# Bicycle Owner's Manual

ROAD RACING BIKE
TIME TRIAL BIKE
GRAVEL BIKE
HYBRID BIKE

X-LAB

Road and Hybrid Bikes


# IMPORTANT SAFETY INFORMATION

**Read this manual carefully before assembling or riding this bicycle.**
**Improper assembly, use, or maintenance may result in serious injury or death.**

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English – United States

## 1. USING THIS MANUAL

This user manual provides important information about your X-Lab bicycle, including product features, safety information, assembly guidance, operating instructions, maintenance recommendations, and troubleshooting tips. It is intended for bicycle owners and riders, not for professional mechanics or service technicians.

**Read this entire manual carefully before assembling or riding your bike for the first time.** Understanding the instructions and safety information in this manual is essential for safe operation and to help reduce the risk of accidents, personal injury, or damage to the bicycle.

### 1.1 Important Safety Information

This manual contains **warnings, cautions, and notices** related to the assembly, operation, maintenance, and storage of your bicycle. Failure to follow these instructions may result in serious injury, property damage, or death.

Pay special attention to information identified with the following signal words:

- **WARNING** – Indicates a potentially hazardous situation that could result in serious injury or death if not avoided.

- **CAUTION** – Indicates a potentially hazardous situation that may result in minor or moderate injury, or damage to the bicycle, if not avoided.
- **NOTICE** – Provides important information related to proper operation, maintenance, or longevity of the bicycle.

All safety information in this manual should be reviewed carefully before use.

### 1.2 Assembly Guidance and Skill Level

Correct assembly and adjustment of your bicycle are critical to rider safety, performance, and comfort.

**Assembly videos may be provided as supplemental guidance.** These videos are intended to support the written instructions but **do not replace the written assembly steps or safety warnings provided in the model-specific Assembly / Quick Start Guide.**

**Do not attempt to assemble or ride the bicycle until all assembly steps in the Assembly / Quick Start Guide have been fully completed and verified.**

If you do not have prior experience assembling bicycles, or if you are unsure about any step in the assembly process, **X-Lab strongly recommends that assembly and initial inspection be performed by a certified and reputable bicycle technician.**

Improper assembly, adjustment, or modification of the bicycle may result in unsafe riding conditions and could lead to serious injury or damage.

### 1.3 Intended Use and Rider Responsibility

X-Lab bicycles are designed and tested for specific riding conditions. It is important to use your bicycle only within the riding conditions for which it was designed.

X-Lab follows bicycle use classifications established by ASTM International. These classifications define the types of terrain and riding conditions a bicycle is designed to withstand.

This manual applies to the following models and intended use categories:

| ASTM Condition | Intended Riding Use | Applicable Models |
|---|---|---|
| Condition 1 – General Road Riding | Paved roads and smooth surfaces only. Not designed for gravel, off-road riding, jumps, or aggressive terrain. | AD8, AD9, RT9, RS7, RS5 |
| Condition 2 – Gravel & Mixed Surface | Paved roads, gravel roads, and maintained dirt paths. Not designed for aggressive trail riding, large obstacles, or jumps. | GT8, SP3 |

Using a bicycle outside of its intended ASTM classification may result in component damage, loss of control, serious injury, or death. Operation outside intended use may also void warranty coverage.

Because riding conditions, environments, and rider behavior vary widely, it is not possible to anticipate every situation that may occur during use. As a result, this manual cannot guarantee absolute safety under all conditions. **By choosing to ride this bicycle, the rider assumes responsibility for all risks associated with its use.**

The rider is responsible for:

- Reading and understanding this manual before riding.
- Following all **assembly, operation, and maintenance** instructions.
- Wearing appropriate personal protective equipment.
- Operating the bicycle in a safe and controlled manner.
- Complying with all applicable **federal, state, and local laws and regulations.**
- Inspecting the bicycle before each ride and not riding if any component appears damaged, loose, or unsafe.

Failure to follow the instructions and warnings in this manual may result in serious injury, property damage, or death.

### Misuse and Modifications

**NOTICE:**

Do not modify or alter the bicycle.

Unauthorized modifications, misuse, or operation outside the intended use may:

- Compromise safety
- Void warranty coverage
- Result in non-compliant operation under local regulations

X-Lab is not responsible for damage or injury resulting from improper use or unauthorized modifications.

### 1.4 Updates to Information

The information contained in this manual is based on the latest product information available at the time of publication. X-Lab reserves the right to update, revise, or discontinue products and documentation at any time without prior notice.

For the most current information, updates, and support resources, please visit the official X-Lab website.

### 1.5 Questions or Assistance

If you have questions about assembly, operation, maintenance, or safety after reading this manual, please contact X-Lab Customer Support at support@xds.co before riding the bicycle.

Keep this manual and any other documentation provided with your bicycle for future reference.

## 2. BASIC INFORMATION AND SAFETY WARNINGS

This section contains critical safety information for the operation of your X-Lab bicycle. **Failure to follow these warnings and instructions may result in serious injury, property damage, or death.** Read and understand this entire section before assembling or riding the bicycle.

### 2.1 General Safety Information

Like any form of transportation or physical activity, riding a bicycle involves inherent risks. These risks include, but are not limited to, loss of control, collisions, falls, and equipment failure.

By choosing to ride this bicycle, you acknowledge and accept these risks and agree to operate the bicycle responsibly, safely, and in accordance with all instructions provided in this manual.

## 2.2 Prohibited Use of Alcohol, Drugs, and Impairing Substances

**Never operate this bicycle under any of the following conditions:**

- While under the influence of alcohol
- While under the influence of drugs (including prescription or over-the-counter medications that may impair alertness or coordination)
- While experiencing physical or mental conditions that impair balance, reaction time, judgment, or safe control of the bicycle

Operating a bicycle while impaired significantly increases the risk of accidents, serious injury, or death.

