Initial Set-up

1. Unpack parts.

2. Download Action Tracer from the Play Store / Apple Store.

https://play.google.com/store/apps/details?id=com.queling.actiontracer

https://apps.apple.com/th/app/action-tracer/id6465174912
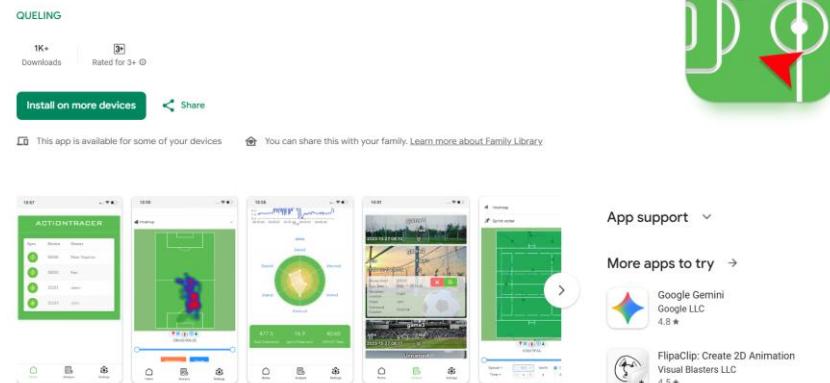
3. Enable Bluetooth on your phone, and Approve Bluetooth permissions if the app requests it.

4. Go to Settings -> Add Member. Enter the name of one of the players, and the optional details if you like. Press the Tick to save. You'll now find the player listed under Settings -> Member List.

5. Go to Settings -> Add Device. Turn on the tracker, so that a yellow or blue light is showing. Press Rescan if the tracker is not showing a Device ID in the list. Click the device from the list, then select an Owner in the dropdown list. Press the Tick to save. You'll now find the tracker listed under Settings -> Device List. From Device List, you can change the owner (blue button), or see the battery level (green number), or the red button to remove the device from the app.

6. The tracker is now connected to the app. After you add a field, you'll be ready to start using the tracker.

7. When you're physically at the field, you'll be ready do add the field to the app. Turn the tracker on and wait for the solid blue light (GPS signal connected). Carry the phone and tracker to a forward-left corner of the field. Press Settings -> Create New Map -> By Device. Choose Football, Rugby, or Custom Field. Hold the tracker over the corner line and press Next in the phone, then select which tracker you're using. Wait around 10 seconds for Point Calibration to reach 100%. Move to the forward-right corner, hold the tracker over the corner, and press Next. Repeat for the 4 corners as instructed by the app. In case the signal fails, you may need to restart the

process, but once you finish the 4 corners and enter a name for the field, it'll be saves in the app for re-use. It'll now show in Settings -> Map List to rename it, delete it, or share it with another phone using the same app.

8. You can repeat Add Device, Add Member or Add Map for additional trackers, players, or fields.

9. Charge the tracker so it's ready for use on a field. Plug the cable into the USB port of a computer or phone charging adapter. Connect the magnetic end of the cable to the back of the tracker. A red light means charging, no light means it's finished charging. If you want to know the exact % charged, you can disconnect it, turn it on, open the app and go to Settings -> Device List (green number, 56% shown below).

Tracking a Game or Training

1. Turn on the tracker. Wait for the light to change from yellow to blue (GPS Signal Connected). Insert the tracker into the vest and put it on.


2. When you're ready to start recording data, press the button 1 more time (through the vest is fine) and note the beep noise (which means it'll start recording, and the blue light will start flashing). When you want to stop recording data (eg. at the end of the half), press the button 1 more time (no beep sound). If you stopped recording at the end of the 1st half, you can press the button again at the beginning of the 2nd half (beep sound will signal recording begins), and press it again at full time (no beep sound).

In the scenario above, the tracker will now have 2 data recordings in its memory. The tracker can hold 2 hours of data including up to 15 individual recordings. So you'll want to Sync the data to the app, before using the tracker too much more, or your old data may be overwritten.

