

PRODUCT MANUAL · APP GUIDE

User Manual

Using the Acemate App

Comprehensive Guide for the AI Rally Partner

Acemate Thailand | AI Rally Partner
noqer.co

Official distributor in Thailand noqer.

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In this manual

This manual covers the **Using the Acemate App** chapter of the in-app Product Manual: choosing and starting training, reviewing results, device settings and calibration, and your account.

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SECTION 01

01 Choosing and Starting a Training Session

> Find a training plan in For You, the five mode shortcuts, My Training, or the Training Library. Review the plan details, then start your session.

1.1 Connecting the Robot Before You Start

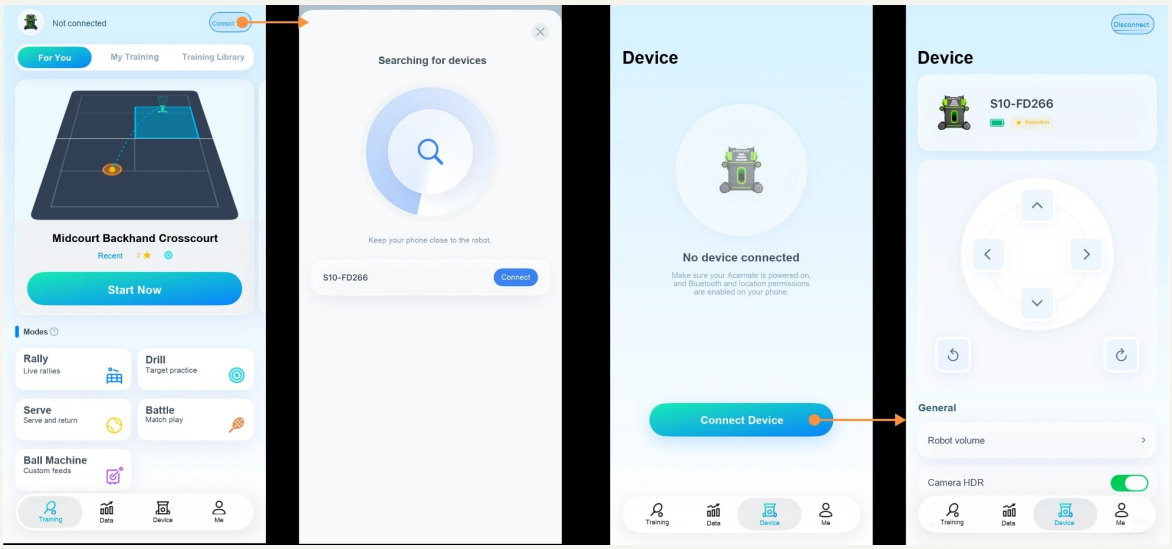

Figure 1 · Training home → searching for devices → Device page (not connected / connected)

1.1.1 Connection and Device Status

- The top of the Training page shows the connection, battery level, and device status. Allow Bluetooth access when using the app for the first time.
- After connecting to S10_XXXXX or S10Pro_XXXXX, you can start training when the status shows "Position Correct" and the battery has sufficient charge.

1.1.2 Court and Positioning Status

- Before starting a training mode that involves robot movement, follow the prompts to place the robot in a safe position and confirm that positioning is ready.
- On a non-standard court, or if positioning is abnormal, complete Court Setup or Camera Calibration first.

