Your Complete Guide to the Ultiracer Mobile App

Everything you need to know to get started with indoor cycling brain-body balance training on your phone.

What Is the Ultiracer App?

The Ultiracer mobile app is the companion to the Ultiracer indoor cycling trainer. It connects to your trainer via Bluetooth, measures your real-time lateral balance while you ride, and turns every session into actionable data. Use it to track left-right symmetry, monitor heart rate zones, review performance trends over time, and generate shareable PDF reports — all designed to help you build better neuromuscular control on the bike.

Brain-Body Balance Training

Measures real-time lateral position to train neuromuscular coordination and symmetry while cycling.

Complete Ride Analytics

Tracks speed, power, cadence, heart rate, and balance across every session with detailed charts.

Progress Over Time

Review your history, compare sessions, and watch your symmetry score improve week after week.

Home Dashboard

Your personal command center. See your total rides, weekly activity, cumulative distance, and balance score at a glance. Recent sessions with key metrics are displayed below so you can quickly review your progress. Tap "Start Ride" to begin a new training session.
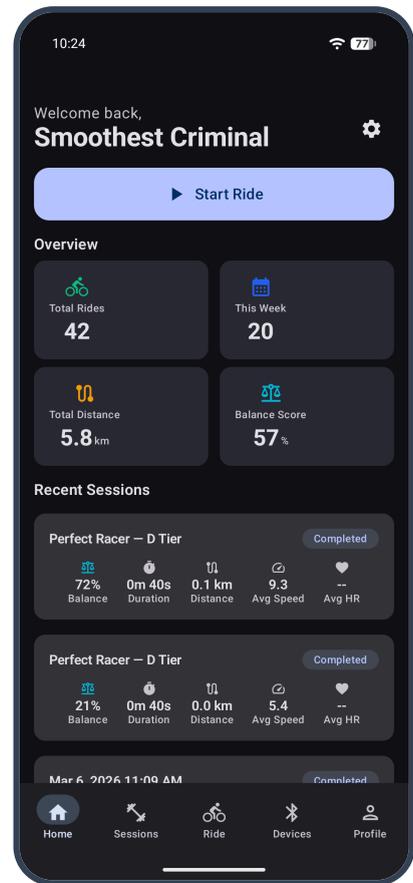
Choose Your Ride

Pick your training mode before starting a session:

• Free Ride — Open-ended session. Ride at your own pace with no targets. Great for warm-ups and casual training.
• Perfect Racer — A guided balance challenge. Follow on-screen targets and earn a score based on how well you stay centered.
• Test Mode — Calibrate your trainer setup. Verifies sensor connections and ensures accurate balance readings.

Each mode adjusts how the trainer responds to your movement and what data is collected.
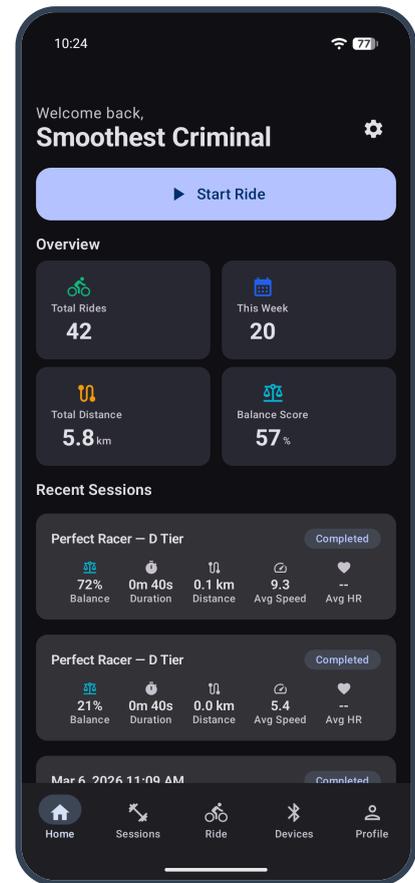
Sessions List

