

RB Ranking — User Manual

[What is RB Ranking](#)

[Key Ideas](#)

[Flow in 60 seconds](#)

- [CRITERIA](#)
- [SCAN](#)
- [TRIAL](#)
- [RANKING](#)

Tabs

- [CRITERIA](#)
- [SCAN](#)
- [TRIAL](#)
- [RANKING](#)

[Print PDF](#)

[Usage tips](#)

[Notes and limitations](#)

[Update](#)

What is RB Ranking

RB Ranking is a tool for managing off-road events with:

- quick reading of **META data** (teams, times, penalties) from QR codes generated by RB Reader upon completion of the digital Roadbook created with Roadbook Editor;
- **TRIAL** management with real-time attempts and penalties;
- automatic ranking calculation (Accuracy, CAP, Speed, Regularity, Trial, Overall);
- **PDF printout** of the ranking and/or criteria configuration.

[Return to Index](#)

Key ideas

- The single columns (Accuracy, CAP, Speed, Regularity, Trial) are **raw values** (without weights).
- **FinalScore** column **applies the CRITERIA** weights according to the formula:
$$R = \text{weight_acc} \cdot \text{Accuracy} + \text{weight_cap} \cdot \text{CAP} + \text{weight_speed} \cdot \text{Speed} + \text{Regularity} -$$

weight_trial·Trial

(Regularity does not use a multiplier: it only uses the set average.)

- **Decimals:** The on-screen leaderboard and PDF (CTRL+P) **show 1 decimal place**, rounded **to the nearest tenth**.

[Return to Index](#)

Flow in 60 seconds

1. **Enter the event title and date (dd/mm/yy format, e.g., 09/11/25).**
The date must **match** the actual event date.
2. **CRITERIA:** enable/disable the criteria with one click.
Set the **weights** (Accuracy, CAP, Speed, TRIAL). If you use **Regularity**, set the **average** to be respected (e.g.: **27,5 km/h** – use the **comma**, not the dot).
If you plan TRIAL stages, in addition to the weight, set the number of obstacles (max 9), the points for each attempt, and the penalties for knocked-down posts (KD) and reversing (RV).

Use SIM (simulation) to see how weights affect the final ranking. Adjust the weights and check the RANKING tab. When you are satisfied, click OK to save.

Once the configuration of penalties and scores has been confirmed, it will not be possible to modify it.

[Return to Index](#)

3. **SCAN:** Enter crews by scanning the **QR code** (or [typing in the METAS manually*](#)).
Once you've finished entering them, press **FINISH** (SCAN).
You can open the Ranking tab at any time and view the provisional ranking, then return to Scan and scan the other crews as they arrive at the finish line. CTRL+P prints the criteria configuration and /or the partial ranking with the data entered and calculated in real time.

* If you don't have a scanner (**not recommended**) : Open the .csv file on the participant's Android device (**Downloads folder**), take the **first 49-character line** . Ex :

0010911251238161248450054000001830012000000046263

[Return to Index](#)

4. **TRIAL: Enter your TEAM** number when you show up for the trial, record **KD/RV**, and use the **two-colour buttons** (red = failed, green = passed).
You can correct errors by changing scores/penalties until you click on the next obstacle to activate it, thus confirming the previous one.
The team's **Trial total** updates **in real time** (it can be negative).
Once you complete the last obstacle, press **OK TEAM**. Then move on to the next team.
You can also check the provisional ranking in RANKING, using tabs to move from one page to another.
You can also consult the scores of crews who have already completed the trials by

clicking on the team number in the list on the right, but you cannot edit them.
To end the TRIAL trials, click **FINISH** (TRIAL).

[Return to Index](#)

5. **RANKING:** Check the rankings and, whenever you want, **print** with **Ctrl+P**.
You can enable automatic scrolling by clicking on the individual column headers of the rankings (you can also activate multiple or all columns for automatic scrolling at once).
If possible, you can connect your computer to a wall-mounted television using the appropriate cable (HDMI).

Note : You can fill out TRIAL or SCAN first, depending on whether the **TRIAL test** takes place before or after the roadbook is closed .

Pressing CTRL+P will print the configuration you selected and/or the updated ranking with the results you entered.

[Return to Index](#)

The 4 tabs

1) CRITERIA

- **Event title** and **date** (required; **dd/mm/yy format** – e.g., 02/11/25).
The date must **match** the actual event date.
- **CRITERIA** weights are configured in the dedicated panel and are applied **only in the FinalScore** column
- If you use **Regularity**, set the **average** (comma **only**, e.g. **27,5 km/h**).
- If you plan to run a **TRIAL track**, remember to configure obstacles, scores, and penalties at the beginning of the setup (CRITERIA tab) and before clicking FINISH in CRITERIA.
Once you click FINISH and save, you cannot change the settings.

