

Qingdao Magene Intelligence Technology Co.,Ltd.

USER MANUAL

Electronic Rear Derailleur

ERD200



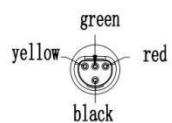
1. Product Overview

The ERD200 Electronic Rear Derailleur is a high-performance ebike transmission system component specifically designed for road and commuting purposes. It offers two versions: 11 - 36T and 11 - 46T. Equipped with advanced electronic control technology, this product enables precise shifting and a stable operating experience. The ERD200 supports direct connection to the main battery of the electric bicycle. It comes with various control options such as road bike wireless shifters and flat-bar wireless buttons. While ensuring the continuous and stable operation of the device, it significantly simplifies the system integration process, providing an efficient and convenient solution for creating intelligent and multi - functional electric bicycle solutions.。

2. Technical Parameters

2.1. Electrical Interface

Front view of the connector



HYT-F, S-Z409LMB

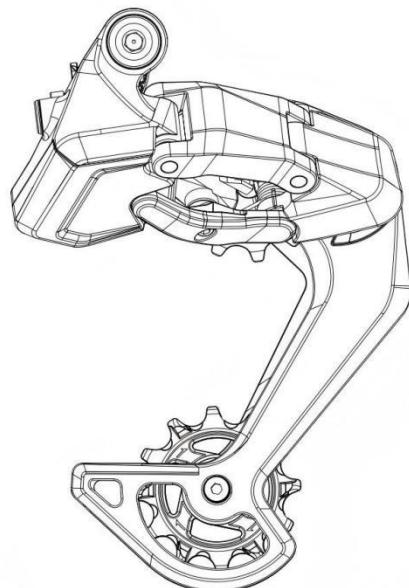
Function

red: VCC

black: GND

yellow: CAN_L

green: CAN_H



2.2. Specification Parameters

Product Model	ERD200	
Certification Model	P0207379	
SKU	ERD200-36T	ERD200-46T
Operating Voltage (VDC)	20V-60V	
Communication Protocol	CAN/2.4G/BLE	
Rear Speeds	10s-12s	
Compatible low-high sprocket	11T-36T	11T-46T
Average weight	266g	270g
Color	黑色	
Operating Temperature	-20°C~45°C	
Storage Temperature	-20°C~50°C	
Waterproof Rating	IPX7	

* The main difference between ERD200 - 36T and ERD200 - 46T is that they have different derailleur cages to adapt to cassettes with different numbers of teeth.