Browse and filter all your past rides. Use the status tabs — Completed, Active, or Cancelled — to find specific sessions. Each entry shows your balance percentage, duration, distance, average speed, and average heart rate at a glance. Tap any session to view its full detail page with charts and analytics.
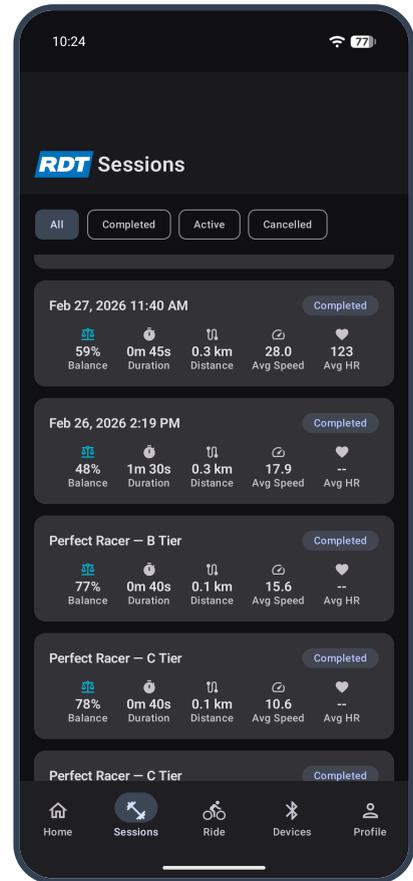
Session Detail & Charts

Dive deep into any session. The overview charts plot your data over the full ride duration:

• Speed (km/h) — How fast you were pedaling throughout the session.
• Heart Rate (bpm) — Your cardiovascular effort, color-coded by HR zone.
• Cadence (rpm) — Pedal revolutions per minute. Ideal range is 80–100 rpm.
• Power (watts) — The force you are applying to the pedals.
• Lateral Position — Your left-right balance shown as distance from center.

The Balance section below the charts shows your symmetry score (0–100), left/right position distribution, and average deviation from center.

Device Connection

Scan for and connect to Ultiracer trainers via Bluetooth. The app supports both BLE (Bluetooth Low Energy) and Classic Bluetooth.

BLE is a low-power wireless protocol used by most modern fitness sensors. Classic Bluetooth is an older, higher-bandwidth protocol used by the Ultiracer trainer for real-time position data.

You can also pair additional sensors — heart rate chest straps or wrist monitors, cadence sensors, and power meters — for comprehensive ride data. The app auto-detects nearby devices and remembers previously paired ones.
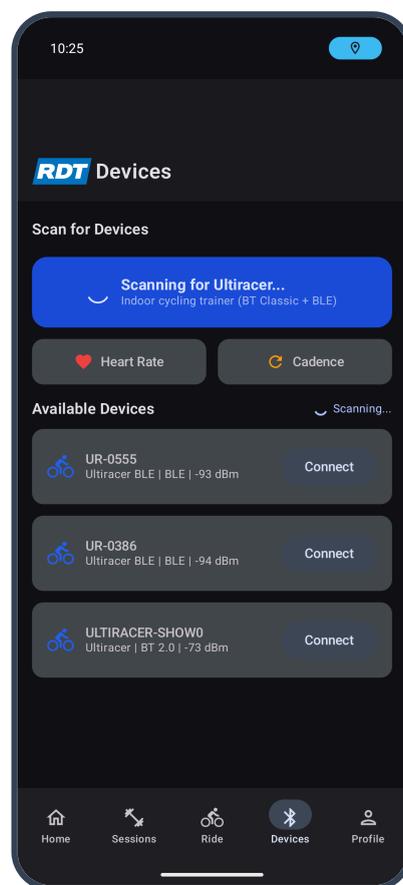
How to Sign Up

Creating your Ultiracer account takes just a few minutes. The same account works on both the mobile app and the web platform at ultiracer.com.

1 **Enter Your Email & Password**

Go to the Sign Up page. Enter your email address and create a password. Your password must be at least 8 characters and include an uppercase letter, lowercase letter, number, and special character. You can also sign up with Google or Kakao (Korea) for one-tap registration.

