

USER GUIDE



Ride-X9

Intelligent Radar & Tail Light V2.0

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Warnings

The Ride-X9 Intelligent Radar & Tail Light is designed to enhance your cycling safety, but it's just an additional measure. It can never replace your own vigilance.

ALWAYS STAY ALERT! Be aware of your surroundings. **NEVER OPERATE** the device while cycling. **NEVER GAZE** at its display, or let it distract you. Rely on your own judgment and stay focused throughout your ride. Use the Ride-X9, but remember, your safety ultimately depends on you. Enjoy a safe journey!

Getting Started

The following list gives an overview of the installation and setup tasks:

Charge the Device: Refer to "Charging the Device" for detailed guidance.

Install the Universal Mount: Check "Installing the Universal Mount" for the installation process.

Pairing with a Smartphone: Download the Darviso app and pair your smartphone with the Ride-X9. See "Pairing with Smartphone" for the pairing steps. By finishing these tasks, you'll be ready to utilize the Darviso Ride-X9 and have a safer cycling experience.

Video Tutorials

For step by step guides on how to use the Darviso Ride-X9 Intelligent Radar & Tail Light, please visit our official website <http://www.darviso.com/support> or scan below QR code and check out the Tutorial Videos.



Device Overview



	Hold for 2 seconds to turn the device on and enter light mode switch.
Power & Lights Switch Key	Press to change light modes.
	Hold for 2 seconds to turn the device off.
LED Indicator	Changes color based on the battery level, pairing status, and charging status.

LED Indicator

LED Indicator	Status
Green Flashing	Device Operating
Blue Flashing	Bluetooth Connected
Red Flashing	Low Battery
Red Constantly On	An error occurred. You may need to restart the device.
Blue-Green Alternating Flashing	Device Firmware Updating
Red Slow Flashing	Charging
Green Constantly On	Fully Charged

Tail Light Modes

Mode	Intensity	Lumens	Runtime	Default Lighting	Vehicle Approach
Constant On	High	20	8h	Stable & Low	Rapid Flashing
Group	Low	5	10h	Stable & Low	Rapid Flashing
Breathing	Low	15	10h	gradual bright-dim	Rapid Flashing
Daytime Flashing	Middle	15	13h	Three Shorts & One Long	Rapid Flashing
Nighttime Flashing	High	75	12h	Three Shorts & One Long	Rapid Flashing
Light Off	Off	0	16h	None	Rapid Flashing
Sleep Mode	Off	0	>30d	None	None

Sleep Mode

When the radar is stationary for over 5 minutes, it enters Standby mode to extend battery life and will awaken upon detecting movement.

Warning Light

When a vehicle is detected by the Ride-X9 radar, the light will switch to a suitable warning light based on threat level to highlight the cyclist, catching the attention of approaching vehicles.

Brake Light

When deceleration is detected, the light will illuminate for 2.5 seconds to notify approaching vehicles/cyclists.

Turning Off the Taillight

Hold the device key for 2 seconds.

Charging the Device

Before charging, dry the Type-C port, cover, and surrounding area to prevent corrosion. The built-in Lithium Polymer Battery can be charged via the provided Type-C cable using a wall outlet (with a compatible adapter) or a computer USB port.

Note: Charging won't work outside the approved temperature range (see Ride-X9 Specification).

- Lift the waterproof cover on the Type-C port.
- Connect the cable's small end to the device's port.
- Plug the large end into a computer or a power adapter.
- If using an adapter, plug it into a wall outlet.
- The red-flashing light means it's charging; solid green indicates full charge.
- Unplug the cable and close the cover.

Tips:

- Ensure a secure cable connection. Charging times: 3 hours via computer, 2.5 hours via AC.
- Unplug when the light turns solid green.
- Check battery life on the paired device's settings.

Update Radar Firmware

Pairing and Status Display

After successfully pairing your Ride-X9 radar with the app, the device status will be shown on the app interface.

Firmware Update Notification

When a new firmware version is available, the app will automatically push a firmware upgrade message to you. Select "Update" from the pop-up window or find the update option in the status menu to initiate the update process.

Downloading the Update

It will take a few minutes to download the firmware, make sure your device is connected to a stable network and the battery of the radar and smartphone has sufficient power.

Completing the Update

Once the download is finished, the app will prompt you to complete the installation process. After the installation is successfully completed, press "Done" to finalize the update. It is recommended to keep your Ride-X9 firmware up-to-date to ensure optimal performance, access to new features, and enhanced security.