### 2.3 Health and Medical Conditions

Riders with medical or physical conditions that may affect safe operation of the bicycle should consult a qualified medical professional before riding.

This includes, but is not limited to:

- Visual or hearing impairments
- Balance or coordination disorders
- Seizure disorders
- Cardiovascular conditions
- Mobility limitations
- Any condition that could impair safe riding

Failure to consider personal health limitations may increase the risk of serious injury.

### 2.4 Pre-Ride Safety Checklist

Before every ride, perform the following checks to ensure the bicycle is in safe operating condition. If any item does not pass inspection, do not ride the bicycle until the issue has been corrected.

| Inspection Item | Inspection Details |
| --- | --- |
| **Brake System** | Confirm that front and rear brakes function properly, ensure brake pads are not excessively worn, and verify that brake cables or hoses are undamaged. |
| **Tires and Wheels** | Tire pressure is within the recommended range indicated on the tire sidewall, inspect tires for cracks, bulges, or excessive wear, and ensure wheels spin true without wobble. |
| **Steering System** | Confirm that the handlebar and stem are securely tightened, and ensure steering rotates smoothly without looseness. |

| Inspection Item | Inspection Details |
| --- | --- |
| **Drivetrain System** | Ensure the chain is clean and properly lubricated and confirm smooth and accurate gear shifting. |
| **Accessories and Fasteners** | Verify the saddle is properly adjusted and secured, ensure all bolts and fasteners are tightened, and confirm accessories such as racks and fenders are securely installed. |

**WARNING!**

Any fenders, racks, or other accessories mounted to the front fork must be specifically designed for this bicycle and securely installed at all attachment points.

If an accessory, mounting bracket, or loose hardware contacts the front wheel or tire while riding, the wheel may suddenly stop. This can result in immediate loss of control, serious injury, or death.

## 2.5 Environmental Use Recommendations

### Wet or Slippery Conditions

Exercise additional caution when riding in wet weather.

**NOTICE:** Riding on wet, muddy, sandy, loose, wintry, or icy surfaces may significantly reduce traction, steering control, and braking effectiveness. Always reduce speed, brake earlier, and avoid sudden or aggressive braking or turning in these conditions. Refer to Section 5 for additional riding and braking guidance.

## Night Riding

Avoid riding at night unless absolutely necessary. Visibility is significantly reduced after dark, and motorists may have difficulty seeing cyclists.

If night riding is required:

- Ensure all required reflectors are properly installed, clean, and visible.
- Install and use approved front and rear bicycle lights that are visible from an appropriate distance.
- Wear reflective or high-visibility clothing.
- Ride at reduced speeds and remain alert to road hazards and traffic conditions.

Failure to use proper lighting and visibility equipment when riding at night or in reduced visibility conditions may increase the risk of collision, serious injury, or death.

**Riding with a Child**

Carrying or towing a child significantly changes the handling, braking, and balance characteristics of your bicycle. Extra caution is required.

**WARNING** Adding a child seat, trailer, or carrier increases weight and raises the bicycle's center of gravity. This may increase stopping distance, reduce stability, and increase the risk of tipping. Loss of control may result in serious injury or death.

**WARNING** Any rack, fender, or accessory mounted to the front fork must be specifically designed for this bicycle and securely attached. If an accessory contacts the front wheel or tire, the wheel may suddenly stop, causing immediate loss of control, serious injury, or death.

**WARNING** Do not attach a child seat to a carbon fiber frame or seatpost unless the bicycle is specifically designed and approved for such use.

**Additional Safety Guidance:**

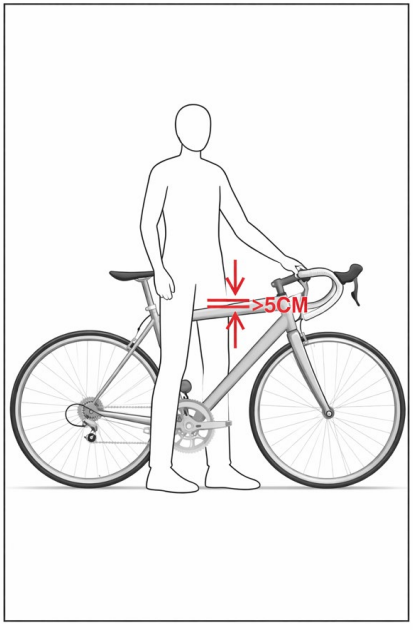
- Confirm all attachment hardware is secure before every ride.
- Do not exceed the maximum load rating of the bicycle or rack.
- Never leave a child unattended in a child seat or trailer.
- Reduce speed and avoid sudden braking or sharp turns.
- Ensure the child wears an approved, properly fitted helmet.
- Follow all manufacturer instructions provided with the child seat or trailer.

## 2.6 Bicycle Size Selection and Fit

Selecting the correct bicycle size is a critical safety consideration. Riding a bicycle that does not fit properly may affect balance, control, and the rider’s ability to stop or maneuver safely.

A key element of proper bicycle fit is standover height. Standover height refers to the distance between the ground and the top tube of the bicycle frame when the rider is standing over the bicycle with both feet flat on the ground.

When standing over the bicycle, there should be a minimum clearance of at least 2 inches (5.08 cm) between the rider’s body and the top tube of the frame.




To accurately assess fit, wear the shoes you intend to use while riding.

If the bicycle does not provide sufficient clearance, or if the rider cannot comfortably straddle the frame while maintaining balance, the bicycle may be too large and should not be ridden.

**WARNING**

Operating a bicycle that is improperly sized may increase the risk of loss of control, falls, or serious injury. If you are unsure whether the bicycle is the correct size, consult a qualified bicycle technician or authorized dealer before riding.

