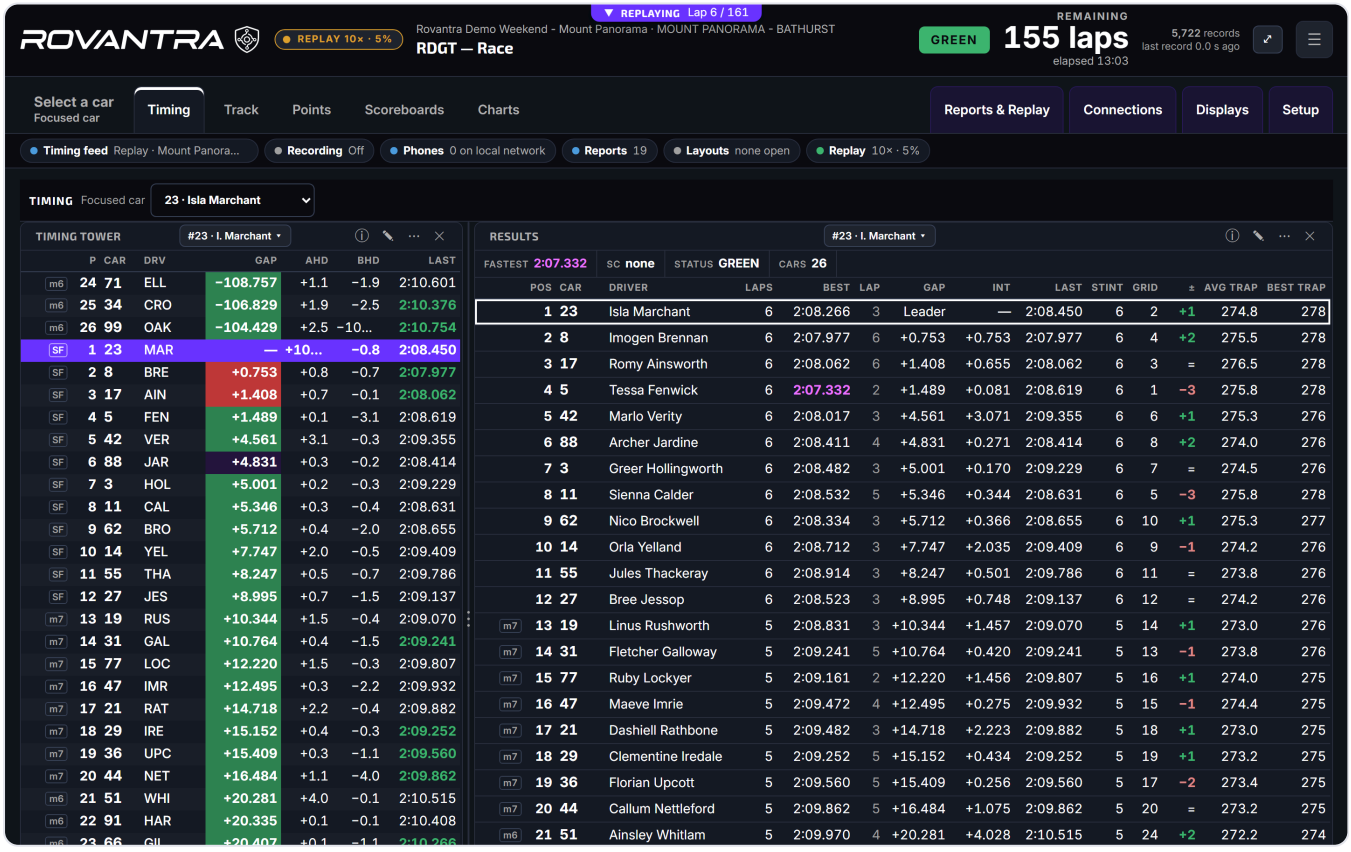
SETTING	WHAT IT DOES
Which sessions	In **Reports & Replay › Templates**. Automatic reports at the flag for **only sessions with our cars** or **every session**. A Build you press yourself always builds.
+1 lap after the clock	In the **This race** panel, time-certain races only, on by default. Turn it off for a race that ends at the clock; laps to go drops by one and says so.

CHAPTER 5

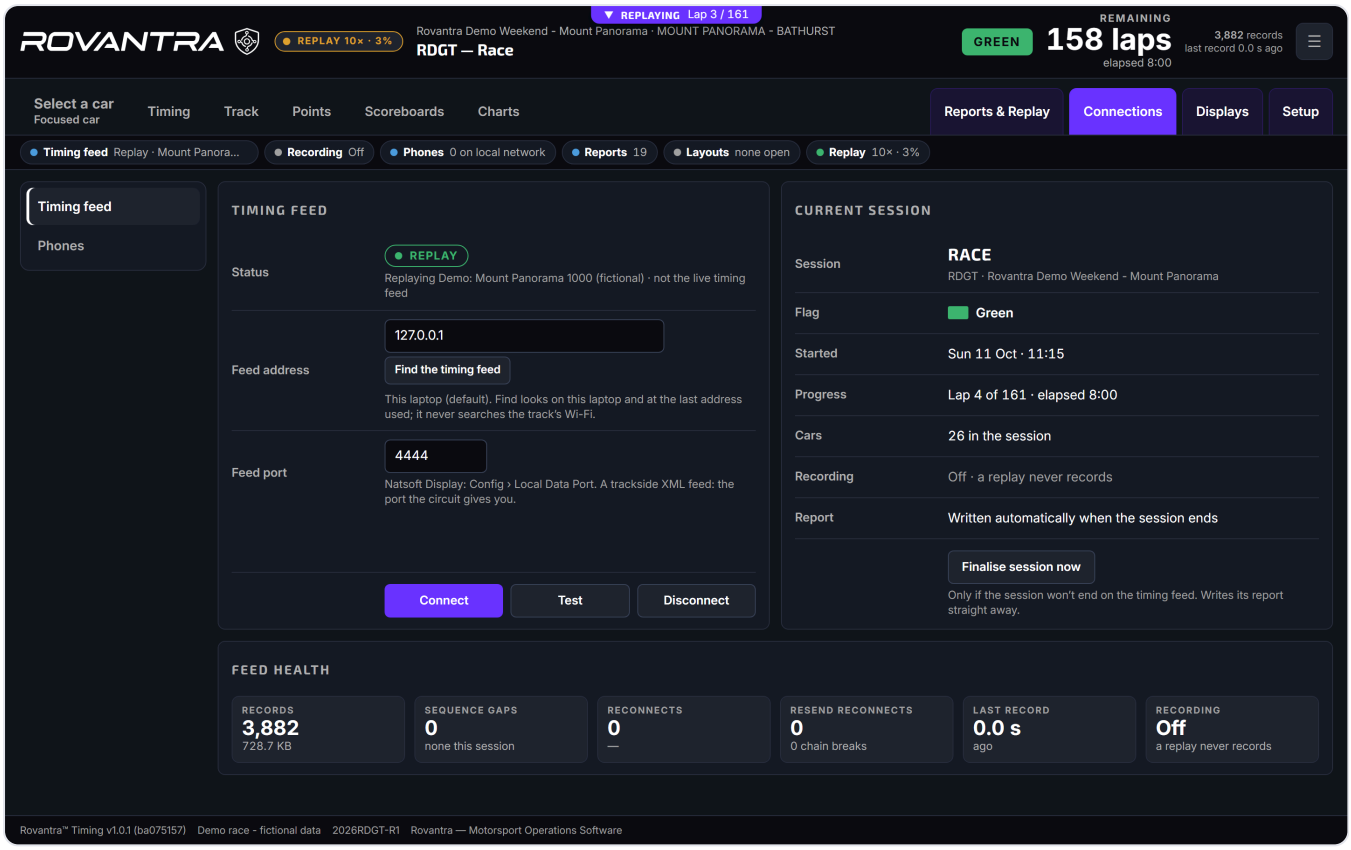
5 Displays and layouts

Every screen in Rovantra Timing is a layout of displays you can rearrange, resize and save. Timing tabs sit on the left of the window; setup tabs sit on the right.