Taillight Status LED for Firmware Updates

LED Activity	Status
Flashing blue and green	The device is uploading firmware
Flashing green	The firmware update is complete and successful

Installing the Universal Mount

The unit comes with a seatpost mount and a saddle mount, which can be selected according to the type of bike.

Saddle Mount

- Fix the saddle radar mount onto the saddle crossbar, sandwiching the crossbar within the mount's groove and securing it with screws.



- Use an L-wrench to tighten the screws, ensuring the mount is securely installed.



- Slide the radar horizontally into the mount's slot.



- Rotate the radar until it locks vertically.



- Adjust the radar's tilt angle using the level bubble until it is centered, indicating the radar is installed perpendicular to the ground.



- After the level bubble is basically centered, tighten the radar mount rotating shaft screws, radar installation is complete.



Seatpost Mount

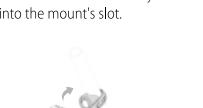
- Install the seatpost mount securely and unobstructed on the seatpost.



- Adjust the strap's tightness and secure the base, with the radar's fixing buckle facing backwards and parallel to the rear wheel.



- Slide the radar horizontally into the mount's slot.



- Rotate the radar until it locks vertically, ensuring the strap's tightness and device security.



Note:

- Mounting the seatpost mount too low may block the radar signal with the tire, which will impact the detection performance. Refer to Figure 5 for a visual illustration.
- The seatpost mount has a specific correct orientation. Installing it in the wrong direction will make the radar face the ground, failing to meet the requirements for vehicle monitoring. Please refer to Figure 6 for details. The radar coverage area is shown in the figure below.

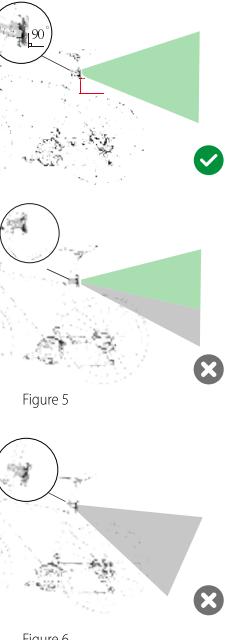


Figure 5

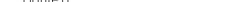


Figure 6

Pairing with Smartphone

1.Open the APP, enter the main interface, and click the Bluetooth pairing button.

2.Select the pairable radar.

3.After successful pairing, "Connected" will be displayed. Click the back button to return to the main interface.

4.You can see the battery level and connection status changes.

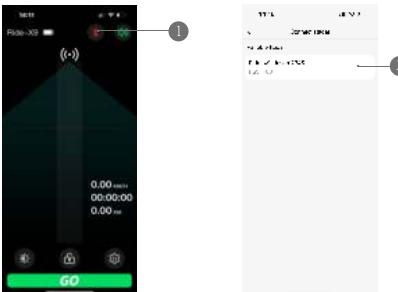


Figure 5

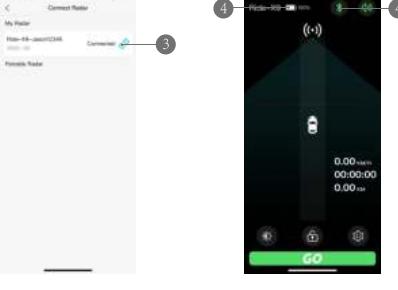


Figure 6



Daily Maintenance

Taking good care of your Ride-X9 is crucial to maintain its performance and longevity, reducing the risk of damage.

Device Care

Avoid Physical Impact: Do not drop your Ride-X9 or subject it to severe shock. Such impacts can damage internal components, leading to malfunctions.

Mind the Environment: Do not expose your device to extreme temperatures. Both excessive heat and cold can affect the battery life and the functionality of internal components. Also, keep it away from excessive moisture, as this can cause corrosion and short-circuits.

Use Authorized Cables: Do not use power and/or data cables that have not been supplied by or received prior official approval from the manufacturer of Ride-X9. Unapproved cables may not be properly insulated or may have incorrect voltage outputs, which can damage the device.

Keep Away from Chemicals: Do not put your Ride-X9 in contact with chemical cleaners, solvents, sunscreen, insect repellents or other dry or liquid chemicals. These substances can damage the device's components and finishes, potentially causing discoloration or component failure.

Protect the USB Port: Ensure the USB rubber cover is tightly closed at all times when not in use. This will prevent water exposure and subsequent damage to the USB port, which is essential for charging and data transfer.

Cleaning the Device

Handle the Lens with Care: The lens surface of Ride-X9 is delicate and can easily be scratched. Do not use a cloth or any material that can scratch the optical lens on the front of the device. Scratching the optical lens may lead to inaccurate sensor readings or poor performance of related functions.