1.2 Finding a Training Plan

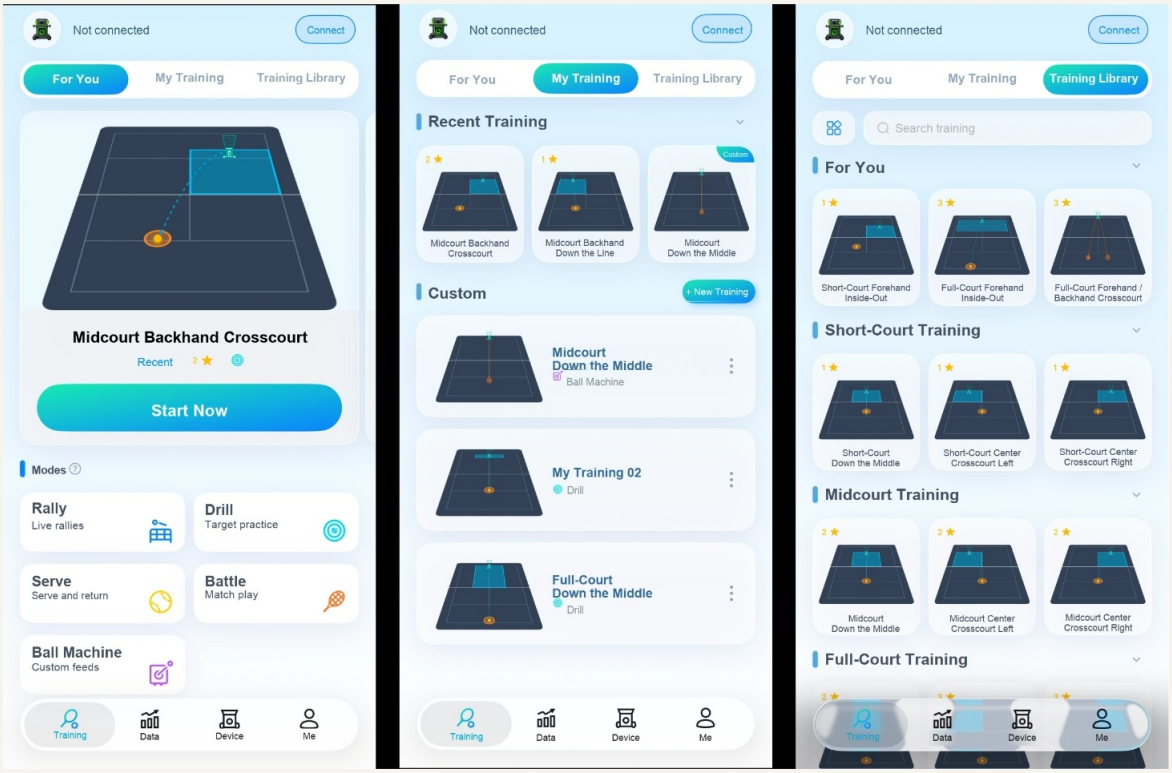

Figure 2 · For You · My Training · Training Library

1.2.1 For You and Training Library

- For You: Recommends training plans suited to your current tennis level.
- Five modes and Training Library: Get started quickly using the Drill, Rally, Ball Machine, Serve, or Battle shortcuts.
- Training Library: Use filters or search by keyword to find a training plan.

1.2.2 Five Modes and Training Details

- Each training plan shows:
  - Mode icon: Identifies one of the five modes: Drill, Rally, Ball Machine, Serve, or Battle.
  - Diagram: Orange indicates where the robot's feeds will land; blue indicates the target area for your returns.
  - Training name
  - Difficulty: Rated from 1 to 5 stars. More stars indicate greater difficulty.
- Tap a plan to open its details panel, which shows the following information and controls:

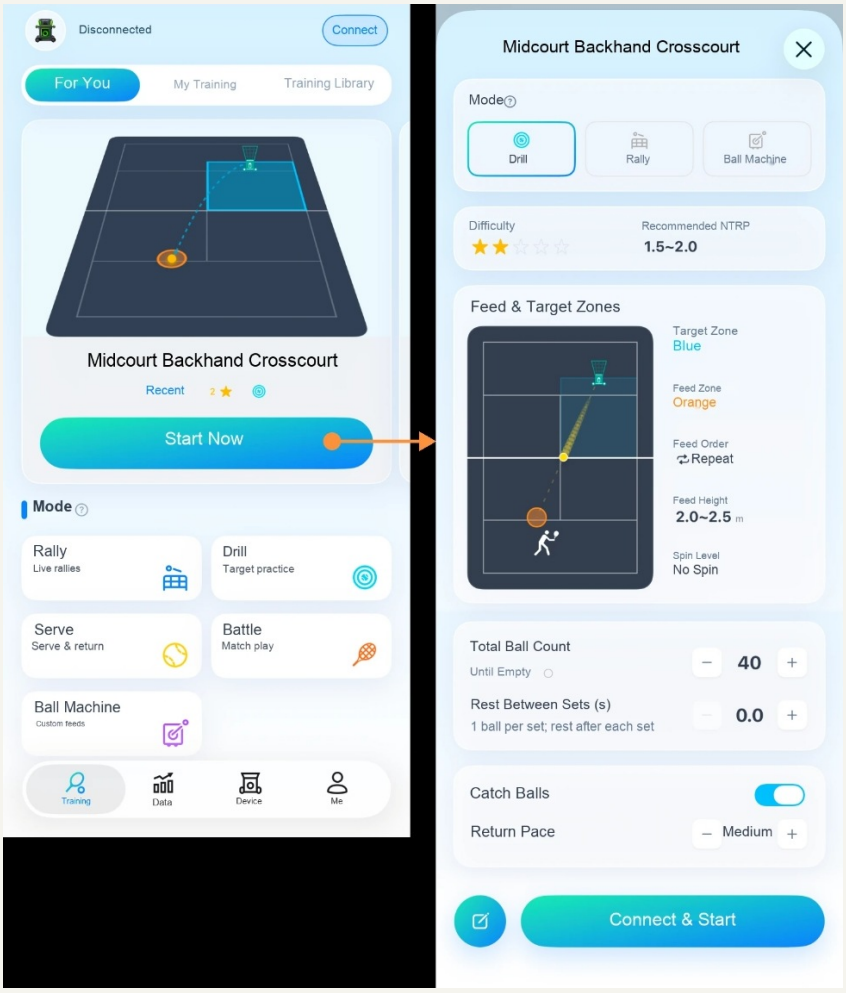

Figure 3 · Training plan details panel

1.2.2.1 Selecting a Mode

- Tap a mode shortcut on the home page to enter that training mode. For some training plans, you can switch between supported modes on the details page.
- The app provides five training modes:
  - Drill mode: Practice returning the ball to the target area. At the end of the session, you receive a score based on return accuracy and shot quality.
  - Rally mode: Rally continuously with the robot. At the end of the session, you receive a score based on rally performance and shot quality.
  - Ball Machine mode: The robot remains stationary so you can focus on stroke technique.
  - Serve mode: After choosing a serve training plan, you can turn Catch Balls on or off. When it is on, you can select Simulate Return to practice the shot after your serve.
  - Battle mode: Choose a robot playing style and practice competing under pressure.