2 **Fill In Personal Information**

Enter your name, date of birth, biological sex, height, and weight. This information is used to calculate your heart rate zones, estimate calories burned, and personalize your session reports. For Korean and Japanese users, the family name field comes first.

3 **Accept Terms & Conditions**

Read and accept the Terms of Service and Privacy Policy. You must scroll to the bottom of each document before the checkboxes become active. This ensures you have reviewed the full terms.

4 **Verify Your Email**

After creating your account, check your inbox for a verification email. Click the link to confirm your email address. You can use the app immediately, but some features (like sharing reports) require a verified email.
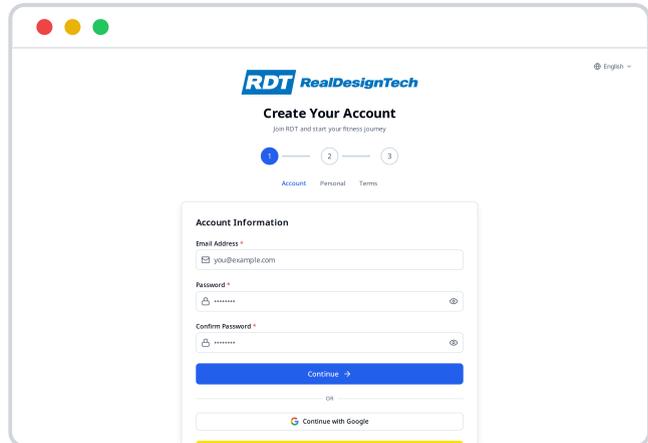
How to Log In

Ultiracer supports multiple login methods for convenience and security. Choose the one that works best for you.

1 **Enter Your Email**

On the login page, enter your registered email address. The app will check what login methods are available for your account and show the appropriate option.

2 **Choose Your Login Method**

Depending on your account setup, you will see one of these options:
• Password — Enter your account password.
• Passkey (Biometric) — Use your fingerprint or face ID for instant login. This is the fastest and most secure method.
• Email Code — A 6-digit code is sent to your email. Enter it to log in without a password.
• Google / Kakao — One-tap social login.

3 **Multi-Factor Authentication (If Enabled)**

If your account has MFA enabled, you will be asked for a second verification step after entering your password. This adds an extra layer of security to protect your account and personal health data.
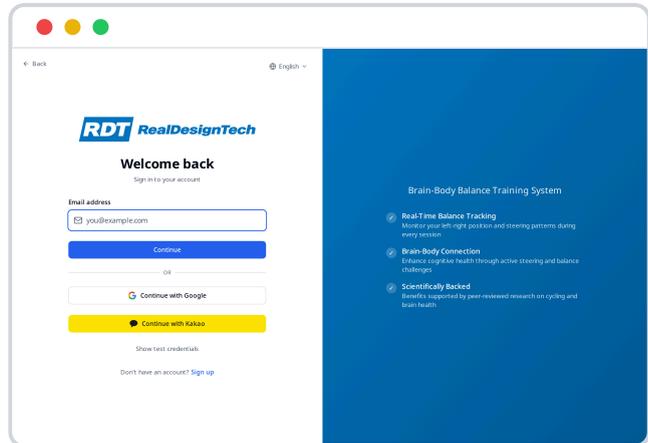
Your Ride Journey: Start to Finish

Here is the complete flow from starting a ride to reviewing your results. This works the same on the mobile app and the web platform.

1 Connect Your Trainer

Go to the Devices tab (app) or Ride page (web). The app scans for nearby Ultiracer hardware via Bluetooth. On the web platform, you connect via Web Serial or Web Bluetooth. Tap/click your trainer to pair. Connection takes 2–5 seconds. A green indicator confirms you are connected.

2 Choose Mode & Start

Select Free Ride, Perfect Racer, or Test Mode. Optionally add a session title and notes. Tap "Start Ride." The trainer begins sending real-time data immediately — speed, lateral position, heart rate (if a monitor is connected), cadence, and power.