Clean the USB Cover Area: Regularly remove dirt and debris from the USB rubber cover and the surrounding area. This helps to keep the cover functioning properly and prevents dirt from entering the USB port when the cover is opened.

Gentle Water Cleaning: While the USB cover is closed, briefly run water over the device to remove dust. However, after cleaning, allow the device to dry completely before opening the cover. Trapped moisture can cause damage to the internal components if the cover is opened too soon.

Do Not Tamper with the Device: Do not attempt to disassemble, repair, or make any modification to your Ride-X9. Any such attempt will void the warranty, and improper handling can cause irreversible damage to the device.

Ride - X9 Specification

Content	Parameters
Size	88*40*22mm
Weight	75g
Radar Detection Distance	150m
Light Display Range	1.6km
Light Beam Angle	220°
Radar Detection Angle	120°
Operating Temperature	-20°~55°
Charging Temperature	0°~45°
Battery	Rechargeable Lithium Polymer Battery
LED Lumens	Constant light 20, Group 5, Breathing 15, Daytime Flashing 15, Night Flashing 75, Lights Off 0, Hibernation Mode 0
Battery Life	Constant light 8h,

Troubleshooting

When troubleshooting issues with your DARVISO Ride-X9 Intelligent Radar & Tail Light, it's recommended to follow a systematic approach. Start with hardware-related checks, then move on to software-related aspects, and finally consider potential device damage.

• **Power Supply:** Confirm the battery of the Darviso Ride X9 Intelligent Radar & Tail Light is adequately charged. Connect it to a reliable power source and observe if the charging indicator lights up.

• **Physical Inspection:** Examine the device for any visible signs of damage, such as cracks, dents, or loose parts. Check the integrity of the mounting mount and the connection cables.

Common Abnormalities and Solutions

Power related Issues

• Device Fails to Power On

Possible Causes

Depleted battery.

Faulty charging cable or power adapter.

Internal power circuit malfunction.

Solutions

Charge the device for at least 2-3 hours with the original charging cable and adapter.

Try using a different power outlet.

If the problem persists, contact our support team at support@darviso.com.

• Device Powers Off Unexpectedly

Possible Causes

Low battery level.

Overheating of the device.

Software glitches.

Solutions

Immediately charge the device.

Let the device cool down in a well ventilated area. Avoid using it in high temperature environments.

Restart the device. If the issue continues, reset the device to its factory settings following the instructions in the user manual.

Radar Function Abnormalities

• No Radar Alerts

Possible Causes

Incorrect pairing with a compatible device (smartphone or cycling computer).

Obstruction in front of the radar sensor.

Radar sensor malfunction.

Solutions

Re-pair the device according to the pairing instructions in the "Getting Started" section or on our website <http://www.darviso.com/support>.

Clean the radar sensor surface to remove any dirt, dust, or debris.

If the problem remains, contact our support team.

• False Radar Alerts

Possible Causes

Interference from other electronic devices.

Software calibration issues.

Solutions

Move away from other electronic devices, such as WiFi routers or microwave ovens, when using the radar function.

Perform a radar calibration through the Darviso app or follow the calibration steps in the user manual.

Light Function Abnormalities

• The Light Doesn't Turn On

Possible causes: The connection between the light module and the main unit is loose, the light bulb is burnt out, or there is a malfunction in the light control circuit.

Solutions: Check and re-secure the connection between the light module and the main unit. If the light bulb is replaceable, replace it with a compatible one. If the problem persists, please contact our support team.

App related Abnormalities

• App related Abnormalities

Device Not Connecting to the App

Possible Causes: Bluetooth issues on the smartphone or cycling computer, outdated app version, incorrect app settings.

Solutions: Enable and disable Bluetooth on your device, then try to pair again. Next, update the Darviso app to the latest version from the app store. Finally, check and adjust the app settings according to the user manual.

• App Freezing or Crashing

Possible Causes: Insufficient device memory, software bugs in the app.

Solutions: Close other unnecessary apps running on your device to free up memory. Then, uninstall and reinstall the Darviso app. If the problem still exists, report it to our support team with detailed information about the error.

Seeking Further Assistance

If you have exhausted all the above troubleshooting steps and the device still exhibits abnormalities, please contact our professional support team at support@darviso.com. Provide a detailed description of the problem, including the symptoms, the steps you have taken, and any error messages received. Our team will work closely with you to resolve the issue promptly and ensure your cycling experience with the Darviso Ride X9 is safe and enjoyable.