1.2.2.2 Difficulty and Recommended Playing Level

- The plan's relative difficulty is rated from 1 to 5 stars. A higher star rating indicates greater difficulty.
- Recommended playing level: Choose a training plan suited to your current tennis level.

1.2.2.3 Training Animation and Ball Feed Details

- The animation on the left illustrates the robot's feeds and your returns.
- The right side shows the target area for your returns, the robot's feed landing area, feed height, and spin intensity for this plan.

1.2.2.4 Total Ball Count

- Tap to increase or decrease the total number of balls for this session. You can choose:
  - Until Empty: The session ends automatically when the robot runs out of balls.
  - A specific ball count: The session ends automatically after the robot feeds the specified number of balls.

1.2.2.5 Rest Between Sets (Drill / Rally / Ball Machine)

- Set a rest interval after each set of balls, ideal for training with multiple balls per set.

1.2.2.6 Catch Balls (Drill Mode Only)

- Drill mode includes a Catch Balls switch, preset to our recommended setting:
  - On: The robot moves to catch your returns that land in the target area.
  - Off: The robot moves to the corresponding area to feed balls but does not catch your returns. This is mainly intended for drills with target areas alternating between the left and right sidelines, where the robot must travel farther. It helps keep feed placement and timing more consistent, allowing you to focus on returning balls to alternating target areas.

1.2.2.7 Return Pace (Drill / Rally)

- In Drill and Rally modes, choose one of five return paces on the training details page: Very Fast, Fast, Medium, Slow, or Very Slow. Select a pace that suits your reaction time and desired training intensity.

1.2.2.8 Starting and Restarting

- Tap to start the session and begin the training countdown.

1.2.2.9 Adding a Custom Training Plan

- In Drill, Rally, and Ball Machine modes, an Edit button appears at the bottom:
- Tap it to open the plan's detailed robot settings. After adjusting the settings, save a copy to the Custom section of My Training. The original preset plan remains unchanged.

1.3 Advanced: Custom Training Plans

- Tap My Training in the center of the top bar on the Training page.

> You can create, duplicate, edit, or delete custom plans for Drill, Rally, and Ball Machine modes.