TAB	WHAT IT SHOWS
Focused car	Far left. Your chosen car: My car, Car laps, Laps, Pit option, gaps, plus any displays you add. Team cars are always in its car picker.
Timing	Timing tower and Results
Track	Track map and Race control
Points	Starting grid and Live points
Scoreboards	Sector and micro-sector scoreboards
Charts	Lap chart, gaps and pace charts
Reports & Replay	Reports, Templates, Replays, Folders & Options
Connections	Timing feed and Phones
Displays	Full-screen layouts and Screens (extra monitors)
Setup	Set up this weekend, Branding, Account



The Timing tab: timing tabs on the left, setup tabs on the right, status chips underneath



Connections › Timing feed, here replaying the demo

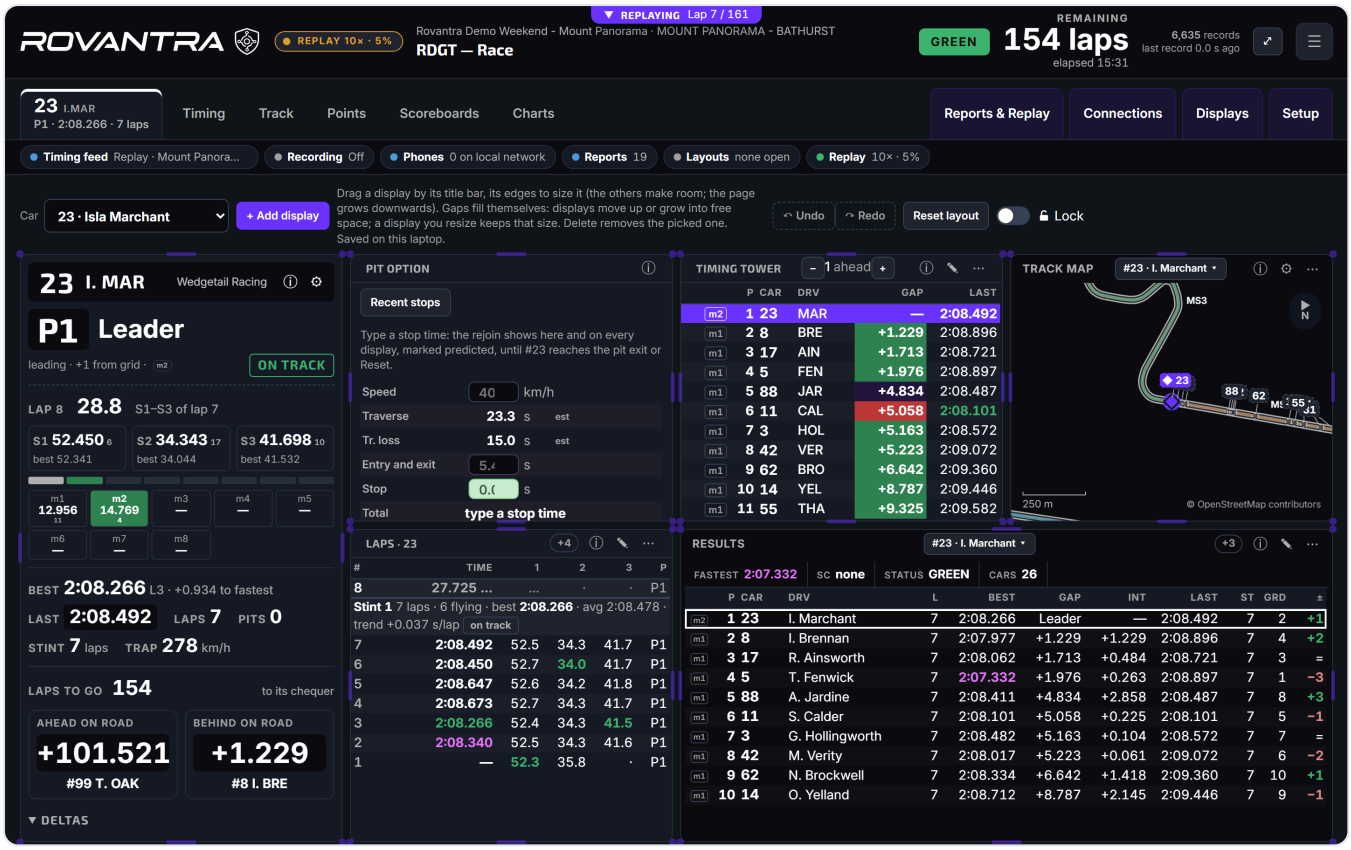
The ⚙, ⋯ and ⓘ buttons

- ⚙ on a display opens its own settings: cars, columns, units, label style.
- ⋯ appears when a display or header is too narrow for all its buttons. Everything that doesn't fit folds into it; nothing is lost.
- ⓘ explains what the display shows and how it's worked out.

Displays squeeze rather than crop: as one narrows it drops decimals first, then shortens names (Sam Parker, S. Parker, PAR), and drops whole columns only last.

Move, resize and lock

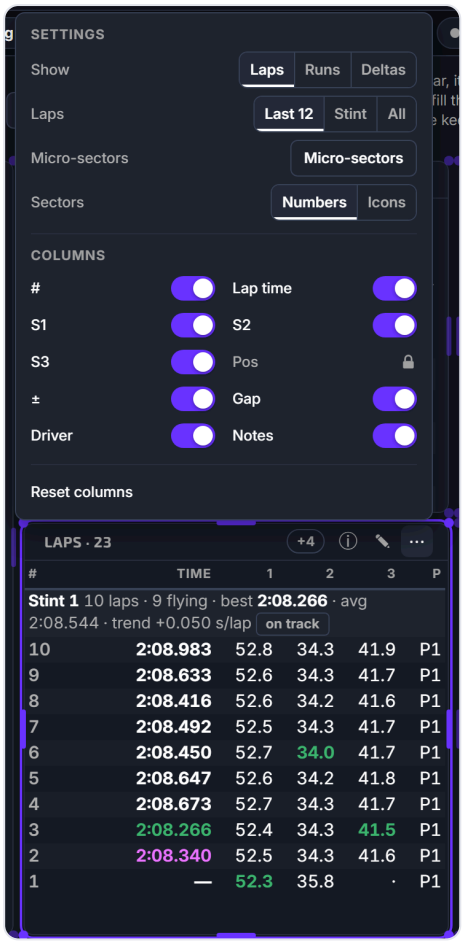
1. Choose **Unlock** on a layout. Drag a display's handle to move it, or a corner to resize it. Other displays move aside and fill gaps.
2. `Ctrl+Z` and `Ctrl+Y` (or **Undo** and **Redo**) step back and forward while unlocked.
3. Choose **Lock** when done. Every menu, car picker and full-screen button still works; only moving and resizing stop.
4. **Reset layout** returns the focused-car tab to its default 8-display layout.



The Focused car tab unlocked for editing: car panel, Pit option, Laps, Timing tower, Track map and Results

Focused-car Laps

The Laps display shows the focused car's recent laps, with the three major sectors as numbers and micro-sectors off by default. Its ⋯ menu has two switches: **Micro-sectors** on or off, and **Numbers / Icons** for the sectors. Car laps, My car and pop-out copies keep their own settings.