## 2.7 Using a Child Seat or Cycle Trailer

### Using a Child Seat or Cycle Trailer

Attaching a child seat or towing a cycle trailer changes the handling, balance, and braking characteristics of your bicycle. Before installing a child seat or trailer, confirm that your bicycle is suitable for this type of use.

**WARNING** Adding a child seat or trailer increases weight and raises the center of gravity of the bicycle. This may increase stopping distance, reduce stability, and increase the risk of tipping. Failure to adjust riding behavior may result in loss of control, serious injury, or death.

**Bicycle Compatibility**

Not all bicycles are designed to safely accommodate child seats or trailers.

- Verify that the frame, fork, and mounting points are approved for use with a child seat or trailer.
- Do not attach a child seat to a carbon fiber frame or seatpost unless the bicycle is specifically designed and approved for such use.
- Ensure racks, mounting hardware, and attachment systems are compatible with your bicycle model.
- Follow all manufacturer instructions provided with the child seat or trailer.

If you are unsure about compatibility, consult an authorized dealer before installation.

**WARNING** Any rack, fender, or accessory mounted to the front fork must be specifically designed for this bicycle and securely attached. If an accessory contacts the front wheel or tire while riding, the wheel may suddenly stop, resulting in immediate loss of control, serious injury, or death.

### Load Limits

Do not exceed the maximum total load rating of your bicycle, including rider weight, child weight, and any cargo. Refer to Section 3.3 for model-specific load limits.

### Riding Adjustments

When riding with a child seat or trailer:

- Reduce speed.
- Allow greater braking distance.
- Avoid sudden steering inputs or sharp turns.
- Take extra care when mounting, dismounting, and stopping.
- Never leave a child unattended in a mounted seat or trailer.

The rider is responsible for ensuring that all attachments are secure before every ride.

## 3. TECHNICAL SPECIFICATIONS

This section provides general technical information for your X-Lab bicycle. Specifications may vary slightly by model and configuration.

### 3.1 Model Overview

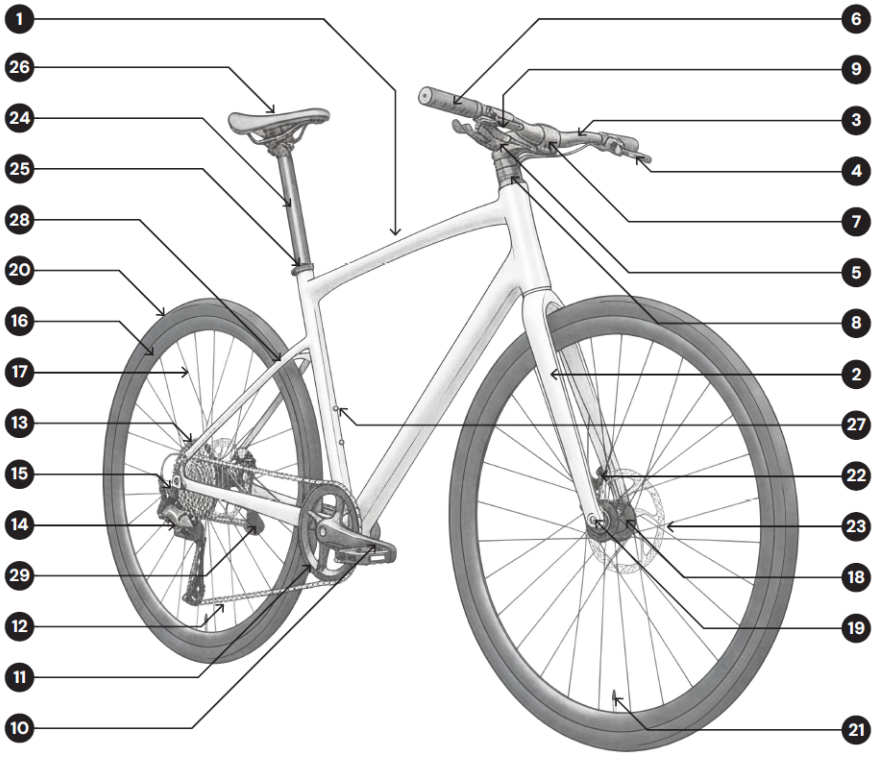
This manual applies to the following X-Lab bicycle models:

- AD8
- AD9
- RT9
- RS7
- RS5
- GT8
- SP3

Refer to the product label and serial number to confirm the specific model.

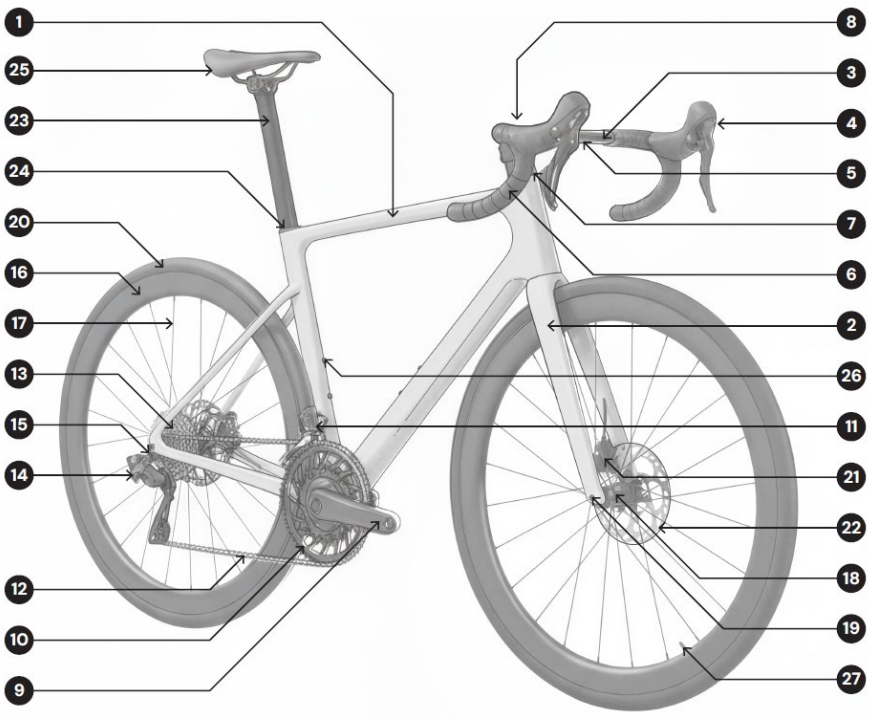
### 3.2 Bicycle Component Overview

Refer to the component overview diagrams on the following pages.