Important Safety Information

Warnings

Before using the DARVISO Ride-X9 Intelligent Radar & Tail Light, carefully read and fully understand the following safety information. Disregarding these warnings may lead to collisions or other accidents, resulting in serious injury or even death.

! No Unauthorized Disassembly or Self-repair !

The product is sealed with advanced technology. Do not attempt to open or repair it on your own. Such actions may damage internal components like the PCB board, Bluetooth and radar chips, rendering the device inoperable and posing safety hazards. If you encounter any issues, contact our customer service immediately.

Distraction Warning

Safe Usage: Our device's radar is designed to detect and alert you about approaching vehicles from the rear during cycling, helping you stay aware of rear-end traffic and take timely evasive actions.

Additionally, the taillight makes your bike more visible to vehicles behind, reducing the risk of collisions. However, do not operate the APP interface or adjust the radar settings while riding. Always park your bike in a safe location, such as by the roadside, to make any necessary adjustments. Once the settings are done, you can enjoy the enhanced safety features of our radar-integrated taillight during your ride.

Avoid Distractions: The device is designed to enhance your awareness, but improper use can be distracting. Avoid focusing too much on the LED lights or sounds, as this may divert your attention from the road, leading to potential injury. Glance at the LED lights briefly and always stay alert to your surroundings.

Don't Over-rely: The radar's proximity alert is for awareness-building. Do not rely on it excessively. Always maintain vigilance when cycling.

Cycling Precautions

Traffic Rules: Always abide by local traffic rules when cycling. This includes stopping at red lights, yielding to pedestrians, and using designated bike lanes where available.

Speed Limit: Do not exceed a safe speed for the road conditions. High-speed cycling reduces your reaction time and increases the risk of accidents.

No Random Crossing: Do not randomly cross roads or change lanes without proper signals and checks. Always look around and use hand signals to indicate your intentions.

Children's Safety: Do not allow minor children to ride bicycles alone. If children are riding, ensure they are supervised by an adult. Also, teach them not to rely solely on the radar of the device but to always be vigilant and ride safely.

Battery Warning

The device is powered by a lithium-ion battery. Incorrect handling can shorten its lifespan or cause damage, potentially leading to fires, burns, electrolyte leaks, and personal injury.

Temperature Limit

Keep the device away from heat sources and temperatures above 131°F (55°C). Avoid leaving it in direct sunlight or near heaters.

Operate it within the range of 4°F to 131°F (-20°C and 55°C). For long-term storage, maintain the ambient temperature between 32°F and 77°F (0°C and 25°C).

Handling

Keep the device out of the reach of children to prevent misuse or ingestion. Do not put the battery or any part of the device in your mouth. Seek medical help immediately if ingestion or exposure occurs.

Installation and Pre-use Precautions

Universal Compatibility: The DARVISO product is designed to be compatible with all types of bicycles. However, prior to installation, visually inspect the mounting areas on your bike to ensure a proper fit and the absence of any obstructions.

Installation: For the seat post or saddle mount, begin by cleaning all parts to remove any debris.

Follow the step-by-step installation instructions provided in the user manual precisely. Incorrect installation may cause the device to detach during cycling, potentially leading to an accident.

Before each ride, check that the device is securely fastened to the bicycle using the mounts. If your setup includes an aluminum alloy carabiner and braided anti-loss rope, also verify their good condition and proper attachment.

Device Precautions

Liquid Exposure: Do not submerge the product or its battery-containing parts in water or other liquids. Although it has an IP67 waterproof rating, avoid long-term or repeated exposure to water. Dry it thoroughly immediately if it gets wet.

Temperature Exposure: Do not expose the product to high temperatures or heat sources. Remove it from a hot vehicle to avoid damage and the risk of fire.

Operate within the temperature range of 4°F to 131°F (-20°C and 55°C). For long-term storage, keep it within the temperature parameters specified in the manual.

Component Usage: Use only the components provided with the product to avoid damage and safety risks. Storage: Store the device in the provided nylon bag when not in use to protect it from dust and scratches.

Legal Limitations

Users are responsible for following all safety instructions and applicable local laws. DARVISO, our manufacturers, and licensors are not liable for any damage caused by the use of this product during activities, misuse, improper installation, force majeure, any violation of traffic or safety regulations, or issues related to the device's components. This product is not warranted to be free from errors or defects or to be fit for any particular purpose. If you have any questions regarding your rights and responsibilities when using this product, consult a legal expert.

Warranty Policy

Common Abnormalities and Solutions

DARVISO warrants to the original purchaser of the Darviso Ride-X9 Intelligent Radar & Tail Light (hereinafter called "Product") that for a period of one year from the original date of purchase, the Product will be free from defects in material or workmanship under normal, non commercial use.