The Laps display and its ⋯ settings

Full-screen layouts and extra screens

Displays › Full-screen layouts builds walls of displays for a pit-wall monitor or TV: set the outer padding for the whole screen in the layout editor, and each display's inner padding on the display itself. **Displays › Screens** sends a layout to a second monitor. `F11` puts the main window full screen and `Esc` leaves it.

> **LAPTOP-ONLY DISPLAYS**
>
> Strategy stays on the laptop: Pit option, Pit now, Strategy, Position, Traffic on rejoin, Rival stop watch, Raising average and Blue flags. Chapter 7 lists what phones show.

Closing the Rovantra Timing window quits the whole app, including recording and phones. If a feed is live it asks first, and the next start reconnects.

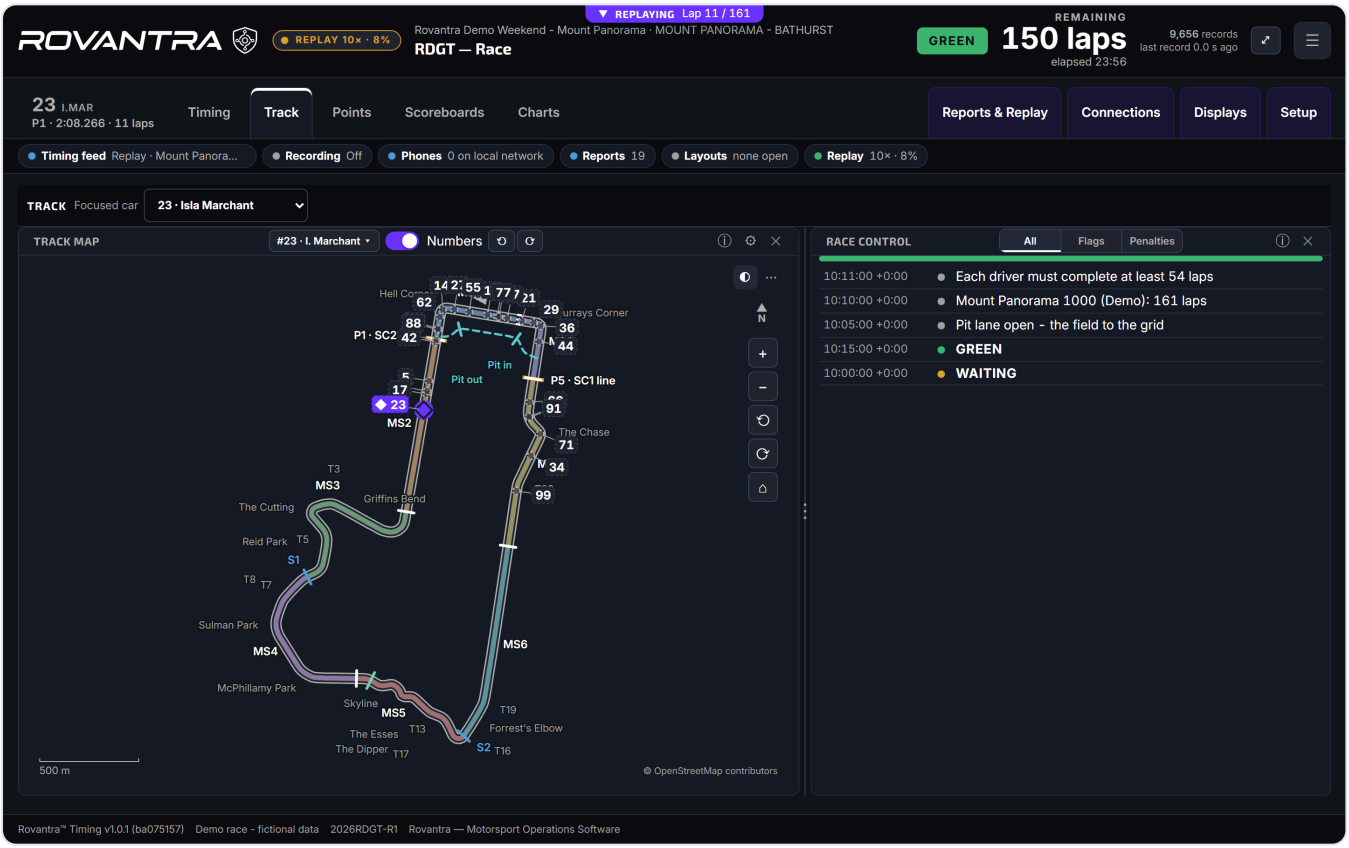
CHAPTER 6

6 The track map

The Track tab draws every car on the circuit, moving between the timing loops the feed reports. V1 ships 48 circuit layouts, including every Supercars venue. Start/finish lines are already calibrated for Bathurst, Gold Coast, every layout at The Bend, and Adelaide.

Reading the map

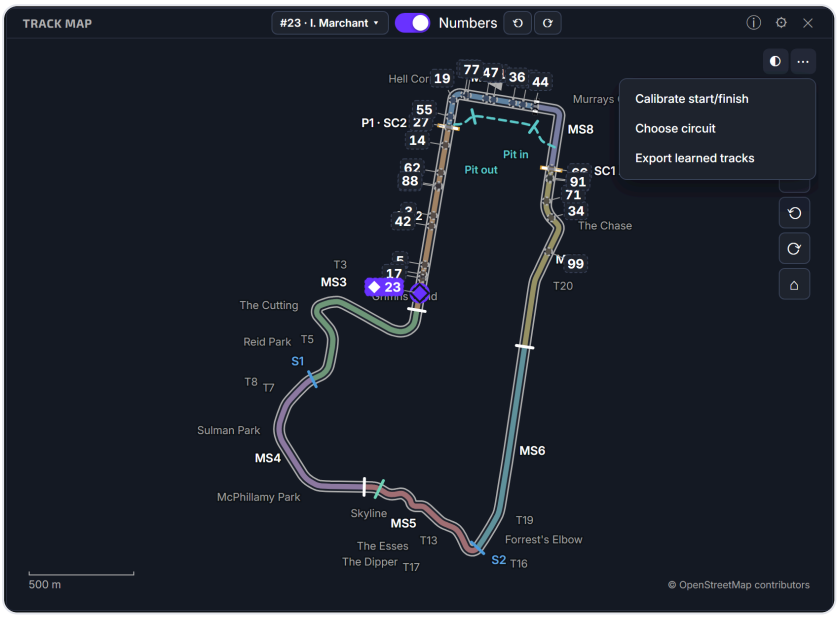
- Dots move at each car's recent pace and snap to each loop as the feed reports the crossing.
- The map draws only the loops and micro-sectors the feed actually sends, so it always matches the scoreboards.
- Cars entering the pits move into the pit lane at pit in, wait between the lines and rejoin after pit out.
- Kerb hop and shortcut loops (Surfers Paradise, Mount Panorama, The Bend, Sydney Motorsport Park, Adelaide) are drawn from the track file. Switch them off with **Kerb/shortcut loops** in the map's ⚙ settings.
- Natsoft doesn't send kerb hop counts in races, so the badge reads **Shortcuts | HOPS not sent**, and a count of 0 there is correct.



The Track tab: map with corner names, sector lines, pit lane and Race control

The map's controls

CONTROL	WHAT IT DOES
Numbers	Shows car numbers on the dots. The arrows beside it rotate the map.
⚙	View and label settings: corner names and numbers, microsector colours, label style, dot size, Kerb/shortcut loops (on by default).
⋯	**Calibrate start/finish**, **Choose circuit** and **Export learned tracks**.
+ − ⌂	Zoom in, zoom out and fit the whole circuit.