City / Flat-Bar Bicycle Components

| | |
|---|---|
| 1 | Frame |
| 2 | Fork |
| 3 | Handlebar |
| 4 | Brake lever |
| 5 | Shift lever |
| 6 | Grip |
| 7 | Stem |
| 8 | Headset spacers |
| 9 | Headset top cap |
| | + Phone mount |
| 10 | Crank |
| 11 | Chainring and guard |
| 12 | Chain |
| 13 | Cassette |
| 14 | Rear derailleur |
| 15 | Derailleur hanger |
| 16 | Rim |
| 17 | Spoke |
| 18 | Hub |
| 19 | Thru axle |
| 20 | Tire |
| 21 | Valve stem |
| 22 | Brake caliper |
| 23 | Brake rotor |
| 24 | Seatpost |
| 25 | Seatpost clamp |
| 26 | Saddle |
| 27 | Water bottle mounts |
| 28 | Fender and rack mounts |
| 29 | Kickstand |




| | |
|---|---|
| 1 | Frame |
| 2 | Fork |
| 3 | Handlebar |
| 4 | Brake/shift lever |
| 5 | Stem |
| 6 | Bar tape |
| 7 | Headset spacers |
| 8 | Headset top cap |
| 9 | Crank |
| 10 | Chainring(s) |
| 11 | Front derailleur |
| 12 | Chain |
| 13 | Cassette |
| 14 | Rear derailleur |
| 15 | Derailleur hanger |
| 16 | Rim |
| 17 | Spoke |
| 18 | Hub |
| 19 | Thru axle |
| 20 | Tire |
| 21 | Brake caliper |
| 22 | Brake rotor |
| 23 | Seatpost |
| 24 | Seatpost clamp |
| 25 | Saddle |
| 26 | Water bottle mounts |
| 27 | Valve stem |

Road / Drop-Bar Bicycle Components

### 3.3 Weight Limits

To ensure safe operation, **do not exceed the maximum allowable weight limits,** which include the rider and any carried cargo:

| Model | Maximum Total Load |
|---|---|
| AD8 | 220 lbs (100 kg) |
| AD9 | 220 lbs (100 kg) |
| RT9 | 220 lbs (100 kg) |
| RS7 | 242 lbs (110 kg) |
| RS5 | 242 lbs (110 kg) |
| GT8 | 242 lbs (110 kg) |
| SP3 | 242 lbs (110 kg) |

**WARNING:** Exceeding the maximum load may affect handling, braking performance, and structural integrity and may result in unsafe riding conditions.

### 3.4 Environmental Operating Conditions

Store in a dry, temperature-controlled environment.

### 3.5 Serial Number Information

Each bicycle is assigned a unique serial number (SN).

- The serial number is located on the underside of the downtube
- Record the serial number and retain it for future reference

The serial number may be required for warranty service, product support, or theft reporting.

### 3.6 Component Configuration

Component specifications and configurations may vary by model and production batch. X-Lab reserves the right to make changes to components or specifications without prior notice.

**NOTICE**

Specifications provided in this manual are descriptive only and do not constitute a guarantee of performance, range, or suitability for all riding conditions.

Each X-Lab bicycle is designed with maximum load limits that must not be exceeded.

- The total load includes the rider, cargo, accessories, and any additional items carried.
- Exceeding recommended limits may reduce braking effectiveness and compromise handling.

## 4. ASSEMBLY GUIDE

Refer to the model-specific Assembly/ Quick Start Guide included with your bicycle.

A digital version of the Assembly/ Quick Start Guide is also available on the official X-Lab Bikes website.

**Always ensure you are using the correct guide for your specific model before beginning assembly.**

## 5. OPERATION

This section provides important information regarding the proper operation of your X-Lab bicycle, including brake use, shifting techniques, rider control, and adjustment considerations.

This bicycle may be equipped with either disc brakes or rim brakes depending on model. Refer to your specific configuration.

Improper operation of the bicycle may result in loss of control, collision, serious injury, or death. **Read and understand this entire section before riding.**

### 5.1 Tire Inflation

Proper tire inflation is critical to safe operation, handling, and braking performance.

Under-inflated tires may reduce stability and increase the risk of pinch flats or tire damage. Over-inflated tires may reduce traction and increase the risk of tire failure.

Your bicycle tires are equipped with inner tubes. Refer to model-specific specifications to determine whether your wheels and tires are compatible with tubeless conversion. If you are unsure, consult an authorized X-Lab dealer before making any modifications.

### Recommended Tire Pressure

The recommended tire pressure range is printed on the tire sidewall. Always inflate within the stated minimum and maximum pressure limits.

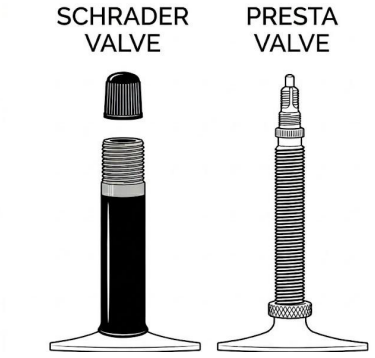
Do not exceed the maximum pressure printed on the tire sidewall or rim surface.