3. Installation & Usage

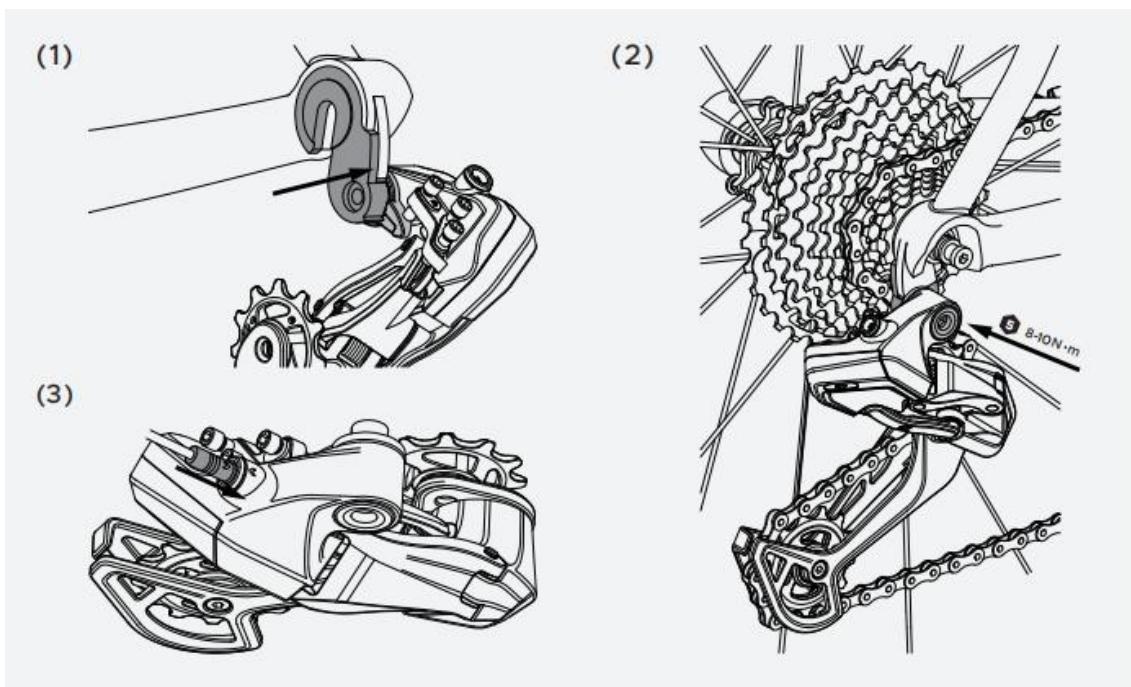
3.1. Install the Rear Derailleur

- (1) When installing the rear derailleur, ensure that there is no gap between the dropout and the derailleur hanger.
- (2) Lock the rear derailleur onto the derailleur hanger in the direction of the

arrow shown in the diagram (8 - 10N·m). After locking, there should be no obvious axial wobbling.

(3) Align the arrow - marked position at the other end of the wire with the arrow - marked position on the rear derailleur as shown in the diagram, and then insert it into the port. You can check the distance between the tip of the largest cassette tooth and the wheel spokes. The spacing value should be greater than 5mm to avoid the risk of interference and rubbing caused by mixing different

types.



3.2. Adjust the Rear Derailleur