3. With the tracker turned on and near the phone, press the circular green button under Sync (click again if needed). If you instead press Sync All, you may also load unwanted data recordings into the app. After a short load time, in the pop-up window, click the recordings which you want to import into the app, then Sync Selected. Eg. the 2 halves played on this day.
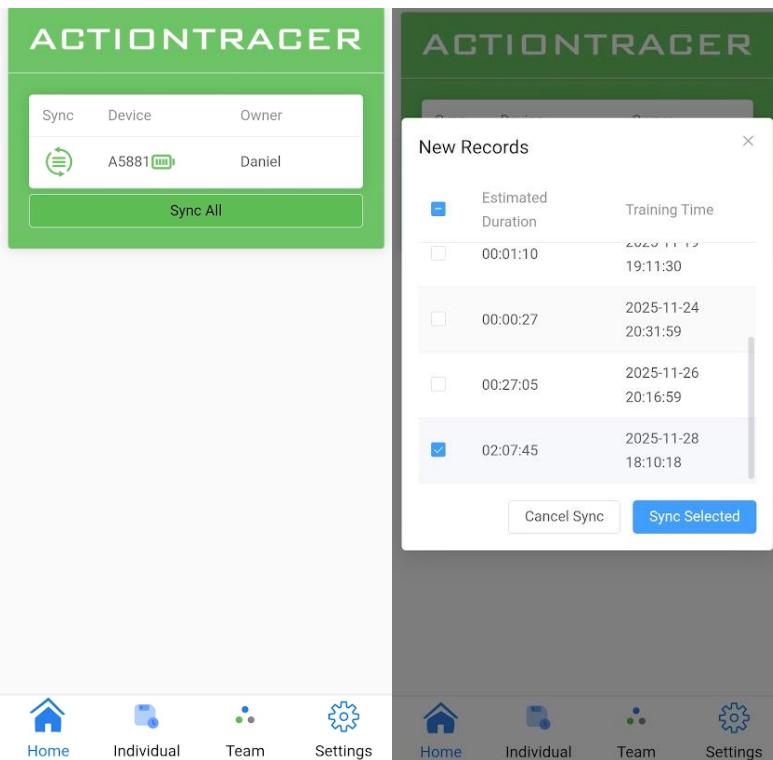
4. The recordings will now appear under the Individual tab. The first time you click on the recording, it'll ask you which field it is for. Select the correct field and press Load. You can click the name of the recording if wanting to rename it. Or press the little arrows on the right hand side if wanting to access more settings (View Summary, Change Field or Delete Recording). Click into the recording to view full data analysis.
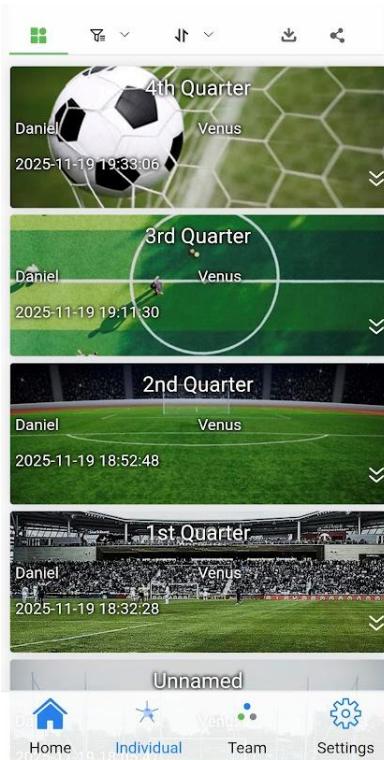
5. Upon the data finishing loading, you can view the Heatmap, Sprint Vector, Play Back and Statistics tabs.

Heatmap – View where the player ran the most, and cut down to certain minutes of the game if needed.

Sprint Vector – See where the player did the most sprints. You can adjust the Speed and Time filters to include more or less sprints.

Play Back – watch the player's movement in up to 8x speed.

Statistics – see the data such as speed graph, total distance, max speed, average speed, sprint time, max acceleration, max deceleration.

6. If wanting to compare multiple players from the same game, you can go to the Team tab. Press the green New Match icon. Give it a name, press Add Session, select a Date and Map, select the data to import and compare, press Save.

Here you can review team data, Speed Diagram with multiple players, Radar Chart with multiple players, heat maps, play back, sprints, rankings and player comparisons.

7. If wanting to export data to Excel .xls format (or TCX) for PC, there are 2 options.

- (Individual export, XLS with Screenshots or TCX) Go into Individual, open the recording, press the Download icon at the top. You can optionally choose to export with Screenshots, so the pictures will arrive on the computer too.
- (Bulk export, XLS only, no screenshots) Go to Individual, press the Download icon at the top. Select the recordings you want to export, then press Download Selected.

It will save to the phone hard drive (suggested to save into Documents or Downloads). After saving, you can open the email program on the phone, attach this data file, then email it to yourself, to open on a computer.