Higher pressures are generally used for smooth pavement to reduce rolling resistance. Lower pressures (within the printed range) may improve comfort and traction on rougher surfaces.

### Valve Types

Your bicycle is equipped with either Presta or Schrader valves.

- **Schrader valves** are wider and similar to automotive tire valves.
- **Presta valves** are narrower and commonly used on road bicycles.



Ensure your air pump is compatible with the valve type on your bicycle.

If your bicycle is equipped with a Presta valve:

1. Remove the valve cap.
2. Loosen the small knurled nut at the top of the valve stem.
3. Press the valve briefly to confirm it is open.
4. Inflate to the desired pressure.
5. Tighten the knurled nut after inflation.
6. Reinstall the valve cap.

**WARNING** Improper tire pressure may affect braking, steering, and overall control of the bicycle. Riding with incorrectly inflated tires may result in loss of control, serious injury, or death.

## 5.2 Brake System Operation

### Proper Braking Technique

- Apply brakes gradually and evenly.
- Use both front and rear brakes together for balanced stopping.
- Shift body weight slightly rearward during hard braking.
- Avoid sudden or excessive force on the front brake.

**WARNING**

Applying excessive force to the front brake may cause the rear wheel to lift off the ground, which can result in loss of control, serious injury, or death.

### Wet or Slippery Conditions

Braking distance increases significantly in wet, muddy, sandy, loose, wintry, or icy surface conditions. Traction and steering control may also be reduced.

- Reduce speed.
- Brake earlier than normal.
- Avoid sudden or aggressive braking or turning.
- Use smooth, progressive lever pressure.

**WARNING** Reduced traction in wet, loose, or icy conditions may result in loss of control. Failure to adjust speed and riding technique may result in serious injury or death.

### Brake Pad Wear

Brake pads are wear items and must be inspected regularly. Reduced braking performance, noise, vibration, or visible thinning of brake pads may indicate the need for service.

If braking performance is reduced, do not ride the bicycle until the issue has been corrected by a qualified bicycle technician.

## 5.3 Gear Shifting Operation

Models equipped with multiple front chainrings include a front derailleur for larger gear range.

### Proper Shifting Technique

- Continue pedaling while shifting.
- Reduce pedaling force during gear changes.
- Shift one gear at a time.
- Anticipate terrain changes and shift before steep inclines.

**NOTICE:** Do not shift gears while applying heavy pedaling force. Excessive load during shifting may cause drivetrain damage or premature wear.

### Cross-Chaining

Avoid extreme gear combinations (large front chainring with largest rear cog, or small front chainring with smallest rear cog). These combinations increase drivetrain stress and wear.

If shifting becomes noisy, inconsistent, or hesitant, the derailleur may require adjustment by a qualified bicycle technician.

### 5.4 Drivetrain and Chain Use

Proper drivetrain maintenance improves performance and safety.

- Keep the chain clean and properly lubricated.
- Wipe off excess lubricant after application.
- Inspect the chain regularly for wear or damage.
- Replace worn chains promptly to prevent damage to cassette and chainrings.

Riding with a worn or damaged chain may result in chain breakage and loss of control.

### 5.5 Wheel Retention System (Thru-Axle or Quick Release)

Your bicycle is equipped with either a thru-axle system or a quick-release wheel retention system, depending on model.

Before every ride:

- Ensure the wheel is fully seated in the dropouts.
- Confirm the axle or quick-release lever is properly secured.
- Verify there is no side-to-side wheel movement.

**WARNING**

Riding with an improperly secured wheel may result in wheel detachment, loss of control, serious injury, or death.

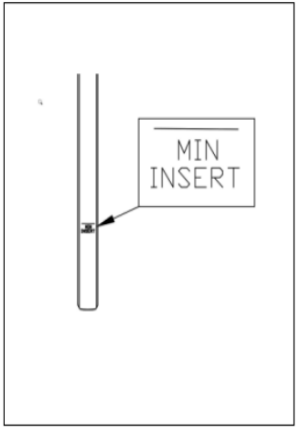
If you are unsure how to properly secure the wheel retention system, consult a qualified bicycle technician.

## 5.6 Saddle and Handlebar Adjustments

Proper fit improves comfort, control, and safety.

### Saddle Height

- Adjust saddle height to allow a slight bend in the knee at full pedal extension.
- Never raise the seatpost beyond the minimum insertion mark.
- Ensure the seatpost clamp is securely tightened to the manufacturer-specified torque.




**WARNING** Failure to insert the seatpost past the minimum insertion mark may result in frame damage, loss of saddle support, serious injury, or death.

### Handlebar and Stem

- Ensure handlebars are properly aligned with the front wheel.
- Confirm all stem bolts are tightened to manufacturer-specified torque.
- Do not ride if the handlebar rotates independently of the front wheel.

**WARNING**

Failure to properly secure the seatpost, stem, or handlebar may result in loss of control and serious injury.

### 5.7 Riding Technique and Control

Safe riding requires attention, awareness, and proper technique.

- Keep both hands on the handlebars while riding.
- Maintain a safe following distance.
- Ride at a speed appropriate for conditions.
- Avoid distractions while riding.

Obey all applicable traffic laws and regulations.

**When cornering:**

- Reduce speed before entering the turn.
- Avoid braking aggressively while leaning.
- Maintain steady pedal cadence.

**When descending:**

- Keep weight balanced.
- Avoid sudden braking.
- Remain alert to road hazards.

### 5.8 Post-Ride Inspection

After each ride:

- Check for loose components.
- Inspect tires and wheels.
- Listen for unusual noises.
- Address issues before the next ride.

If the bicycle has been involved in a crash or impact:

- **Do not ride the bicycle.**
- Have the bicycle fully inspected by a qualified technician before returning to service.

## 6. POWER METER AND APP (IF EQUIPPED)

Some X-Lab bicycle models may be equipped with an integrated power meter and mobile app connectivity. If your bicycle does not include these features, this section **does not** apply.