(1) Place the chain on the largest cassette sprocket and the smallest chainring. (Note: If the rear derailleur cannot shift to the largest cassette gear position when not in the limit state, perform "overall offset" in the APP until the rear derailleur can reach this gear position, and the upper jockey wheel is

aligned with the largest cassette sprocket.)

(2) The B - screw is as shown in the figure.

(3) Use a 2.5mm hex wrench to adjust the B - screw, and adjust the distance between the tip of the jockey wheel tooth and the tip of the highest tooth on the largest cassette sprocket to be between 5 - 10mm.

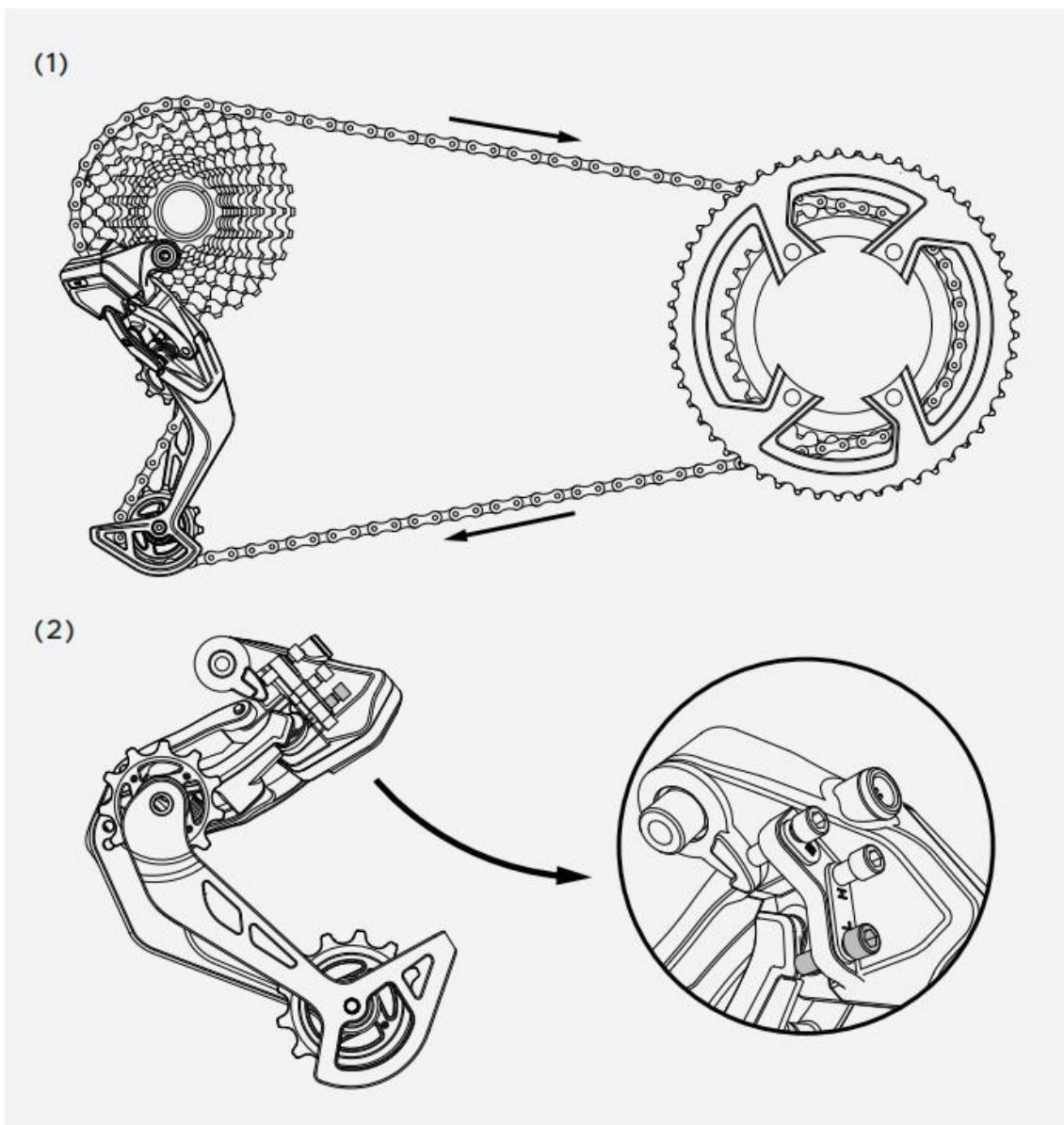
Note: To avoid chain drop when the rear derailleur shifts to the extreme gear positions without adjustment, which may be caused by differences in frame sizes or improper operation. The H/L limit screws of the rear derailleur are at the extreme positions during factory - out. Please adjust them to the appropriate state according to the actual situation.