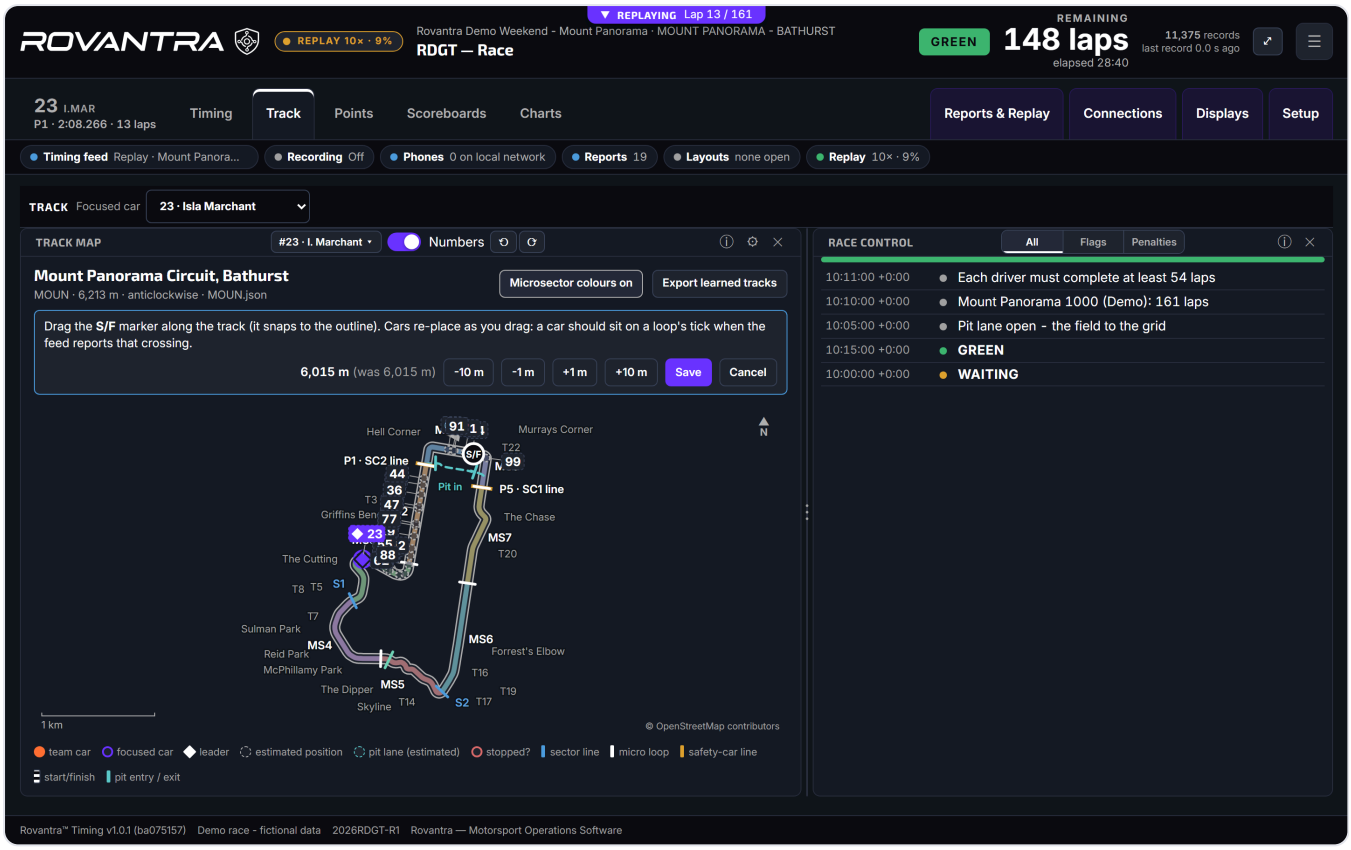


The map's ⋯ menu

Calibrate the start/finish line

Do this once per circuit if the leader's dot doesn't sit on the S/F marker as its lap time appears, or the map shows **control line not calibrated**. A live session or a replay both work.

1. Play a session at that circuit at 1× and let a few cars complete laps.
2. Open the **Track** tab and check the map names the right circuit with its outline drawn.
3. Choose **Calibrate start/finish** in the map's ⋯.
4. Drag the **S/F** marker to the real start/finish line. It snaps to the track. Fine-tune with **−10** **−1** **+1** **+10 m**.
5. Watch a few cars cross: the leader's dot should touch the marker as its lap time appears in the tower. Nudge until it does.
6. Choose **Save**. The **control line not calibrated** badge goes.



Calibrate mode: drag the S/F marker, nudge with the metre buttons, then Save

Export learned tracks

Your laptop keeps learning each circuit: its Natsoft code and name, your calibrated line and the pace between loops. **Export learned tracks** saves it all as `Documents\Rovantra Timing\exports\learned-tracks-<date>.json`. Email it to support so it can go into the shipped track files. Updates never overwrite what your laptop has learned.

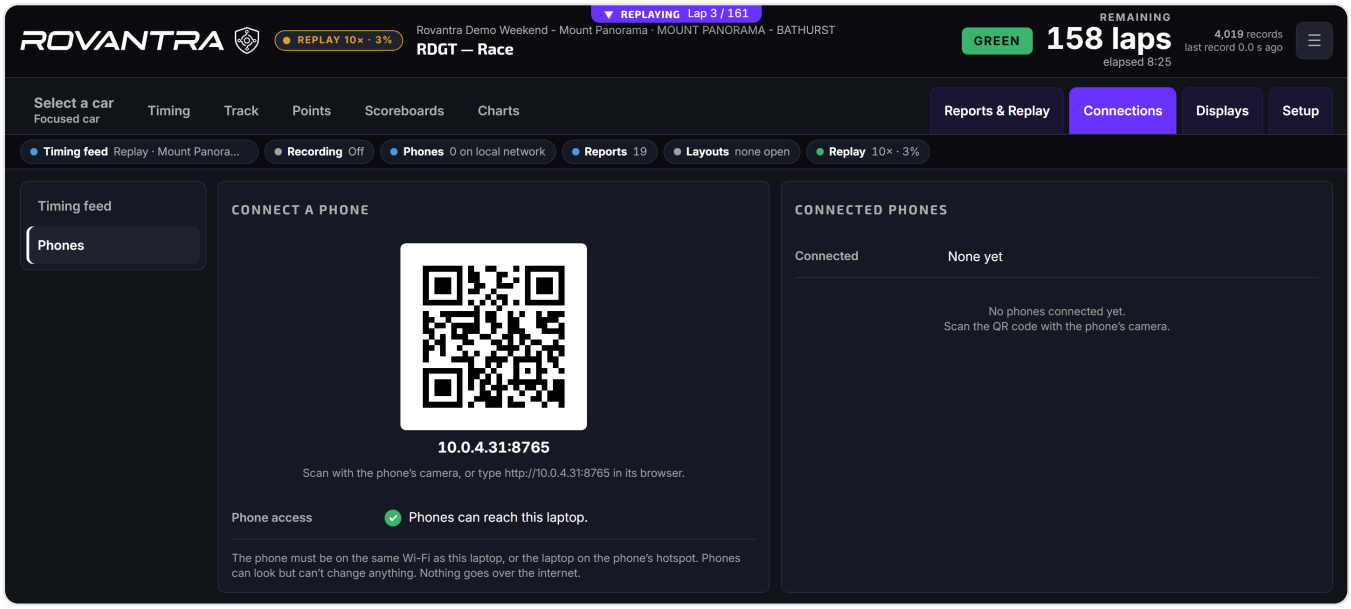
CHAPTER 7

7 Phones and tablets

Any phone or tablet on the same Wi-Fi as the timing laptop can show live timing by scanning a QR code. Phones need no app, no sign-in and no licence, and they can look but not change anything.