This section provides instructions for using the “X-Lab Bikes” App with the X-Lab bicycle and power meter. It explains how to download and install the app, connect the bicycle and power meter, and use available app features.

**NOTICE:** Use of the mobile application is optional. The bicycle can be operated safely without the application.

### 6.1 Safety Information

Do not operate your mobile phone while riding.

When recording ride data, keep mobile network and location services enabled.

### 6.2 Downloading the Mobile Application

The “X-Lab Bikes” app is compatible with the following mobile operating systems:

- **iOS 14 or later**
- **Android 12 or later**

**NOTICE:** Ensure your mobile device is connected to Wi-Fi or cellular data before downloading the app.

1 Open the Apple App Store or Google Play Store on your mobile device.

2 Search for the **“X-Lab Bikes”** mobile application.

3 Download and install the application by following the on-screen instructions.

Application availability and compatibility may vary by device, operating system, or region.

### 6.3 Connecting the App to the Power Meter

**1** Activate the power meter. For first-time activation, connect the magnetic charging cable to the power meter. Charging the power meter will automatically turn it on.

Ensure the battery level is **greater than 50%** before pairing.

**NOTICE:**

If the power meter remains stationary for **10 minutes,** it will automatically enter sleep mode.

If the power meter has entered sleep mode, rotate the crank one full revolution to wake or activate it.

**2** Open your mobile device settings and turn **Bluetooth** on.

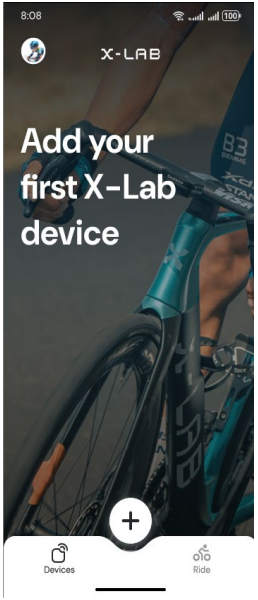
**3** Launch the X-Lab Bikes app.

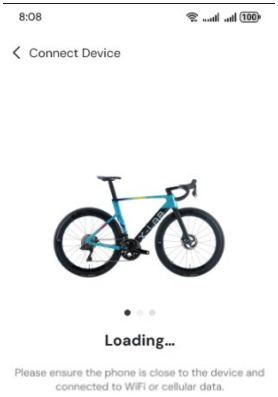
When opening the app for the first time, allow access to **Bluetooth** and **location permissions** when prompted.

**4** On the app home screen, tap the “+” **(Add Device)** icon.

The app will automatically search for nearby X-Lab meters.

**5** Select the matching power meter **serial number (SN).**






**NOTICE:** The power meter serial number is located on the **inside of the chainring on the crankset,** as shown in the illustration.


**6** Follow the on-screen instructions to complete pairing.

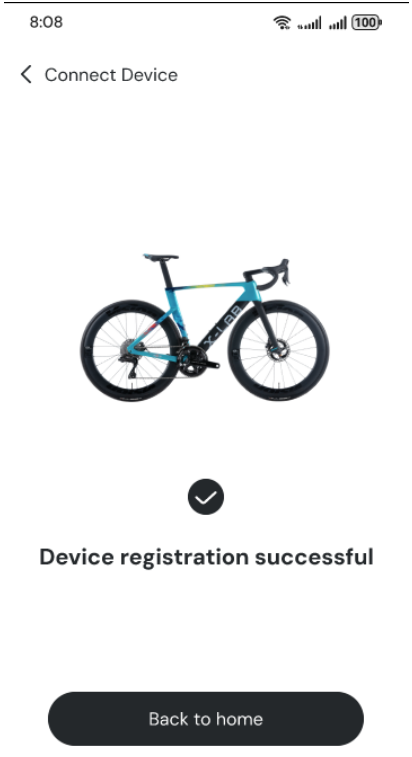
Once pairing is successful:

- The app will display “Device registration successful.”
- The app will return to the device home screen.
- Battery status information will be shown, confirming the connection.

If pairing is unsuccessful, restart the application and repeat the process.

Loss of app connection does not affect basic bicycle operation.

**NOTICE:** If multiple X-Lab devices are paired with the app, you can switch between them using device cards on the app’s home screen. The mobile application can connect to **only one Bluetooth device at a time.**



## 6.4 App Features

After a successful connection between the X-Lab bike and the “X-Lab Bikes” app, the following features may be available. Feature availability may vary by model, region, device type, and software version.

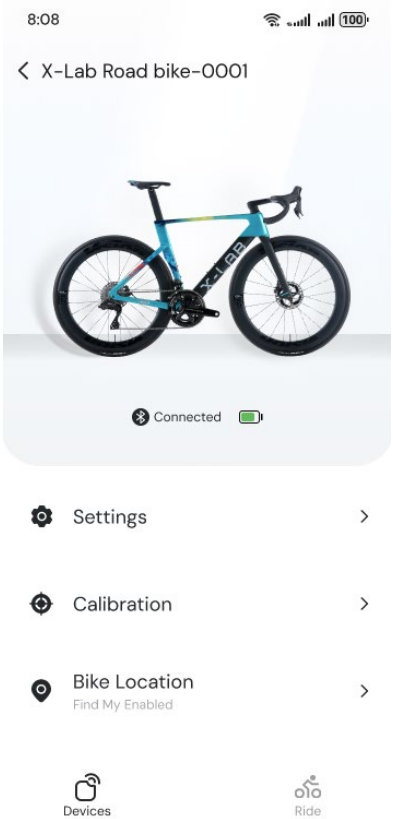
| Feature | Description |
| --- | --- |
| **Power Meter Battery Status** | Displays the current battery level of the integrated power meter. |
| **Device Information** | Allows the user to view power meter information, including serial number (SN), firmware version, MAC address, and related device details. |
| **Ride Data Recording** | Automatically records supported ride data, including power output, cadence, and route information during compatible riding activities. |
| **Calibration** | The calibration function may be used to reset the power meter zero offset if measurement drift occurs over time. |
| **Device Location (Find My)** | Enables locating the power meter through Apple’s Find My network, where supported (iOS only). |