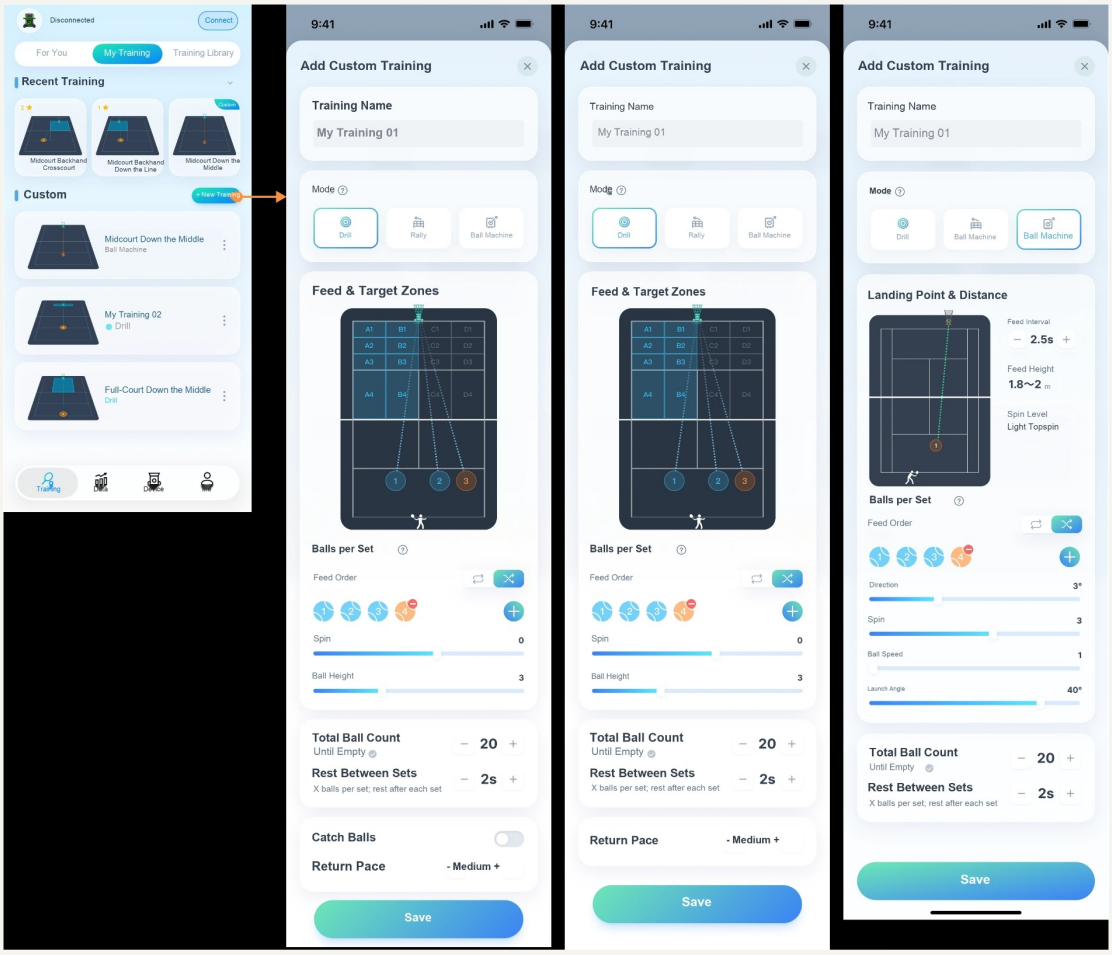

Figure 4 · My Training list and Add Custom Training (Drill · Rally · Ball Machine)

1.3.1 Custom Training — Add

1.3.1.1 Training Name

- Enter a name for your training plan.

1.3.1.2 Training Mode

- Tap to switch your custom plan between Drill, Rally, and Ball Machine modes.
- Available robot settings vary by mode. When you switch modes, the ball feed settings below change accordingly:

a. Drill Mode — Settings

- Feed and target area selection
  - Blue boxes indicate the target area for each return.
  - Orange boxes indicate where the robot's feeds will land.
- Balls per set
  - Tap **+** to add a ball. Tap **–** at the upper right of a ball to remove it.
  - Tap a ball to adjust its feed settings.
    - Target area (blue): Tap the upper half of the court diagram to select an area. Two consecutive taps automatically connect the selected areas into one larger rectangular target area.

        - Feed area (orange): Tap an area in the lower half of the court diagram to change the selection.
        - Spin: Adjust within the range supported by your robot model.
        - Ball height: Adjust within the range supported by your robot model.
            - Note: The available ball height range changes automatically with landing distance and spin.
- Total ball count
    - Tap to increase or decrease the plan's total ball count. You can choose:
        - Until Empty: The session ends automatically when the robot runs out of balls.
        - A specific ball count: The session ends automatically after the robot feeds the specified number of balls.
- Rest between sets (Drill / Rally / Ball Machine)
    - Set a rest interval after each set of balls, ideal for training with multiple balls per set.
- Catch Balls (Drill mode only)
    - Drill mode includes a Catch Balls switch, preset to our recommended setting:
        - On: The robot moves to catch your returns that land in the target area.
        - Off: The robot moves to the corresponding area to feed balls but does not catch your returns. This is mainly intended for drills with target areas alternating between the left and right sidelines, where the robot must travel farther. It helps keep feed placement and timing more consistent, allowing you to focus on returning balls to alternating target areas.
- Return pace (Drill / Rally)
    - In Drill and Rally modes, choose one of five return paces on the training details page: Very Fast, Fast, Medium, Slow, or Very Slow. Select a pace that suits your reaction time and desired training intensity.

b. Rally Mode — Settings

- Robot position and feed area diagram
- Balls per set
    - Tap **+** to add a ball. Tap **–** at the upper right of a ball to remove it.
    - Tap a ball to adjust its feed settings.
        - Feed area: Tap a landing area in the court diagram to change the selection.
        - Spin: Adjust within the range supported by your robot model.
        - Ball height: Adjust within the range supported by your robot model.
            - Note: The available ball height range changes automatically with landing distance and spin.
- Robot recovery position
    - Front-to-back position: Adjust where the robot returns between shots to suit the court and your training goals.
    - Side-to-side position: Adjust where the robot returns between shots to suit the court and your training goals.
- Total ball count
    - Tap to increase or decrease the plan's total ball count. You can choose:
        - Until Empty: The session ends automatically when the robot runs out of balls.
        - A specific ball count: The session ends automatically after the robot feeds the specified number of balls.
- Rest between sets (Drill / Rally / Ball Machine)

- Set a rest interval after each set of balls, ideal for training with multiple balls per set.
- Return pace (Drill / Rally)
  - In Drill and Rally modes, choose one of five return paces on the training details page: Very Fast, Fast, Medium, Slow, or Very Slow. Select a pace that suits your reaction time and desired training intensity.

c. Ball Machine Mode — Settings

- Landing position and distance diagram
  - Diagram: Illustrates the distance and direction of each feed, assuming the robot is positioned at the center of the baseline on a standard court.
    - (In actual use, Ball Machine mode does not require court recognition. You can position the robot to suit your needs.)
  - Feed interval: Adjust the time between consecutive feeds.
  - Feed height: Shows the height range for the selected ball. This range is for reference only, as actual height may vary between robots.
  - Spin intensity: Shows the spin intensity for the selected ball.
- Feed order and individual ball settings:
  - Tap **+** to add a ball. Tap **–** at the upper right of a ball to remove it.
  - Tap an individual ball to edit its settings:
    - Feed direction: Adjust using the direction controls available for your robot model.
    - Spin: Adjust within the range supported by your robot model.
    - Ball speed: A higher value produces a faster ball.
    - Feed height: A higher launch angle produces a higher ball trajectory.
- Total ball count
  - Tap to increase or decrease the plan's total ball count. You can choose:
    - Until Empty: The session ends automatically when the robot runs out of balls.
    - A specific ball count: The session ends automatically after the robot feeds the specified number of balls.
- Rest between sets (Drill / Rally / Ball Machine)
  - Set a rest interval after each set of balls, ideal for training with multiple balls per set.

