

# AEGIS RADAR USER MANUAL

# **Aegis Radar**

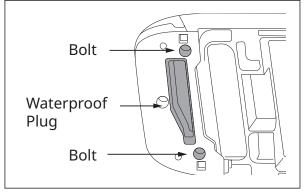
The Aegis Radar is an integrated safety system that combines rear light functionality with vehicle detection. The system actively detects vehicles approaching from behind and automatically adjusts the rear light flash pattern to enhance visibility. Vehicle proximity alerts are displayed on the screen, providing riders with real-time awareness. The system seamlessly integrates with the rear light assembly to deliver a reliable and worry-free cycling experience.

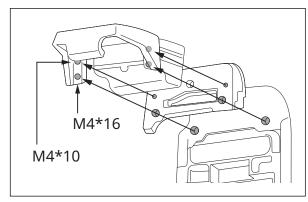
# **Specifications**

Dimension	69 x 41 x 37mm
Weight	56g (bracket is excluded)
Operating Voltage	5V
Operating Temperature	-20°C~60°C (-4°F~140°F)
Storage Temperature	-20°C~80°C (-4°F~176°F)
Data Transfer	CAN bus
Dust and Water protection	IPX6, IPX7
Detection distance	Up to 140m
Detection vehicle relative speed	From 10 to 100km/h (6 to 60mph)
Detection vehicle number	Up to 8 units
Radar beam width	40 degrees

#### **Installation**

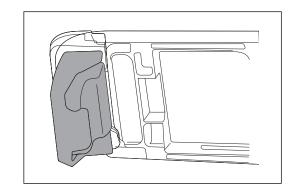
- Step1: Remove the two bolts and the waterproof plug on the underside side of the taillight.
- Step2: Connect the connector under the taillight to the radar.
- Step3: Slide the bracket onto the radar, aligning it with the mounting points. Use a 2.5mm hex torque to secure the bracket to the taillight with two M4\*16 bolts and two M4\*10 bolts with 3.5-4Nm.





step 1 step 2,3

Double check if the Aegis Radar is properly installed. The Aegis Radar should not move or rotate in any direction.



# **Setting**

#### Radar on/off

The default setting is "on". When Aegis Radar is off, the right lane display and the sound notification will be deactivated.

## Radar beeper on/off

The default setting is "on". When Aegis Radar beeper is off, the right lane display will be remained, and the alert notification will be turned off.



#### **INFO**

Using the setting menu or the RideControl App to adjust the setting.

## Viewing radar on the display

When the radar detects the vehicle approaching the e-bike from behind, it will display the information as dots on the screen. The color will change according to the potential threat level, accompanied by the beeper alarm to provide the warning.

Color	Situation	Beeper alarm
Red	Vehicle approaches with high speed (speed difference ≥ 60km/h)	Twice
Green	Vehicle approaches with low speed (speed difference < 60km/h)	Once

**Note** Red warning indicators appear at both the upper and lower screen boundaries.



#### **WARNING**

The radar serves as a reference of approaching vehicles for minimizing the potential risk of bike accident. However, please pay attention to the surroundings when riding and do not complete rely on the radar for your own safety.



#### **INFO**

- Aegis Radar's accompanying taillight will flash to alert approaching vehicles from behind to enhance safety.
- The Aegis Radar requires a compatible display unit (such as RideControl Go Lux, Ride-Control Dash 2, or RideDash Evo 2.0) to show information and alerts.

## Warranty

Giant warrants for the original owner of the Aegis Radar to be free from defects in material and workmanship for the period of two years from the date of purchase. This warranty applies only when the Aegis Radar is purchased new from an authorized dealer.

# **Safety information**

Read the safety information and the manual before using. Improper use can cause damage of the component and/or injuries. Save the safety information and the manual for your future reference!

- Stay focused while riding do not let the Aegis Radar or display information distract you.
- Maintain control of your e-bike at all times when interacting with the Aegis Radar.
- Do not use the Aegis Radar as a handle to lift up your e-bike! This can lead to irreparable damage of the component.



#### **WARNING**

- The Aegis Radar serves only as an assistance tool and cannot replace your visual judgment and road condition observation.
- Stay alert and regularly check for approaching vehicles using your mirrors. Do not rely solely on the radar system.
- Adverse weather conditions (such as heavy rain or fog) may affect radar detection performance.
- Radar detection may be limited when turning, in tunnels, or under complex road conditions.



## **NOTICE**

- Keep the radar sensor and taillight assembly clean to prevent dirt from affecting detection performance.
- Check the radar system regularly to ensure proper operation.
- If any abnormality is detected (such as false alerts or detection failure), contact an authorized dealer immediately for inspection.

## **Disclaimer**

To ensure safety, quality and reliability, use only original parts or Giant authorized replacements for repair and replacement. Giant is not responsible for any direct, incidental or consequential damages, including, without limitation, damages for personal injury, property damage, or economic losses due to improper use.

#### **FCC**

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 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.

**FCC Caution** Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. 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.

## **IMPORTANT NOTE** FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20 cm between the radiator & your body.

#### FCC ID: ZL7-RADAR1

#### IC statement

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

- 1. This device may not cause interference.
- 2. This device must accept any interference, including interference that may cause undesired operation of the device.

Cet appareil contient des émetteurs / récepteurs exempts de licence qui sont conformes au (x) RSS (s) exemptés de licence d'Innovation, Sciences et Développement économique Canada. L'opération est soumise aux deux conditions suivantes:

- 1. Cet appareil ne doit pas provoquer d'interférences.
- 2. Cet appareil doit accepter toute interférence, y compris les interférences susceptibles de provoquer un fonctionnement indésirable de l'appareil.

## **IMPORTANT NOTE** IC Radiation Exposure Statement:

This equipment complies with IC RSS-102 radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated greater than 20 cm between the radiator & your body.

Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé à plus de 20 cm entre le radiateur et votre corps.

IC: 9707A-RADAR1

#### **CE Statement**

This equipment complies with EU radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20 cm between the radiator & your body.

# **EU Declaration of conformity**

We, Giant MFG. Co., Ltd., declare that the equipment is compliance with the requirement limits of applicable standards, in accordance with the Council Directives 2014/53/EU, 2014/30/EU. The test record, data evaluation and Equipment. Under Test (EUT) configurations represented herein are true and accurate under the standards herein specified.

- ETSI EN 301 489-1: V2.2.3 (2019-11)
- ETSI EN 301 489-3: V2.3.2 (2023-01)
- EN 55032: 2015+A11:2020
- EN 55035: 2017+A11:2020
- IEC 61000-4-2: 2008
- IEC 61000-4-8: 2009
- EN 61000-4-2: 2009
- EN IEC 61000-4-3:2020
- AN/NZS CISPR 32: 2015+A1:2020
- EN 62368-1:2014+A11: 2017
- EN 300 440 V2.2.1 (2018-07)
- EN IEC 62311:2020

# **RF Exposure warning**

This device meets the EU requirements (2014/53/EU) on the limitation of exposure of the general public to electromagnetic fields by way of health protection. The device complies with RF specifications when the device used at 20 cm from your body.

# Frequency range and max. Transmit power

Technologies	Frequency range (MHz)	Max. Transmit Power (EIRP)
24 GHz mmWave	24.05 - 24.25GHz	19.9 dbm