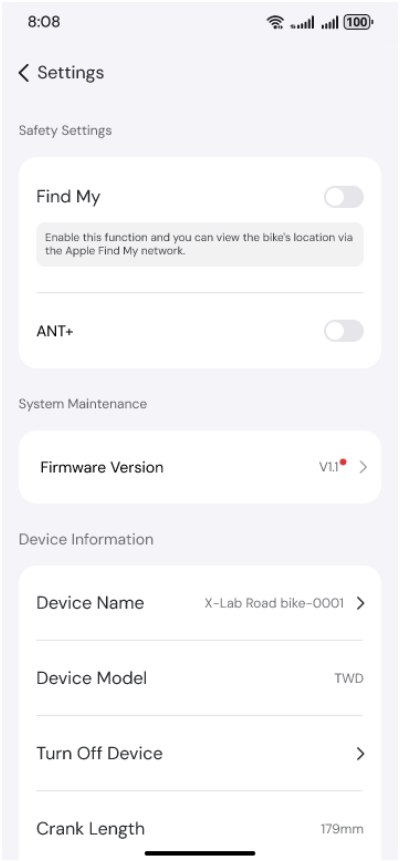
| Feature | Description |
| --- | --- |
| **Ride History and Route Maps** | Allows the user to review previously recorded rides, route maps, and available ride statistics. |

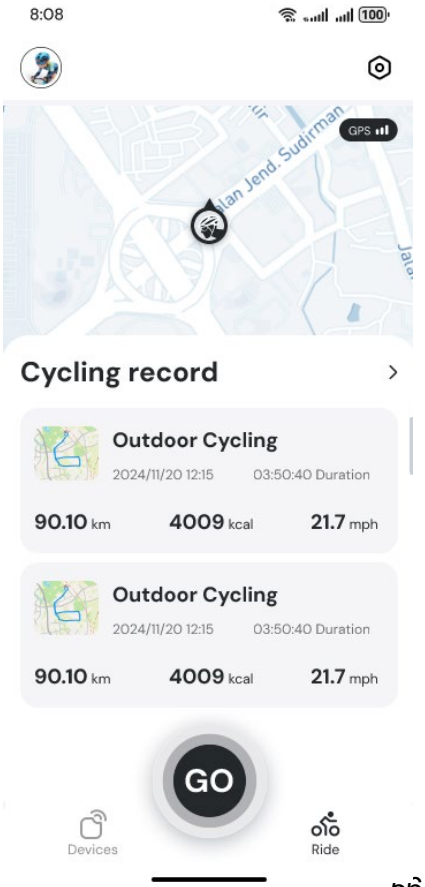
### Vehicle Location Tracking (Find My)

This feature is available on **iOS devices only.** To use it, the rider must enable **Find My** on their Apple device and complete the pairing process within the “X-Lab Bikes” App.

**NOTICE:** Location tracking functionality depends on Apple Find My network availability and device settings. Availability and performance may vary by region.


8:08
X-Lab Road bike-0001
Connected
Settings
Calibration
Bike Location
Find My Enabled
Devices
Ride


8:08
Settings
Safety Settings
Find My
Enable this function and you can view the bike's location via the Apple Find My network.
ANT+
System Maintenance
Firmware Version
V1.1
Device Information
Device Name
X-Lab Road bike-0001
Device Model
TWD
Turn Off Device
Crank Length
179mm


8:08
GPS
Cycling record
Outdoor Cycling
2024/11/20 12:15
03:50:40 Duration
90.10 km
4009 kcal
21.7 mph
Outdoor Cycling
2024/11/20 12:15
03:50:40 Duration
90.10 km
4009 kcal
21.7 mph
GO
Devices
Ride

### 6.5 App Troubleshooting

| Issue | Solution |
| --- | --- |
| **Unable to connect to the power meter** | Ensure Bluetooth is enabled and the power meter is powered on. Restart the app and mobile device if necessary. |
| **Ride data not saved** | Confirm location permissions are enabled, and a network connection is active during the ride. |
| **Images or data not loading** | Clear the app cache or reinstall the app. |

## 7. TROUBLESHOOTING

This section provides general guidance for identifying common issues. If an issue cannot be resolved using the information below, **stop using the bicycle and contact X-Lab Customer Support or a qualified bicycle technician.**

### 7.1 Common Faults and Solutions

| Symptom | Possible Cause | Solution |
|---|---|---|
| **Brakes rubbing** | Wheel not centered, rotor slightly misaligned, brake caliper out of alignment | Ensure wheel is fully seated. Loosen and re-center caliper. If rubbing persists, consult a qualified technician. |
| **Chain skipping** | Worn chain, derailleur misadjusted, cable tension incorrect | Inspect chain for wear. Adjust derailleur indexing. Seek professional service if necessary. |

| | | |
|---|---|---|
| **Poor shifting** | Cable stretch, derailleur misalignment | Adjust barrel adjuster. If shifting remains inconsistent, have serviced by technician. |
| **Noise from bottom bracket** | Loose crank arm, insufficient lubrication, worn bearings | Check crank bolt torque. If noise persists, consult technician. |
| **Tire losing pressure** | Puncture, loose valve core, damaged tube | Inspect tire and tube. Repair or replace as needed. |

## 8. MAINTENANCE

Proper maintenance is essential for safe operation and long-term performance of the X-Lab bicycle. Failure to maintain the bicycle properly may result in component failure, loss of control, or injury.