Connect a phone

1. Put the phone on the same Wi-Fi as the laptop, or put the laptop on the phone's hotspot.
2. On the laptop open **Connections › Phones**.
3. Scan the QR code with the phone's camera, or type the address under it into the phone's browser. It looks like `http://192.168.1.20:8765`.
4. The phone appears in the **Connected phones** list.



Connections › Phones: the QR code, its address and Phone access

Add a **Phone QR** display to a pit-wall layout so crew can scan it from the wall. If the laptop has more than one network (Wi-Fi and Ethernet), pick the address phones should use; **Automatic** usually picks the right one.

What phones show

	ON PHONES	LAPTOP ONLY
Timing	Timing, results, sectors, track map, points, race control	Branding and layout editing
Predictions	**Go now and predicted laps to go**	Traffic on rejoin, Rival stop watch
Strategy	Never on phones	Strategy, Pit option, Pit now
Race clock	Remaining (time-certain races)	

Phone access problems

The Phones page has a **Phone access** line: OK, **firewall rule missing**, or **this Wi-Fi is Public**, with a `Fix` button. On a Public network it walks you through switching to Private, or offers `Allow phones on this Public network`.

> **LOCAL NETWORK ONLY**
>
> In V1, phones work only on the laptop's local network. They don't work over mobile data or from home.

CHAPTER 8

8 Replays

Every recorded session can be replayed with every display, prediction and the track map working exactly as they did live. Replays are the best way to learn the app before a race weekend.

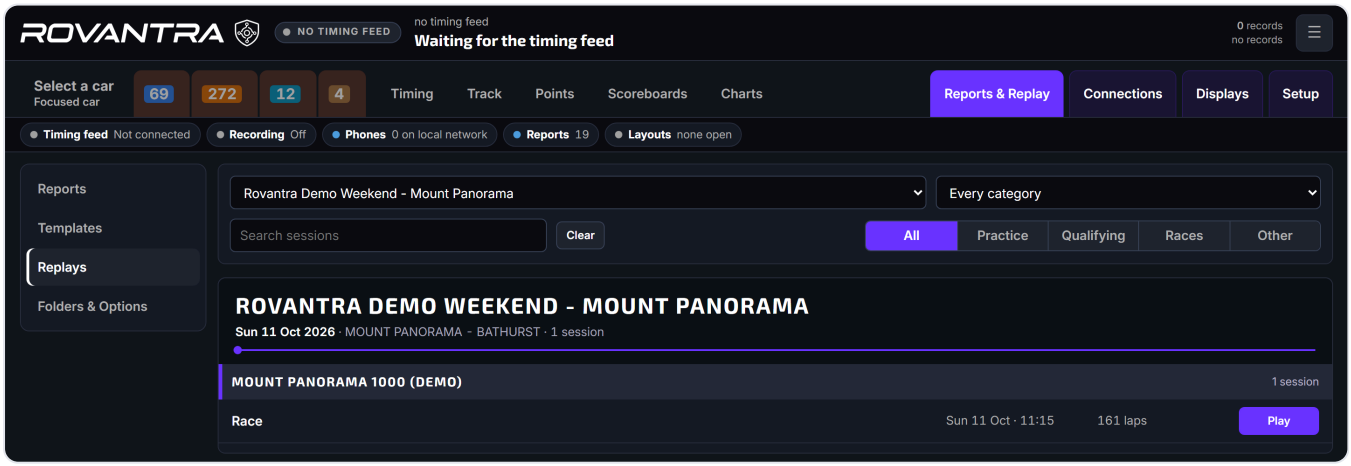
Where recordings come from

SOURCE	WHERE
Your recordings	Each session is saved as an `.nrs` file in its meeting folder under `Documents\Rovantra Timing\`.
Natsoft Display	Listed automatically from its recording folder (`C:\NatsoftDisplay\NTS_RecordedSessions` unless you moved it), newest meeting first.
Other folders	**Reports & Replay › Folders & Options › Replay folders › Browse...** adds a USB stick or archive. A folder that isn't plugged in shows amber. You can also drop any .nrs into `recordings\`.

If the app joined late or the feed dropped out, a session may be split into more than one file. Reports join the pieces back into one session.

Play a replay

1. Open **Reports & Replay › Replays** and pick a session.
2. The **replay bar** floats over every tab: play, pause, change speed and drag the scrubber. Drag the bar aside, or **Hide** it; a small tab brings it back.
3. Switch tabs freely while it plays. Phones follow the replay too.
4. Stop the replay to go back to live.



Reports & Replay › Replays with the demo weekend picked

★ TRY THE DEMO: MOUNT PANORAMA 1000

Every copy includes a fictional 161-lap Mount Panorama 1000, so a new team can see every display working before it has a recording of its own. The cars, drivers and lap times are invented, so it holds no real timing data, and it works on a trial.

1. Open **Reports & Replay › Replays**, pick **Rovantra Demo Weekend - Mount Panorama** in the event list, and choose **Play** on its Race. It starts at 10× speed; slow it on the replay bar.
2. Pick a car as a team car in **Our cars** to see the focused-car tab, Pit option and Go now working.
3. Build its report on the Reports tab to see a full race report and weekend report. Replays and Reports share the event you picked, so it is already selected.

Replays need an in-date licence or trial, like live timing.