[Return to Index](#)

2) SCAN

- For scanning the QR code, a 2D scanner is recommended: you can find some, even Bluetooth ones, on Amazon.
- Fields are filled automatically:
 - **TEAM** (3)
 - **DATE** (6, **DDMMYY**)
 - **START** (6, **HHMMSS**)
 - **END** (6, **HHMMSS**) – used for the overall average
 - **PTS** (4) = penalty for deviations from waypoints (meters)

- **P_SKIP** (4) = penalty for **skipped notes** (e.g. 0450)
- **P_EXTRA** (4) = extra meters (error + return)
- **P_CAP** (4) = CAP penalty (meters)
- **P_SPD** (4) = **speed** penalty (10 points for each km/h above the limit)
- **KM_RB** (5) = roadbook km in **×10** (e.g. 01605 → 160.5 km)
- **AVG×10** (3) = average in **×10** km/h (tenths of km/h; e.g.: 085 → 8.5 km/h)

These values feed the **raw columns** (Accuracy, CAP, Speed, Regularity).

- It allows you to switch to RANKING at any time to check the provisional ranking.
- A field is included to **paste/read META** (string in 11 separate fields or **49 character format**).

[Return to Index](#)

3) TRIAL

- **SETUP TRIAL:**
 - **Points** for 1st/2nd/3rd attempt, **KD** (poles) and **RV** (reverse), **N obstacles** must be configured in CRITERIA.
- **TEAM** : Enter the crew number **one at a time** when they show up for the test.
- **Lines obstacle** :
 - **3 two-color buttons** for attempt (Fail/Pass).
 - **KD/RV** per row: enter knocked down posts and reverse.
 - **Row points** = **base attempt** – (**KD×penKD** + **RV×penRV**) → can be **negative** .
 - **Third FAIL** or **PASS** : concludes the line by saving the current points (even < 0).
 - When entering the new obstacle, the buttons in the previous row are **locked** .
- **Team Trial Total:** This is visible until you click **OK TEAM**, then it resets to zero and is ready for the next team.
At the same time, the results of the previous team are locked. You can view the ranking, even partial, by changing the page with the RANKING tab.
- **Closure team** :
 - **OK TEAM:** available only when **all** obstacles are completed; enables **FINISH** (TRIAL).
 - When entering a new team, **FINISH** becomes disabled again until you click **OK TEAM** again.
 - **FINISH (TRIAL)** : finalizes the TRIAL tests.

[Return to Index](#)

4) RANKING

- **Raw columns** (without weights):
Accuracy, CAP, Speed, Regularity sorted in **ascending order** ; **TRIAL** in **descending order** .
- **FinalScore** (weighted column):
 $R = \text{weight_acc} \cdot \text{Accuracy} + \text{weight_cap} \cdot \text{CAP} + \text{weight_speed} \cdot \text{Speed} + \text{Regularity} - \text{weight_trial} \cdot \text{Trial Sort}$

in **ascending order** (from least penalized to most penalized).
Show **1 decimal place** , rounded to the nearest tenth .
- If a criterion is **disabled** in CRITERIA, its column **remains visible** and shows **0**.
- Click on one or more columns to automatically scroll through the rankings.

[Return to Index](#)

Print PDF

- Start print : **Ctrl+P**.
- Print the criteria configuration and/or the updated ranking.
- Columnar chart layout with **centered title** .
- **Right-aligned** values ; **centered headers**.
- **FinalScore** printed with **1 decimal place** (comma), **rounded to the nearest tenth** .
- Widths calculated to avoid **truncations** (handling long numbers up to 5 signed digits).

[Return to Index](#)

Usage tips

- Please test your **2D scanner** with a test QR code (49 characters) before the event.
- In **CRITERIA**, carefully set **weights, the number of obstacles and the related scores/penalties of the TRIAL**.
- In **TRIAL**, proceed to enter the scores and penalties for each crew.
- Use **OK TEAM** as soon as the crew completes the obstacles: unlocks **FINISH** (TRIAL).
To continue with a new TEAM, enter the crew number (FINISH is disabled); or click **FINISH** to end the TRIAL session.
- A **negative trial** is expected: it impacts **against** the RANKING.

[Return to Index](#)

Notes and limitations

- **SETUP CRITERIA** remains locked until **restart** (deliberate choice for race consistency).

- Columns **disabled** in CRITERIA are **not** hidden in the final ranking: they show **0** .

[Return to Index](#)

Update

Automatic updates are not available yet: use the provided link to check if you're already using the latest version.

[Return to Index](#)