**⚠ IMPORTANT**

If you are unfamiliar with maintenance procedures or if the bicycle requires adjustment, consult a qualified bicycle technician.

### 8.1 Recommended Service Intervals

The service intervals listed below are provided **as general guidelines only**. Actual wear rates and service needs may vary depending on riding conditions, usage frequency, terrain, and riding style.

We generally recommend inspecting, servicing, and replacing components according to the **time or mileage intervals** shown below, whichever occurs first.

| Interval | Task | Rider Action | Service Recommendation |
|---|---|---|---|
| **Before each ride** | Visual safety inspection | Check for loose components, visible damage, abnormal brake lever feel, and unusual noises. Check that tires are properly inflated. | Do not ride if any issue is detected. |
| **Weekly** | General cleaning | Clean bicycle with a soft cloth and mild soap. Dry thoroughly after cleaning. | Avoid high-pressure water and solvents. |
| **Monthly** | Drivetrain condition | Inspect chain and drivetrain components for dirt, | Lubricate and service as needed by a qualified technician if issues are found. |

| Interval | Task | Rider Action | Service Recommendation |
|---|---|---|---|
| | | wear, or abnormal operation. | |
| **Monthly** | Brake system condition | Inspect brake pads and rotors for visible wear or contamination. | Have brakes serviced by a qualified bicycle technician if performance is reduced. |
| **Monthly** | Fastener check | Check for visibly loose fasteners. | Torque verification by a technician if looseness is observed. |
| **Before long-term storage** | Storage preparation | Clean bicycle and store in a dry, temperature-controlled location. | |
| **After a crash** | Safety inspection | Do not ride the bicycle. | Full inspection by a qualified bicycle technician is required. |

**WARNING – Carbon Fiber Components**

X-Lab bicycles may include carbon fiber components such as frames, forks, wheels, handlebars, or seatposts. Carbon fiber is lightweight and strong, but it can be damaged by impact, improper handling, or crashes.

Damage to carbon fiber components is not always visible. Cracks, internal fractures, or structural weakening may occur without obvious external signs.

If the bicycle has been involved in a crash, impact, or other significant force, have all carbon fiber components inspected by a qualified bicycle technician or authorized X-Lab dealer before riding.

Riding with a damaged carbon fiber component may result in sudden component failure, loss of control, serious injury, or death.

## 9. CERTIFICATION AND COMPLIANCE INFORMATION

This section provides regulatory and compliance information applicable to this device and its wireless communication features.

### Federal Communications Commission (FCC) Compliance

FCC ID**: 2BTR6-T901**

This device complies with part 15 of the FCC Rules. Operation is subject to the condition that this device does not cause harmful interference (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance

could void the user's authority to operate the equipment.

**NOTICE:**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

**To maintain compliance with FCC's RF Exposure guidelines, this equipment should be installed and operated with a minimum distance of 8in (20 cm) between the radiator and the human body. Use only the supplied antenna.**

**Apple Find My Network Compliance**

Use of the *Works with Apple* badge means that this product has been designed to work specifically with the technology identified in the badge and has been certified by the product manufacturer to meet Apple Find My network product specifications and requirements. Apple is not responsible for the operation of this device or for its compliance with safety and regulatory standards.

The Apple Find My network provides an easy and secure way to locate compatible items using the Find My app on iPhone, iPad, or Mac, or the Find Items app on Apple Watch.

To use the Apple Find My app to locate this item, the latest version of **iOS®**, **iPadOS®**, or **macOS®** is recommended. The Find Items app on Apple Watch requires the latest version of **watchOS®.**



## 10. WARRANTY, SUPPORT, AND CONTACT INFORMATION

This section provides general information regarding warranty coverage, customer support, and contact resources for your X-Lab bicycle.

### 10.1 Warranty Overview

X-Lab bicycles are covered by a **Limited Warranty** against defects in materials and workmanship, subject to the terms and conditions established by X-Lab.

Warranty coverage:

- Applies only to the **original purchaser.**
- Covers manufacturing defects under normal use.
- Does not cover normal wear and tear or damage caused by misuse, improper assembly, improper maintenance, accidents, or unauthorized modifications.

Warranty terms, coverage periods, and exclusions may vary by product and are subject to change.

For the most current and complete warranty information, visit https://www.xds.co/warranty.

### 10.2 Warranty Limitations and Exclusions

The Limited Warranty does not cover:

- Normal wear items such as tires, brake pads, chains, cables, and grips.
- Damage resulting from improper assembly or failure to follow this manual.
- Damage caused by accidents, crashes, misuse, neglect, or commercial use.
- Unauthorized modifications or installation of non-approved parts or accessories.
- Damage resulting from use outside recommended operating conditions.

Failure to follow the instructions and warnings in this manual may void warranty coverage.

### 10.3 Customer Support

If you have questions regarding assembly, operation, maintenance, troubleshooting, or warranty coverage, contact X-Lab Customer Support at support@xds.co.

Before contacting support, have the following information available:

- Bicycle model
- Serial number (SN)
- Proof of purchase
- A brief description of the issue

Providing complete information will help expedite assistance.

### 10.4 Service and Repairs

For safety and reliability, repairs should be performed by a **qualified bicycle technician.**

| **WARNING** |
| --- |
| Improper repair or modification may result in unsafe riding conditions and could lead to serious injury. |

### 10.5 Contact Information

For customer support, warranty service, or additional product information, visit the official X-Lab website or contact X-Lab through authorized service channels.

Contact details and service resources may be updated periodically. Refer to the official website for the most current information.

### 10.6 Retention of Documentation

Retain this manual, proof of purchase, and all related documentation for future reference.

If the bicycle is sold or transferred, provide this manual to the subsequent owner.

X-LAB

SHENZHEN XIDESHENG BICYCLE CO.LTD

www.xds.co | hello@xds.co