1.3.1.3 Save

- Tap Save to save the selected mode and ball settings as your training plan. It will appear in the Custom section of My Training.

1.3.2 Custom Training — Start

- Tap a plan in the Custom section of My Training to open its details panel, then tap Start Training to begin your custom session.

1.3.3 Custom Training — Edit and Duplicate

- Tap a plan in the Custom section of My Training to open its details panel, where you can edit the name or feed settings directly. Tap Duplicate to create a copy, then adjust and save it as needed.

1.3.4 Custom Training — Delete

- Swipe left on a plan in the list, then tap Delete Plan to remove it.

SECTION 02

02 Viewing Results After Training

After a session, view your records on the Data page. Available results vary by mode: Drill and Rally provide detailed data; Serve and Battle show their respective results. Ball Machine mode does not provide detailed court-tracking data.

2.1 Training Records



Figure 5 · Data page — training history

2.1.1 Training Overview

- Shows your total sessions and total training time.

2.1.2 Date Range Filter

- Tap All to open the date range panel at the bottom:
  - Quickly filter your data by Last 30 Days, Last 90 Days, or All.
  - You can also tap a date in the calendar to view that day's training data.

2.1.3 Training Record Cards

- All training records are listed from newest to oldest. Each card summarizes one session.
- Tap a Drill or Rally card to view detailed data for that session. After completing a Serve or Battle session, you can also view its record and results on the Data page. (Ball Machine mode does not recognize the court or track balls, so detailed data is not currently available.)

2.2 Detailed Training Data

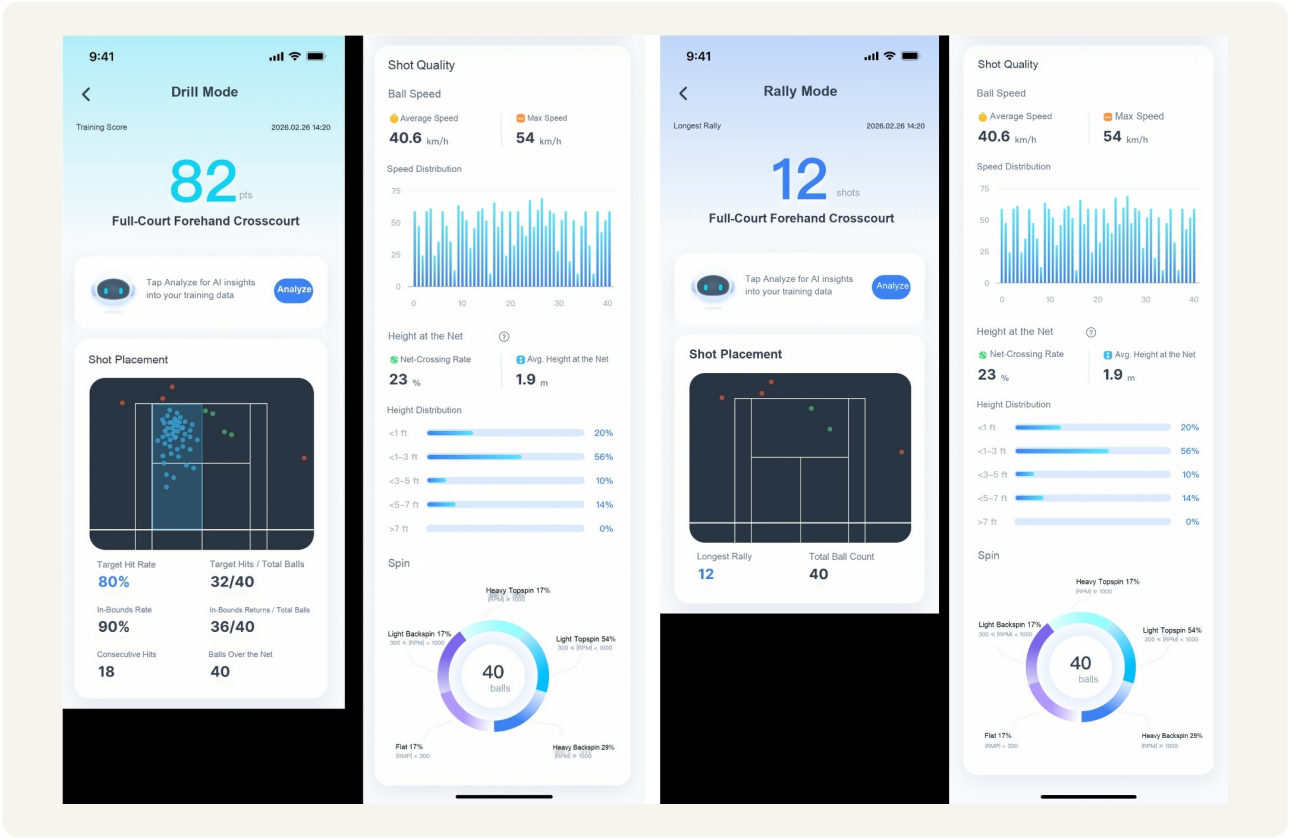

Figure 6 · Session detail — Drill mode and Rally mode (score, shot placement, shot quality)

2.2.1 Training Score and AI Analysis

- Drill mode shows the session's training score; Battle mode shows the match score and result. The information displayed depends on the current training mode.
- Tap Analyze to receive a personalized AI assessment and recommendations based on your training data.