CHAPTER 9

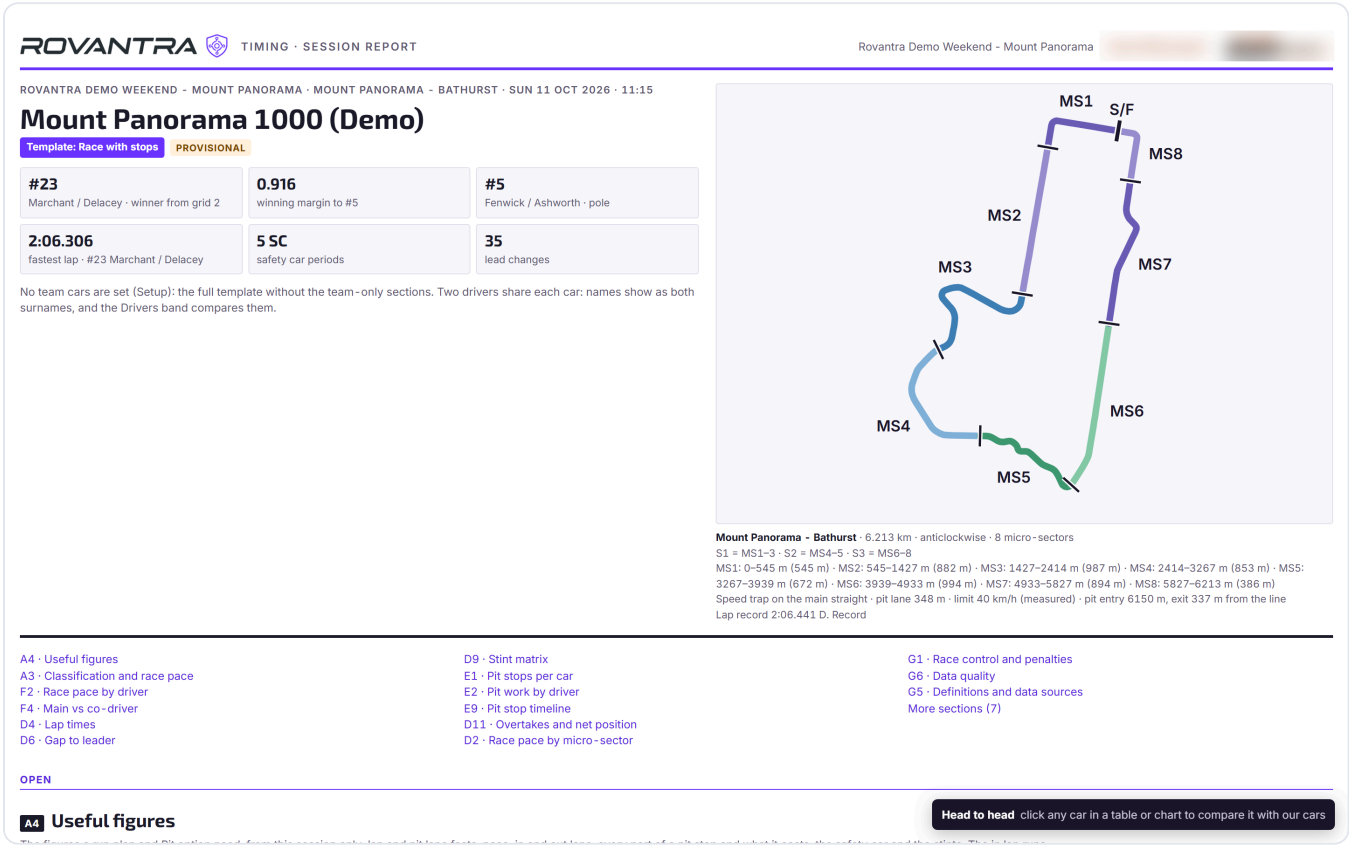
9 Reports and Excel export

A report is built for each session when the chequered flag falls, plus a weekend report per category. Reports open as HTML in your browser or PDF in your PDF viewer.

Session reports

Each session uses one of five templates, chosen automatically: **Practice**, **Qualifying**, **Shootout**, **Race** and **Race with stops** (when half or more of the cars stopped, or any car changed driver). Every section has a short explanation you can switch off.

Inside: a one-line summary per team car, Useful figures against the field and reference cars, sector and micro-sector scoreboards, race pace (fastest 20 %, fastest 70 % and slowest 30 % of green laps), stints, pit stops split into in lap, pit lane and out lap, measured pit entry and exit loss, and race control with safety car periods.



The top of a race report: headline figures, the circuit and its micro-sectors, and the section list

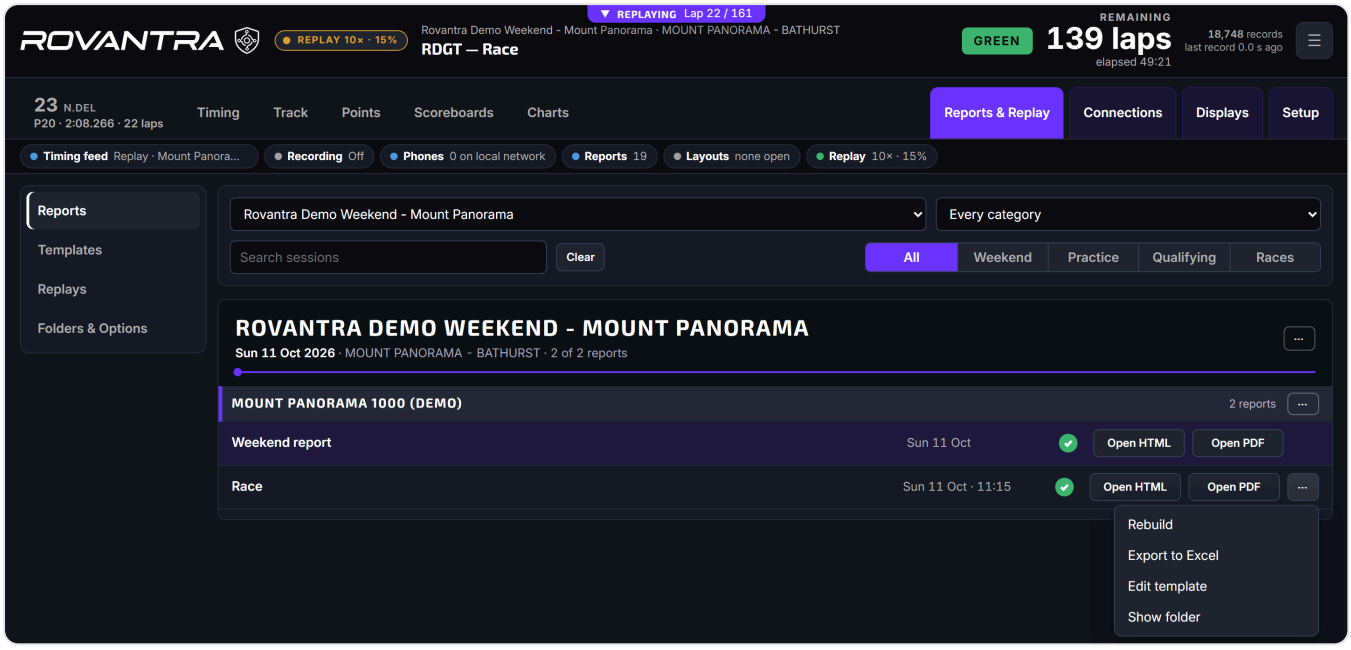
> **READ G6 FIRST**
>
> **G6 Data quality** lists anything missing from the feed. Check it before trusting a figure.

The weekend report

One goes into each of your categories' folders: a cover with the map, lap record and measured pit loss; **Our weekend** with each team car across every session; then results, the weekend pace matrix, Useful figures by session, pit loss by race and the championship after the round.

Build and rebuild

Open **Reports & Replay › Reports**. Each session has a row.