Try to adjust the H screw counter - clockwise several times, 20° each time, until the rear derailleur can shift to the smallest cassette sprocket.

Try to adjust the L screw counter - clockwise several times, 20° each time, until the rear derailleur can shift to the largest cassette sprocket.

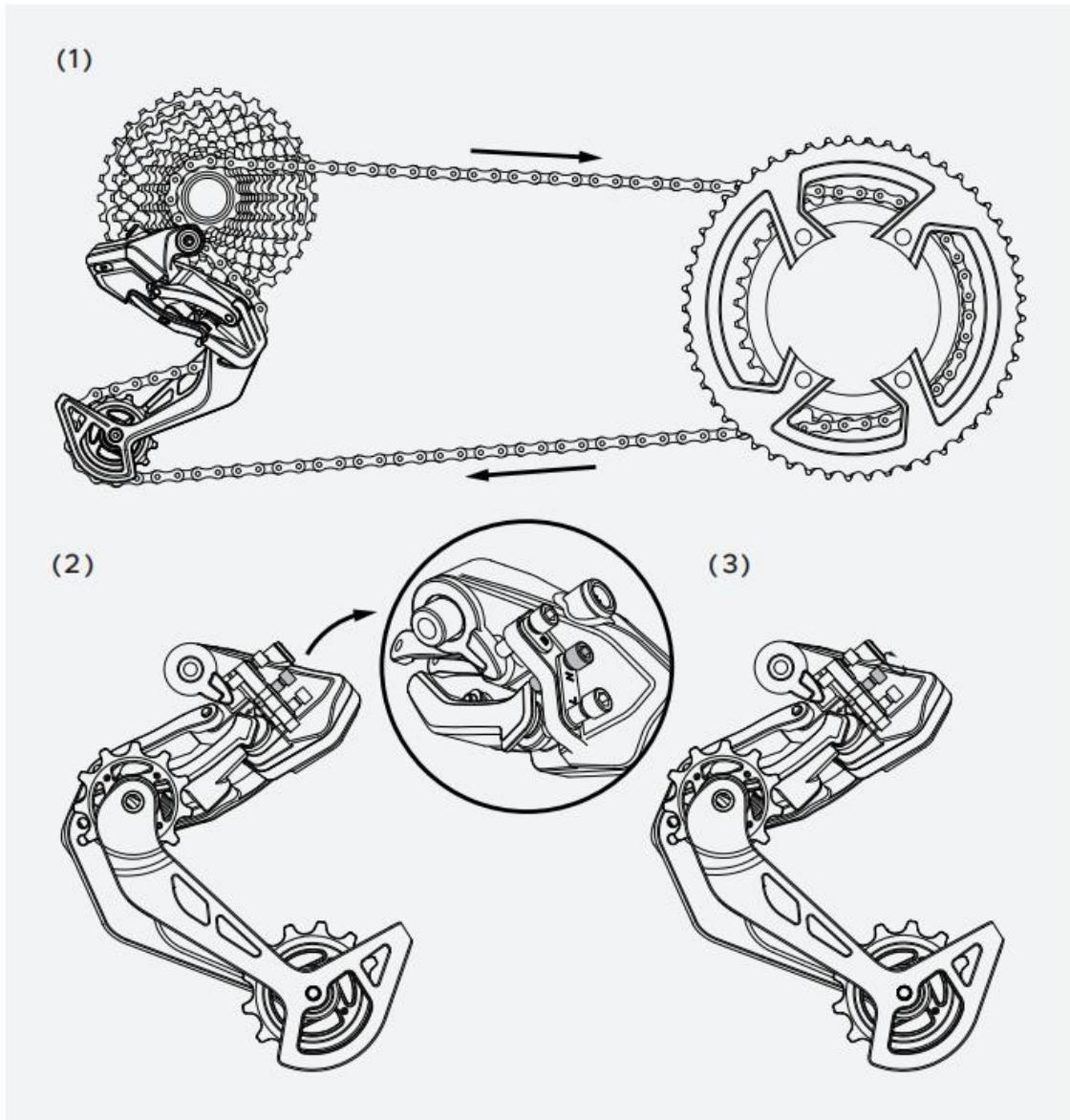
3.3. Adjust the Low - gear Screw

- (1) Shift the rear derailleur to the gear position of the largest cassette sprocket.
- (2) Use a 2.5mm hex wrench to adjust the low - gear screw. After it gently touches the limiting part of the inner connecting rod, turn it back by a quarter turn.



3.4. Adjust the High - gear Screw

- (1) Shift the rear derailleur to the position of the smallest cassette sprocket gear.
- (2) Use a 2.5mm hex wrench to adjust the high - gear screw. After it gently touches the limit part of the inner connecting rod, turn it back by a quarter turn.



3.5. Use the APP to adjust the rear derailleur

The rear derailleur has had its relevant parameters configured in accordance with the flywheel specifications and specific requirements specified by the customer during the manufacturing process. Under normal circumstances, after completing the installation following the steps mentioned above, it can be put into use. If the gear - shifting becomes unsMOOTH due to flywheel replacement or other factors, you can use the

dedicated APP to adjust the rear derailleur and make the flywheel adapt properly.

3.6. Indicator Light for Rear Derailleur Status

Function	Indicator Light Effect	Rear Derailleur Status
Shifting	The blue light blinks.	Gear shifting is successful
	The red light blinks rapidly	Gear shifting failure
Pairing	The green light blinks slowly	Unpaired, scanning
	The blue light blinks slowly	Paired, searching
	The blue light blinks rapidly	Connection successful
	The red light blinks rapidly	Connection failed
	The green light blinks rapidly	Unpaired
Upgrade	The red light blinks slowly	Upgrading

■ WEEE (Waste Electrical and Electronic Equipment) European Directive

2012/19/EU



This symbol on the product or on its packaging indicates that this product must not be disposed of with your household waste. Instead, it is your responsibility to dispose of your waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will

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help to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local city office, your household waste disposal service or the shop where you purchased the product.

■ **CE Declaration of Conformity**

Hereby, Qingdao Magene Intelligence Technology Co., Ltd. declares that this product is in compliance with the Directive 2014/53/U. The full text of the EU declaration of conformity is available at the following internet address: <https://magenefitness.com/certificate.html>

■ **FCC Statements**

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference.
- (2) This device must accept any interference received, including interference that may cause undesired operation.

NOTE: The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications or changes to this equipment. Such modifications or changes could void the user's authority to operate the equipment.

NOTE: 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.

■ RF Warning

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction. Federal Communication Commission (FCC) Radiation Exposure Statement: Power is so low that no RF exposure calculation is needed.