2.2.2 Accuracy

- Shot placement: Shows where your returns landed during the session.
- Related metrics:
  - Drill mode shows whether your returns hit the target area, landed in or out, and cleared the net.
  - Rally mode shows your longest rally and shot count.

2.2.3 Shot Quality

- Data on your ball speed and ball height at the net during the session:
  - Ball speed: Average speed, maximum speed, and speed distribution.
  - Height at the net: Average height, percentage of shots clearing the net, and height distribution. (Height at the net is the ball's height above the ground when your return reaches the net.)
  - Spin: Percentage of balls in each spin category.
    - Flat: $|rpm| < 300$
    - Heavy topspin / heavy backspin: $|rpm| \geq 1000$
    - Light topspin / light backspin: $300 \leq |rpm| < 1000$

SECTION 03

03 Device

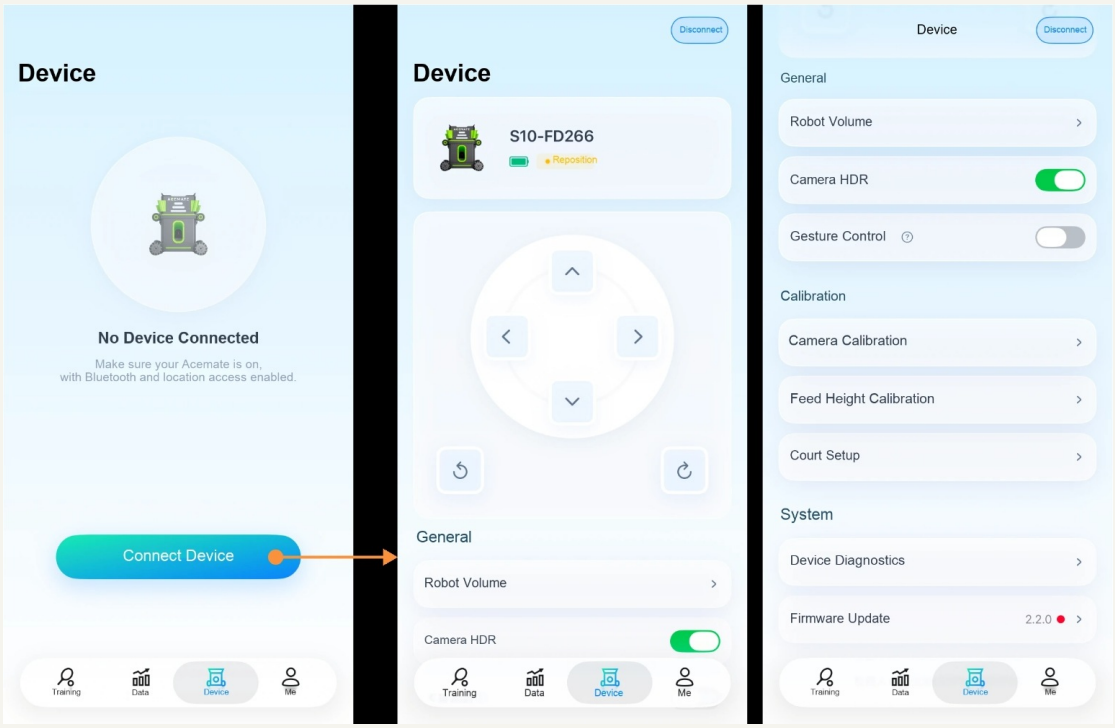

Figure 7 · Device page — not connected · connected (remote control) · settings

3.1 Robot Status

- Connection status
- Robot battery level, shown after connection
- Position recognition status

3.2 Robot Remote Control

- Move the robot forward, backward, left, or right, and control its rotation.

3.3 General Settings

3.3.1 Volume

- Adjust the volume of the robot's voice prompts.

3.3.2 Camera HDR

- Backlighting may affect the cameras' visual recognition. Turn on backlight mode in backlit conditions to improve the robot's ball-catching success rate.

3.3.3 Gesture Control

- After turning on Gesture Control, start at least one session in the app. Then face the robot and raise your hand for more than 2 seconds to automatically restart the previous session.