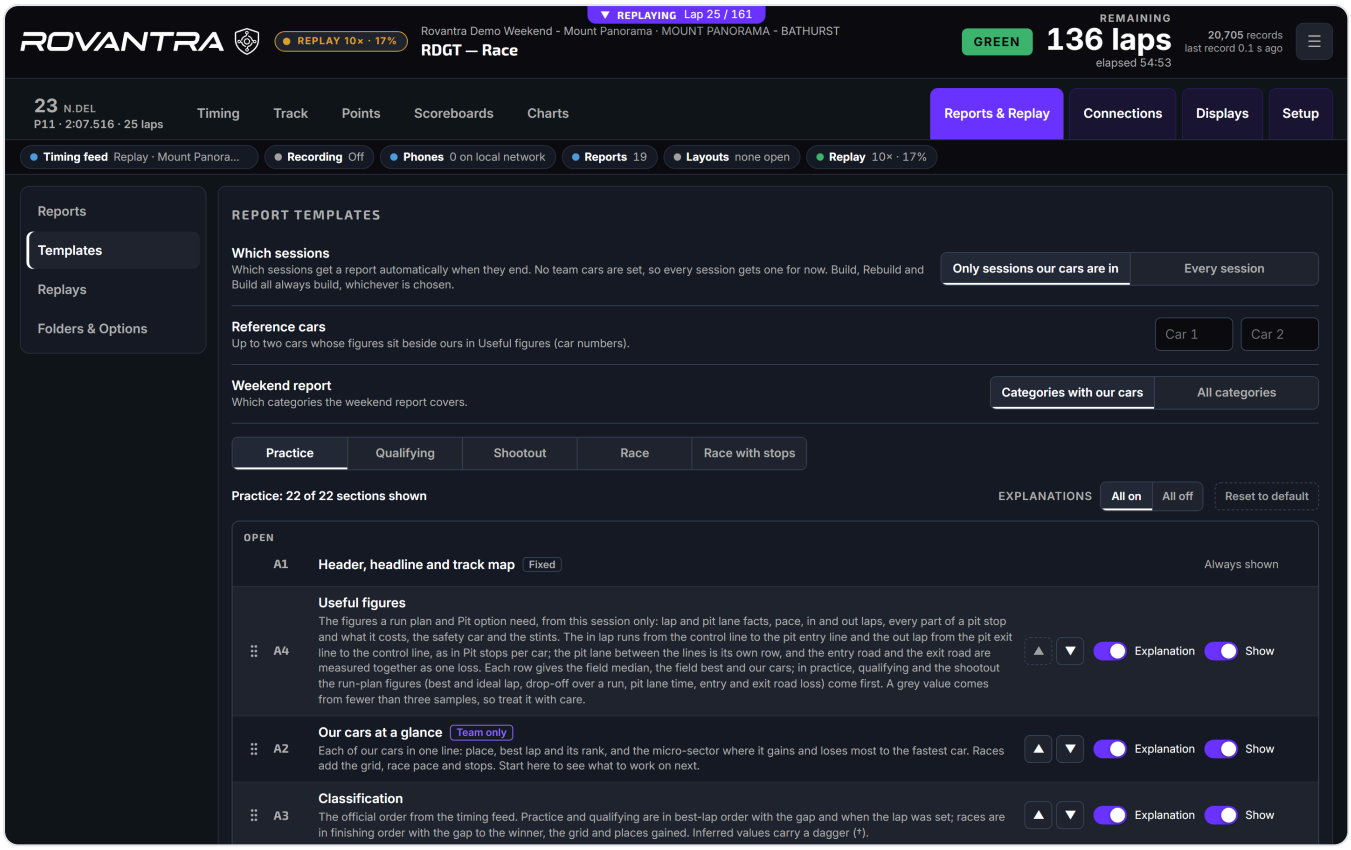
Reports & Replay › Reports, with a row's ⋯ open

- **Build** or **Build all** makes reports that don't exist yet. A build you press always runs, whatever **Which sessions** says.
- **Rebuild** (also in the row's ⋯) rebuilds with the current template.
- A skipped row says **Not built automatically: no team car. Press Build.**
- A restart never overwrites a finished report with an emptier one.

Change the templates

Reports & Replay › Templates has a tab per template: show or hide sections, switch explanations on or off, drag to reorder, choose up to two reference cars and the weekend report's categories. **Reset to default** undoes it all. **Edit template** in a row's ⋯ jumps to that report's template.

Which sessions, at the top of the Templates page, sets which sessions get a report automatically: **Only sessions our cars are in** (default) or **Every session**.



Reports & Replay › Templates

Export to Excel

Export to Excel, next to Rebuild on each row, writes one `.xlsx` beside the report: a sheet per visible report section with real tables and native Excel charts, lap times as m:ss.000 time values (estimates in grey italic), then Raw laps, Sectors, Pit stops, Track limits and About sheets.

Excel export needs a paid licence; on a trial the button says "Export to Excel needs a full licence". Nothing is exported automatically.

CHAPTER 10

10 Updates

Rovantra Timing tells you when a newer version is out, but never downloads or installs anything by itself and never interrupts a session. You choose when to update, ideally between meetings.

How you find out

A link reading **Rovantra Timing x.y.z available — Download** appears in three places:

- a small pop-up in the corner when the app starts (never while a live feed or replay runs; close it with × and it stays away until the next start);
- the footer of the main screen;
- **Setup › Account**.

Install an update

1. Finish or stop any live session or replay.
2. Choose **Download**. Your browser opens downloads.rovantra.com.au/timing/latest; save the new `RovantraTiming-Setup-<version>.exe`.
3. Run it. If Rovantra Timing is open, the installer offers to close it.
4. Approve the administrator prompt (every update needs one). If SmartScreen warns again, choose **More info** then **Run anyway**.
5. Start Rovantra Timing.

> **EVERYTHING IS KEPT**
>
> Settings, licence, recordings, reports, layouts and learned track data all stay. Update every team laptop to the same version before a meeting.

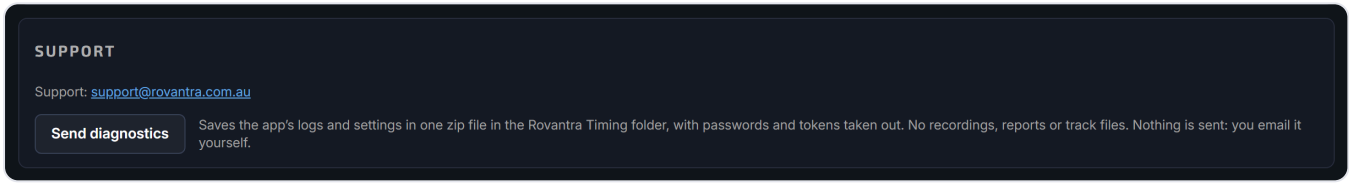
CHAPTER 11

11 Support

Email **support@rovantra.com.au** for help with installing, licences or the app. Include a diagnostics file and we can usually answer from that alone.

Send diagnostics

1. Open **Setup › Set up this weekend** and scroll to the **Support** panel at the bottom.
2. Choose **Send diagnostics**. It writes one zip of the app's logs and settings into your Rovantra Timing folder and opens that folder. It never includes a recording, a report or a password.
3. Choose **Email it to support@rovantra.com.au**. Your email app opens with the subject filled in.
4. Attach the zip (email links can't attach files for you), say what happened and roughly when, and send.



The Support panel

NATSOFT QUESTIONS

Natsoft accounts, passwords and feed access are handled by Natsoft, not Rovantra. Contact Natsoft directly for those.

CHAPTER 12

12 Troubleshooting

Most problems at the track come down to the Natsoft port, the Wi-Fi type or the licence. If yours isn't here, send diagnostics to support.

PROBLEM	WHAT TO DO
"Windows protected your PC"	Expected for V1 (not yet code-signed). Choose More info › Run anyway.
Feed Test says refused	Natsoft Display isn't sending. Check it's connected to the live meeting and its Local Data Port is on, with the same port. Natsoft's own replays never send.
Timed out or unknown host	Wrong address, or the Natsoft PC is on another network. Use Find, or check the address and that both PCs share a network.
Connected, nothing updates	Wait for cars on track. Between sessions the feed can be quiet for minutes.
Port in use	Another program holds port 8765. Close it, or change `ui_port` in `%LOCALAPPDATA%\Rovantra Timing\settings.json` and restart.
Window blank or frozen	Press `Ctrl+R` to reload the display. Timing keeps running underneath.
Phone won't load	Same Wi-Fi as the laptop? Check Connections › Phones › Phone access and choose Fix. Guest Wi-Fi often blocks devices from seeing each other; use a team router or a phone hotspot.
Wi-Fi is Public	Switch it to Private in Windows Settings, or use Allow phones on this Public network.
Sign-in code missing	Check junk mail. Codes last 15 minutes; choose Send code again.
"All 3 laptops on this licence are in use"	Sign out on a laptop you no longer use, remove it from your account page, or email support.
"Your 3-day trial has ended"	Buy a licence, or if you just bought, click the link in your confirmation email first.
Download link does nothing (1.0.0 only)	Fixed in 1.0.1. On 1.0.0 use Setup › Account › Manage your account to reach the download.
Trial refused	One trial per team, email, company and laptop. Contact support.
"This installation has been changed"	A program file was altered or damaged (sometimes by antivirus). Reinstall the same version; your data is kept.
Map shows a circle	The circuit wasn't matched. Check the Track tab's name and email support with the meeting name.
Dots early or late at the line	Calibrate the start/finish line (chapter 6).
Kerb hops always 0 in races	Correct: Natsoft doesn't send them in races (chapter 14).
A session has no report	It may have no team car. Choose Build on its row.
Excel export greyed out	Excel export needs a paid licence.
Micro-sectors empty after joining late	Normal. They fill once each car completes a full lap after you joined.