3 Ride with Live Metrics

During your ride, the live dashboard shows all metrics in real time. The colored position bar gives instant feedback on your left–right balance. Green = centered, yellow = slight drift, red = significant imbalance. You can pause at any time and resume without losing data.

4 End Session & Auto-Save

When you are finished, tap "End Session" (or hold the Stop button on the app). Your session is automatically saved and uploaded. You are taken to the Session Detail page where you can immediately see your charts, balance score, HR zones, and full performance breakdown.

5 Review, Export & Share

On the Session Detail page, review your performance charts, symmetry score, and HR zone distribution. You can:
• Download a PDF Report — Professional report with all metrics, charts, and analysis.
• Export Raw Data (CSV) — Every sensor reading with timestamps for your own analysis.
• Share — Send the PDF directly to your coach, doctor, or training partners.
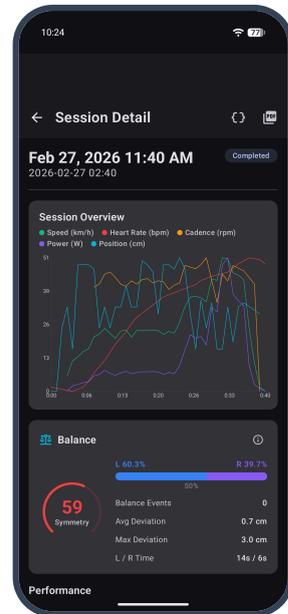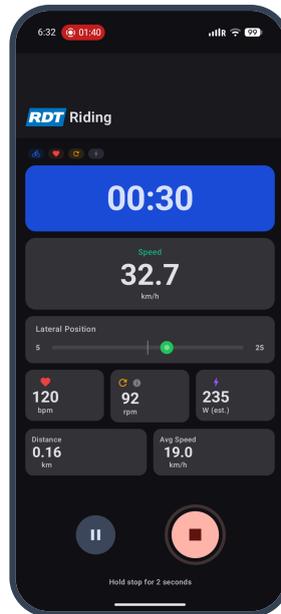
Understanding Heart Rate Zones

Heart rate (HR) zones divide your effort into five levels based on a percentage of your maximum heart rate. Training in different zones produces different fitness benefits. The app automatically calculates your zones using the formula: Max HR = 220 – your age.

Zone	Name	Range	Description
⬤ Z1	**Recovery**	50–60%	Very light effort. Used for warm-ups, cool-downs, and active recovery between hard sessions. You can easily hold a conversation. Helps your body clear metabolic waste and repair muscle tissue.
⬤ Z2	**Aerobic Base**	60–70%	Comfortable, sustainable effort. This is where most endurance training happens. Builds your cardiovascular foundation and teaches your body to burn fat efficiently. You can still talk in full sentences.
⬤ Z3	**Tempo**	70–80%	Moderate effort — "comfortably hard." Improves aerobic efficiency and muscular endurance. You can speak in short phrases but not full conversations. Good for sustained training blocks.
⬤ Z4	**Threshold**	80–90%	Hard effort near your lactate threshold (the point where your muscles produce more lactic acid than they can clear). Improves your ability to sustain high-intensity efforts. Speaking is limited to a few words.
⬤ Z5	**VO₂ Max**	90–100%	Maximum effort. Develops your peak oxygen uptake (VO_2 max) — the maximum amount of oxygen your body can use during intense exercise. Only sustainable for short intervals (30 seconds to 3 minutes). Cannot speak.

Tip: Most effective training programs spend 80% of time in Z1–Z2 (easy) and 20% in Z4–Z5 (hard). This is called "polarized training." The Ultiracer session report shows exactly how much time you spent in each zone so you can fine-tune your training.

PDF Session Report

Generate a professional, shareable PDF report for any completed session. The report is designed to give you (or your coach) a complete picture of your ride performance. You can save it to your device or share it via any app. Below is what each section of the report contains:

1 **Header & User Info**

Shows the report date, your name, date of birth, age, biological sex, height, and email. This identifies who the report belongs to.