3.4 Calibration

3.4.1 Camera Calibration

- If the robot has difficulty catching balls or its feeds are significantly off target, follow these steps to calibrate the cameras. (If the robot is working normally on the same court, you do not need to recalibrate before every session.)
  - **Step 1: Position the robot correctly:** Correct placement is essential. Calibration will fail if the robot is positioned incorrectly.
  - **Step 2: Capture images:** Tap Capture Images to obtain images from the left and right cameras.
  - **Step 3: Check the automatically marked court lines:** Open each camera image to check and adjust the court lines automatically marked by the robot. Align the marked lines with the actual court lines and mark the points in exactly this order:
    - **1-2:** Left singles sideline
    - **3-4:** Center service line
    - **5-6:** Right singles sideline
    - **7-8:** Service line
    - **9-10:** Top-of-net line (the line connecting the tops of the left and right net posts)
    - *Tip: Use a two-finger pinch gesture to zoom in on image details. Tap a point to select it, then drag to adjust its position. Align the marked points with the actual court lines as accurately as possible.*
  - **Step 4: Upload calibration data:** Once you have accurately adjusted all 10 points in each of the **left and right** images, tap the green **"Submit Markings"** button to submit the data.
  - **Step 5: Test on the court:** Once the upload succeeds, calibration is complete. Try the robot on the court to experience the improved tracking accuracy and AI performance.

3.4.2 Feed Height Calibration

- If the robot feeds balls noticeably too high or too low, try Feed Height Calibration.

3.4.3 Court Setup

> Court requirements by mode:
> - In Ball Machine mode: You are not limited to a standard tennis court. Any level, open, and safe area can be used.
> - **Drill, Rally, Serve, and Battle modes all require court recognition:**
>   - We recommend using a standard tennis court. A standard court is **23.77 m** long and **10.97 m** wide for doubles or **8.23 m** wide for singles.

- To use a non-standard court for **Drill, Rally, Serve, or Battle mode, create a new court in Court Setup and enter its actual dimensions. The court must meet the following requirements:**
  - Clearly visible court lines
  - A net with a center strap
- After creating the court, the robot must recognize its position correctly before you can start Rally or other applicable training modes.
- For the best experience, we still recommend using a standard tennis court whenever possible.

3.5 System

3.5.1 Device Diagnostics

- If you encounter an issue you cannot resolve, open Device Diagnostics to describe the issue and upload device logs, data, and your contact details. We will help investigate and resolve it.

3.5.2 Firmware Update

- We will release firmware updates regularly to improve your experience, introduce new features, and fix software issues that may arise during use.
- When new firmware is available, the app will notify you that an update is ready.
- During the update, keep the robot powered on with sufficient battery charge, and keep your phone within connection range to avoid interruptions.

SECTION 04

04
Account and Help

> On this page, you can sign in and view your overall skill rating, access the user guide and FAQs, get support, submit feedback, and change units, language, and other settings.

4.1 Sign-In, Guest Mode, and Sync

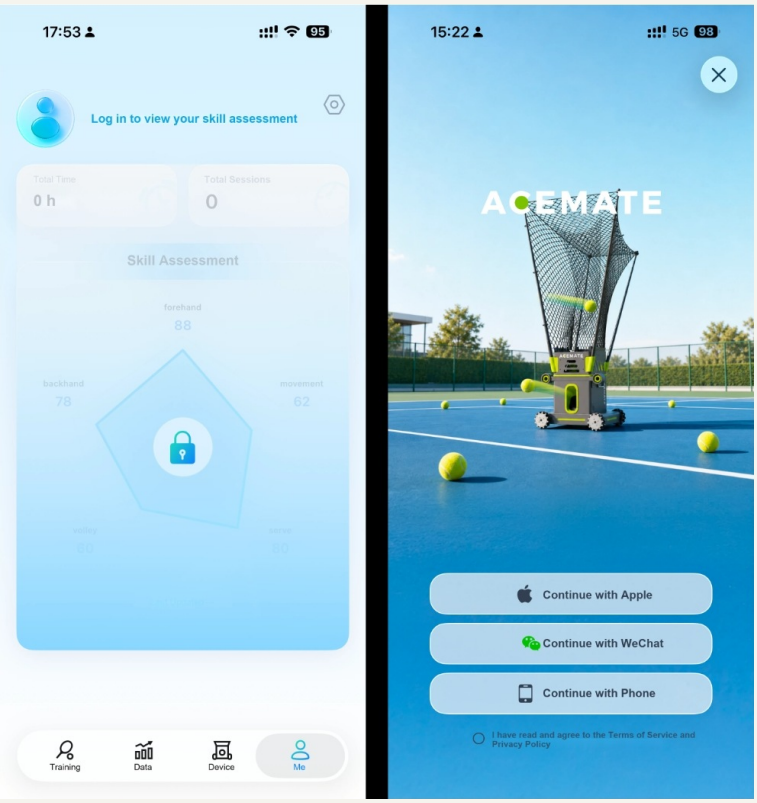

Figure 8 · Me page (Guest Mode) and sign-in screen

- You can train in Guest Mode without signing in. To access your account, sign in with Apple, WeChat, or your phone number.
  - Once you sign in, training records and custom plans belong to the current account and can sync across devices using that account.
  - Before switching accounts, make sure any data you want to keep has synced to the correct account.