CHAPTER 13

13 How the numbers are worked out

Every prediction is an estimate, shown with ≈ and explained by the display's ⓘ. This chapter says what each figure is based on, so you know how far to trust it on the day.

FIGURE	HOW IT'S WORKED OUT
Gap and interval	Taken from the timing feed at each line. If the feed leaves a gap out, it is worked out from the cars' crossing times.
Laps to go (time-certain race)	Time left divided by the car's lap time: the median of its last 3 flying laps, else its best lap, else the field's median; safety car pace while the safety car is out. It shows a range such as **3–4** when the finish could fall on either lap. **+1 lap after the clock** (on by default) adds the lap in progress when the clock runs out.
Laps to go (lap-count race)	Each car shows its own laps left, counting down to 0, so a lapped car shows fewer than the leader.
Go now	While your car is in the pit lane: if you release it this second, how many laps it will get before the end, such as **out lap + 4 flying**. It uses the pit lane time still to run, a typical out lap and the car's lap time.
Pit option	Where your car would rejoin if it pitted now. Stop cost = pit entry loss + time in the pit lane + exit loss, less the track the pit lane bypasses. The entry and exit loss is what you typed, else what the app measured, else a typical 8 s (marked). Other cars are assumed to keep their pace. Under the safety car, every car yet to stop is assumed to stop.
Pit entry and exit loss	Starts at the track default (Sandown 7.2 s, Gold Coast 6.4 s, Bathurst 5.4 s, others 5.5 s). Values you type always win. Reports show the loss actually measured that session.
Race pace	Green laps only (no safety car, pit or out laps): the average of a car's fastest 20 %, fastest 70 % and slowest 30 % of laps.
Stopped	A car is shown stopped when it is 20 s late to its next loop (or half its usual time for that part of the lap, if longer) and still late at the loop after.
OUT	A stopped car is OUT once the leader has passed its last loop twice, or it is more than 180 s or 2.5 laps overdue. In a race, more than 300 s in the pit lane also counts as OUT.
Blue flag due	A lead-lap car is projected to catch a lapped car within 30 s, from the gap and how fast it closed over the last 60 s.
Track map position	Between loops each car moves at the field's recent pace for that part of the track, adjusted by part of its own pace in the last micro-sector, and is never drawn past the car ahead.

WHEN TO BE CAREFUL

Predictions settle after a few green laps. Straight after a restart, the start or a feed dropout, expect ranges and ≈ figures to move more than usual.

CHAPTER 14

14 What Natsoft sends, and what it doesn't

Rovantra Timing can only show what the Natsoft feed gives it. These are the limits teams notice most often. None of them is a fault in your setup.

YOU NOTICE	WHY
Kerb hops read 0 in races	Natsoft doesn't send kerb hop counts in races. The badge says **HOPS not sent**.
Micro-sectors missing or fewer than the circuit has	The map and scoreboards only use loops Natsoft actually reports. Some meetings send fewer than others.
Nothing until cars cross a line	The feed reports crossings at loops, not GPS. Between loops, positions on the map are estimates.
Replays in Natsoft Display don't reach Rovantra Timing	Natsoft Display only sends its Local Data Port during a live meeting. Use Rovantra Timing's own Replays instead.
Quiet periods between sessions	The feed can send nothing for minutes. Rovantra Timing waits and picks up the next session by itself.
Late join or dropout	Anything sent while you weren't connected can't be recovered. Micro-sectors fill after each car's next full lap, and reports list the gap in **G6 Data quality**.

Your Natsoft subscription, login and feed access are with Natsoft. Contact them about anything on their side.

CHAPTER 15

15 Race weekend checklist

A short routine that avoids most trackside problems. Print it and keep it with the laptops.

The week before

- [ ] Every laptop on the same version (Setup › Account)
- [ ] Licence in date for the whole weekend
- [ ] Each laptop signed in, connected to the internet once
- [ ] Natsoft subscription active for the meeting
- [ ] Watch a replay of last year's round or the demo
- [ ] Pit lane loss checked for this track (weekend checklist)

At the track, before the first session

- [ ] Natsoft Display connected to the live meeting, Local Data Port on
- [ ] Feed Test says connected; status shows NATSOFT LIVE
- [ ] Our cars set for each category
- [ ] Wi-Fi set to Private, or Allow phones on this Public network
- [ ] Crew phones scanned in and loading
- [ ] Track tab names the right circuit; S/F calibrated

During each session

- [ ] Leave the laptop plugged in and awake
- [ ] Check the race's +1 lap switch before the start
- [ ] Don't install updates mid-weekend
- [ ] If the window freezes, Ctrl+R; timing keeps running

After the session and weekend

- [ ] Check each report's G6 Data quality
- [ ] Press Build on any session without a report
- [ ] Export to Excel if you need the data
- [ ] Calibrated a new line? Export learned tracks and send it to support
- [ ] Copy the meeting folder to the team share or a USB stick

CHAPTER 16

16 Quick reference

How do I…?

HOW DO I…	GO TO
Put my car first?	Setup › Set up this weekend › Our cars, then the Focused car tab (chapters 4 and 5).
Get timing on a phone?	Connections › Phones, scan the QR (chapter 7).
Fix dots early or late at the line?	Track map › ⋯ › Calibrate start/finish (chapter 6).
Practise with no live meeting?	Reports & Replay › Replays › Rovantra Demo Weekend - Mount Panorama › Play.
Rebuild a report after changing a template?	Reports & Replay › Reports › Rebuild (chapter 9).
Move my licence to a new laptop?	Setup › Account › Sign out this laptop on the old one, or remove it at rovantra.com.au/account/.
Send a problem to support?	Setup › Set up this weekend › Support › Send diagnostics (chapter 11).

Glossary

TERM	MEANING
Loop	A timing line in the track surface. Each crossing is reported by the feed.
Micro-sector	The stretch between two loops. Major sectors are the three official splits.
S/F, control line	The start/finish line, where laps are counted.
Kerb hop, shortcut	A loop that detects a car cutting a corner, used for track limits.
Team car, focused car	Your own cars (Our cars), and the one the Focused car tab follows.
Time-certain race	A race that ends on the clock rather than after a set number of laps.
Pit loss	Time lost slowing into and accelerating out of the pit lane, compared with staying on track.
Learned tracks	What your laptop has learned about each circuit, exportable as one file.
.nrs	A Natsoft session recording, used for replays and reports.

Keys

KEY	WHAT IT DOES
`F11`	Main window full screen.
`Esc`	Leave full screen, close a menu, pop-out or dialog.
`Ctrl+R`	Reload the display if it freezes. Timing keeps running.
`Ctrl+Z` / `Ctrl+Y`	Undo or redo a layout change while the layout is unlocked.

Version history

VERSION	WHAT CHANGED	UPDATE
1.0.1 **16 Nov 2026**	The update notice's Download link now opens the download page in your browser.	Recommended
1.0.0 **16 Nov 2026**	First release. Live Natsoft timing, track maps for 48 layouts, phones over the laptop's network, replays with the demo, session and weekend reports, Excel export.	–

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