2 **Performance Summary Table**

A table listing Duration, Distance, Calories, Speed, Heart Rate, Power, and Cadence. For each metric, it shows Min, Max, and Average values, plus reference ranges (Low / Normal / Elite) so you can see how you compare.

3 **Ride Performance Charts**

Time-series line charts for Speed, Heart Rate, Power, Cadence, and Lateral Position. Each chart shows how that metric changed over the course of your ride, with a dashed line marking the average.

**4** **HR Zone Distribution**

A horizontal bar chart showing what percentage of your ride was spent in each heart rate zone (Z1 through Z5). Includes your estimated max heart rate and time in each zone. See the "Understanding Heart Rate Zones" section of this guide for what each zone means.

5 **Balance Analysis (Ultiracer Exclusive)**

Your symmetry score (0–100) with a rating (Excellent / Good / Fair / Needs Work), plus a left/right position distribution bar. A score of 90+ means excellent bilateral balance. This metric is unique to Ultiracer and helps track neuromuscular improvements over time.

6 **Session Details & Notes**

Technical details: Session ID, status, start/end time, device name, session type (Free Ride or Perfect Racer), and game score if applicable. Any notes you added to the session are also included.
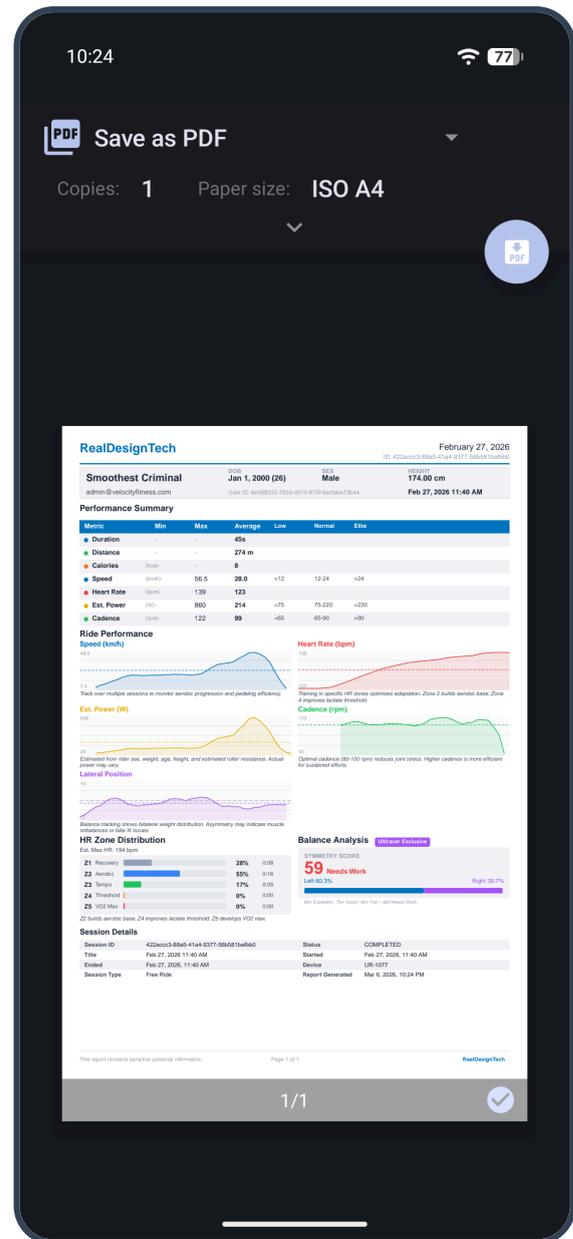
Getting Started

01

Download the App

Install the Ultiracer app from the Google Play Store on your Android device. Requires Android 8.0 or later.

02

Create an Account

Sign up with your email or log in if you already have an Ultiracer account. You can also use passkey (biometric) login for faster access.

03

Connect Your Trainer

Go to the Devices tab and tap "Scan." Your Ultiracer trainer will appear in the list. Tap Connect to pair. The app remembers your device for next time.

04

Start Riding

Return to the Home tab, tap "Start Ride," choose your mode, and begin your brain-body balance training session. Your data syncs automatically when connected to the internet.