4.2 Personal Skill Assessment

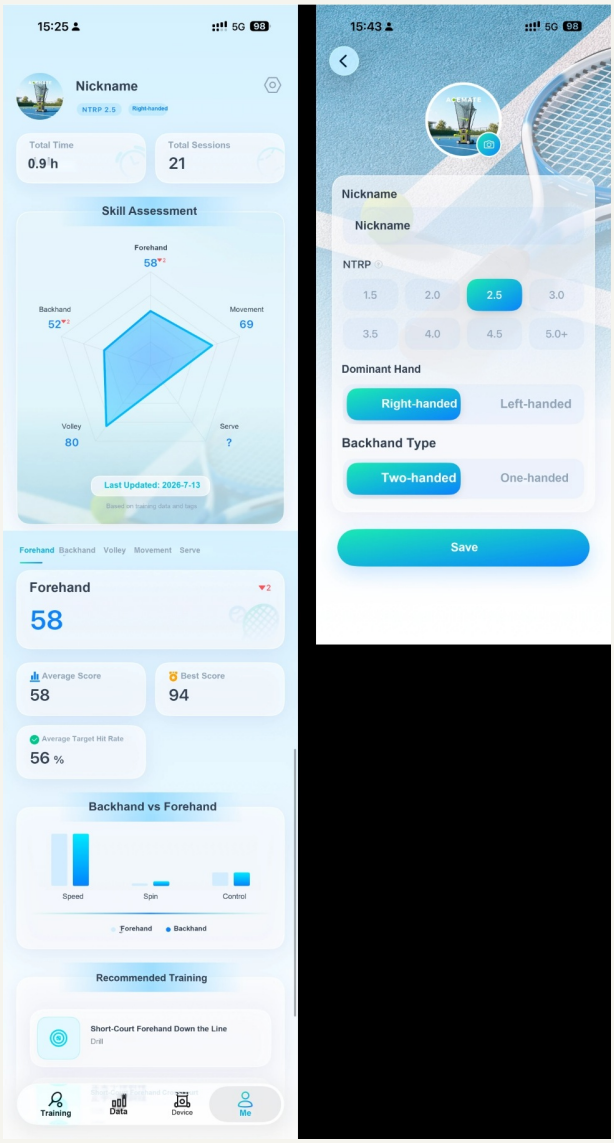

Figure 9 · Skill assessment and profile editor

4.2.1 Profile

- After signing in, set your profile photo, nickname, NTRP level, playing hand, backhand type, and other profile details.
  - If you select Left-Handed, all preset training plans are automatically mirrored, except plans in Serve and Battle modes.

4.2.2 Skill Assessment

- Once you have enough training data, you can view assessments in five areas—forehand, backhand, volley, movement, and serve—to track your progress over time.
  - Each area includes more detailed data.
  - Serve training data is included in the serve assessment once it meets the assessment threshold.

4.3 Settings and More

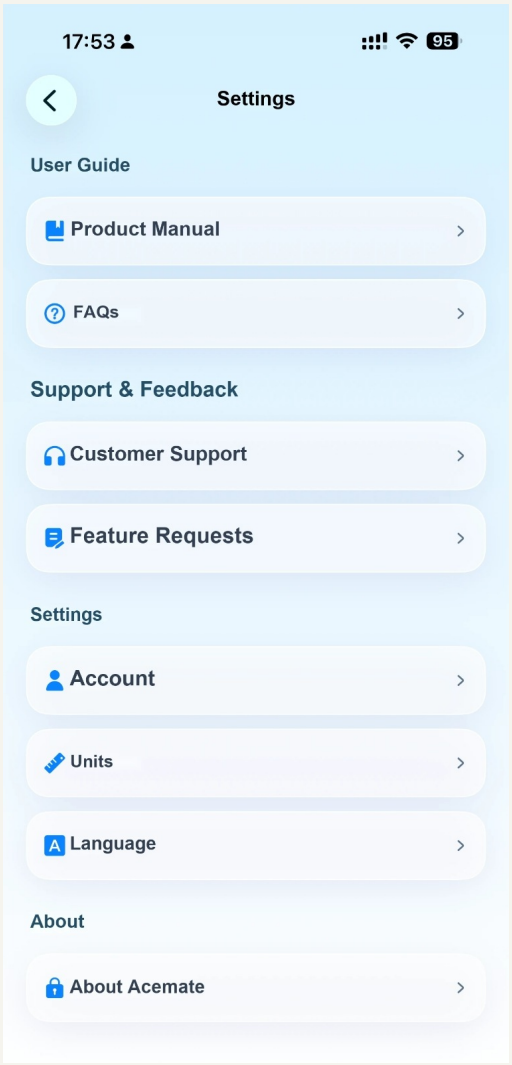

Figure 10 · Settings

4.3.1 User Guide and FAQs

4.3.1.1 Product Manual

- Tap to view the complete product user manual.

4.3.1.2 Frequently Asked Questions

- Tap to view common questions about using the product.

4.3.2 Support and Feedback

4.3.2.1 Customer Support

- Shows our customer support phone number and service hours.

4.3.2.2 Feature Requests

- Tell us which features you would like us to add or improve.

4.3.3 Settings

4.3.3.1 Account

- After signing in, you can sync account data, sign out, view your account ID, or delete your account.

4.3.3.2 Units

- Switch between metric and imperial units.

4.3.3.3 Language

- Choose the app's display language: Simplified Chinese, Traditional Chinese, English, French, German, Japanese, Korean, Polish, Spanish, or Portuguese.

4.3.3.4 Appearance

- Switch between light and dark appearance.

4.3.4 About

4.3.4.1 About Acemate

- Tap to view the app version, Privacy Policy, and User Agreement.