Avoid Distractions: The device is designed to enhance your awareness, but improper use can be distracting. Avoid focusing too much on the LED lights or sounds, as this may divert your attention from the road, leading to potential injury. Glance at the LED lights briefly and always stay alert to your surroundings.

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Installation: For the seat post or saddle mount, begin by cleaning all parts to remove any debris.

Follow the step-by-step installation instructions provided in the user manual precisely. Incorrect installation may cause the device to detach during cycling, potentially leading to an accident.

Before each ride, check that the device is securely fastened to the bicycle using the mounts. If your setup includes an aluminum alloy carabiner and braided anti-loss rope, also verify their good condition and proper attachment.

In addition, the Product is not warranted against failure and should not be used for any application where:

- There is a risk of data stored on the Product being breached or compromised.
- The data stored on the Product is relied upon for medical or lifesaving applications.

DARVISO disclaims any Warranty for the foregoing uses to the fullest extent permitted by law. The Customer assumes all risks associated with such uses of the Product and agrees to indemnify DARVISO for any damages claimed against DARVISO for such uses.

Warranty Disclaimers and Liability Limitations

Except for the express warranties stated above and to the maximum extent permitted by law, the products are provided "as is" and DARVISO disclaims all other warranties, including without limitation any implied warranty of MERCHANTABILITY, of FITNESS FOR A PARTICULAR PURPOSE, or of NON - INFRINGEMENT OF THIRD-PARTY RIGHTS.

To the maximum extent permitted by applicable law, in no event will Darviso be liable to the customer or any third party for any indirect, special, incidental, consequential, exemplary or punitive damages, including, without limitation, any lost profits or revenues, loss or inaccuracy of any data or cost of substitute goods, regardless of the theory of liability (including negligence) and even if Darviso has been advised of the possibility of such damages. Darviso's aggregate liability to the customer for actual direct damages for any cause whatsoever shall be limited to the cumulative product fees paid by that customer for the product causing the damages, if any.

Warranty Service Process

For Products Purchased through Agents or Retailers

Warranty Responsibility: If you purchased the Darviso Ride-X9 Intelligent Radar & Tail Light through an agent or a retailer, the agent or retailer is obligated to handle all warranty services as per our agreement with them. During the one-year warranty period, in case of any product defects or malfunctions, please contact the specific agent or retailer from whom you made the purchase. We have ensured that all our authorized agents and retailers are well-trained to handle your warranty claims efficiently.

Required Information: When reaching out to the agent or retailer, please have the following information readily available:

Purchase Documentation: A dated sales receipt that clearly indicates the place of purchase, the model number of the Product (Darviso Ride-X9 Intelligent Radar & Tail Light), and the amount paid. This receipt serves as proof of purchase and is crucial for validating your warranty eligibility.

Problem Description: Provide a detailed, step-by-step description of the problem you are experiencing with the product. Include any error messages that appear, abnormal behaviors such as unusual lights or sounds, or any visible physical damages. The more detailed your description, the faster the agent or retailer can assess the issue and provide an appropriate solution.

For Products Purchased through Amazon

Option 1: Contact Our After-sales Department

Contact Information: You can contact our dedicated after - sales department at support@darviso.com for all warranty-related matters. When sending an email, please include the following details:

Amazon Order Number: Locate your Amazon order number from your Amazon order history. This unique identifier allows us to quickly access your purchase details, including the date of purchase, shipping address, and product specifications.

Product Problem Description: Clearly describe the problem with the product. For example, if the radar function is not working correctly, explain when the issue started, under what conditions it occurs, and any steps you have already taken to troubleshoot. Include details about any error messages, if applicable, and any changes in the product's performance or appearance.

Option 2: Use Amazon's Return Process

Compliance with Amazon's Policy: You also have the option to directly contact Amazon for return, exchange, or refund applications. When using this option, you will need to comply with Amazon's after-sales policies. These policies cover aspects such as the return window, condition of the returned product, and the process for initiating a claim. Amazon's policies are designed to ensure a seamless experience for both customers and sellers. We will closely cooperate with Amazon throughout the process. Once you initiate the application through Amazon, our team will work in tandem with Amazon to handle your after-sales request. We will keep you updated on the progress of your request, whether it's a repair, replacement, or refund.

Cosmetic and normal wear and tear damage: Cosmetic damage caused by normal wear and tear.

Shipping damage: Damage occurring during product transit. Customers are advised to obtain shipping insurance if