Record Date	Player	Session Name	Field	Total Distance(m)	Sprint Distance(m)	ATK:DEF Ratio	Average Speed	Max Speed	Sprint Time(s)	Sprint Count	Heat(Kcal)	Total time	Max Acc(g)	Max Dec(g)	Acc Counts	Dec Counts
2025-11-19 19:33:06	Daniel	19 Nov	Venus	3113.6	122.7	50:50	4.6km/h	19.9km/h	27.2	13	256.9~284.9	00:40:15	0.332	-0.295	1	0
2025-11-19 19:33:06	John	19 Nov	Venus	1384.6	42.1	50:50	4.5km/h	21.9km/h	9.2	3	114.2~126.7	00:18:30	0.288	-0.249	0	0
2025-11-19 19:33:06	William	19 Nov	Venus	1439.4	10.8	50:50	4.3km/h	18.7km/h	2.4	1	118.8~131.7	00:20:18	0.223	-0.277	0	0
2025-11-19 19:33:06	Omari	19 Nov	Venus	1672.1	26.2	50:50	3.7km/h	18.6km/h	5.8	2	137.9~153.0	00:26:45	0.313	-0.265	1	0

Record Date	Player	Session Name
2025-11-19 19:33:06	Daniel	4th Quarter
Total Distance(m)	**Sprint Distance(m)**	**ATK:DEF Ratio**
3113.6	122.7	50:50
Average Speed	**Max Speed**	**Sprint Time(s)**
4.6km/h	19.9km/h	27.2
Sprint Count	**Heat(Kcal)**	**Total time**
13	256.9~284.9	00:40:15
Max Acc(g)	**Max Dec(g)**	**Acc Counts**
0.332	-0.295	1
Dec Counts	**Field**	
0	Venus	
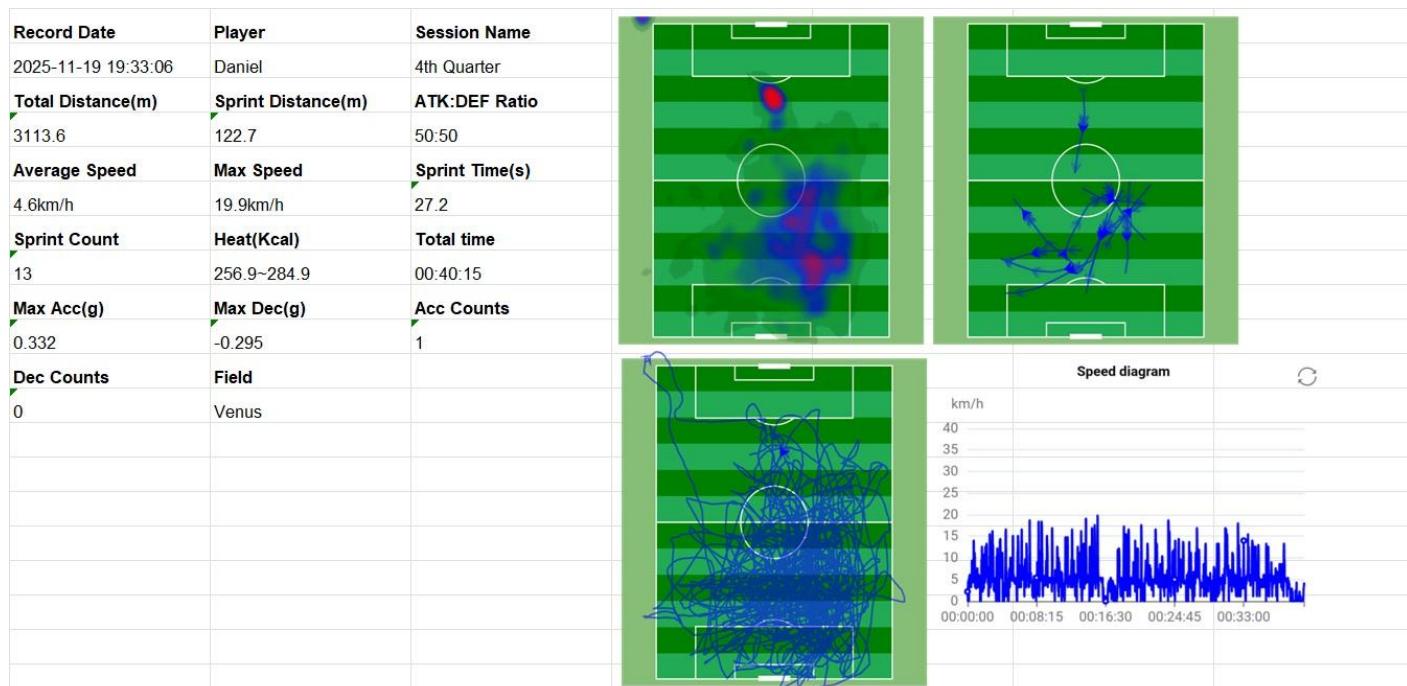
Debugging

- **Not charging?** Check that the magnetic cable has a stable hold, and the red light is showing.
- **Incorrect data recording?** Check that you're not going over the 2 hour limit, and check that there's no roof interfering with the GPS signal.