



## Camera system RS-1000



### Mounting and operating instructions for the rear light function



As of: 12-2023

---

## About the instructions

These instructions are part of the RS-1000 bicycle camera system with rear light function. The RS-1000 camera system transmits the image of the traffic behind to a smartphone in the rider's field of vision.

These instructions describe mounting on the bicycle and the rear light function of the camera system.

The camera function is not part of the instructions.

-  Pairing between the camera system and smartphone is a prerequisite for the rear light function to work.

Pairing is described in a separate document, which is available under the adjacent QR code.



Alternatively, refer to the URL <https://www.ride-safety.com/RS-1000-manual.html>.

The camera system RS-1000 is referred to below as "RS-1000".

## **Manufacturer**

ALPS ALPINE EUROPE GmbH

Ohmstraße 4 | 85716 Unterschleißheim

089-3214210 | [ride-safety@alpsalpine.com](mailto:ride-safety@alpsalpine.com)

[www.alpsalpine.com](http://www.alpsalpine.com)

The statutory warranty conditions apply to the RS-1000 camera system.

# Table of contents

<b>1</b>	<b>Safety</b>	<b>5</b>
1.1	Intended use	5
1.2	Safety notes	6
<b>2</b>	<b>Description</b>	<b>7</b>
2.1	Scope of delivery and required material	7
2.2	Overviews	8
2.3	Technical data	15
<b>3</b>	<b>Mounting the RS-1000</b>	<b>16</b>
3.1	Recharge before mounting	16
3.2	Choose the type and location of mounting	17
3.3	Mounting with bracket	18
3.4	Mounting without bracket	24
3.5	Connecting the cable (e-bikes only)	25
<b>4</b>	<b>Operation and care</b>	<b>26</b>
4.1	Switching On and Off	26
4.2	Performing a reset	27
4.3	Taking care of the RS-1000	28
<b>5</b>	<b>Disposing of the packaging and device</b>	<b>28</b>
<b>EU Declaration of Conformity</b>		<b>30</b>

# 1 Safety

## 1.1 Intended use

The RS-1000 is intended for use on bicycles in road traffic. It can be mounted on the seat post or luggage rack and serves as a digital rear-view mirror on the handlebar. The system records the traffic behind and transmits the image to a smartphone in the rider's field of vision.

The RS-1000 must be supplied with power:

- for e-bikes via the rear light connection,
- for other bicycles by first charging via the supplied USB-C-Kabel.

Note: This product complies with the specified limits for radio frequency emissions from portable apparatus in an uncontrolled environment and is safe for the intended use as described in this manual. A further reduction in radio frequency exposure can be achieved by keeping the product as far away from the body as possible.

## 1.2 Safety notes

### **⚠ DANGER**



**High accident risk if the rear light function fails at dusk or in the dark**

Danger of serious or even fatal injuries!

- ▶ Never ride without an illuminated rear light.
- ▶ Recharge the battery as soon as the RS-1000 indicates a low battery level.
- ▶ Keep the cover cap firmly closed over the connections at all times to prevent the ingress of water and dirt.

## **2 Description**

### **2.1 Scope of delivery and required material**

#### **Scope of delivery**

- RS-1000 camera system with rear light function
- Adapter plate with 2 screws
- Seat support bracket
- 2 rubber adapters
- USB-C cable
- Assembly and operating instructions

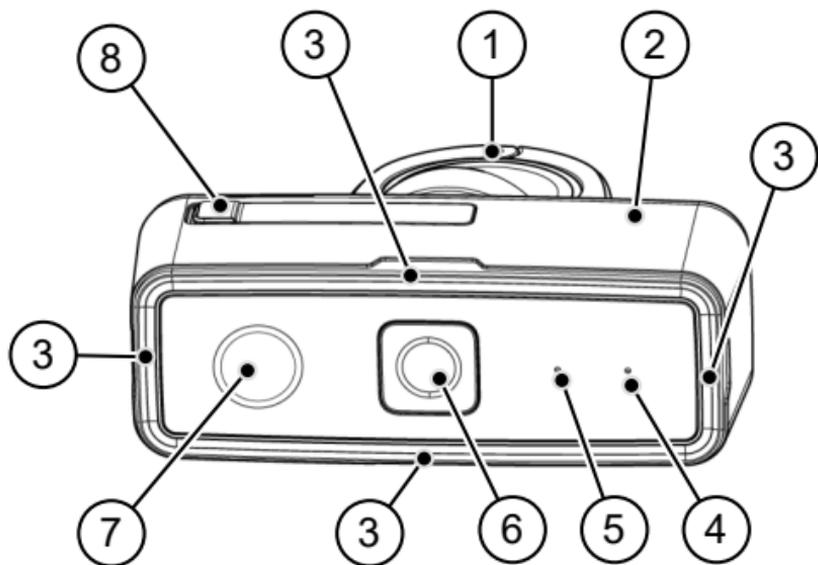
#### **Required material**

You will need the following for mounting and operation:

- for permanent mounting on the luggage rack:  
2 screws M5
- for battery operation: USB-C charger

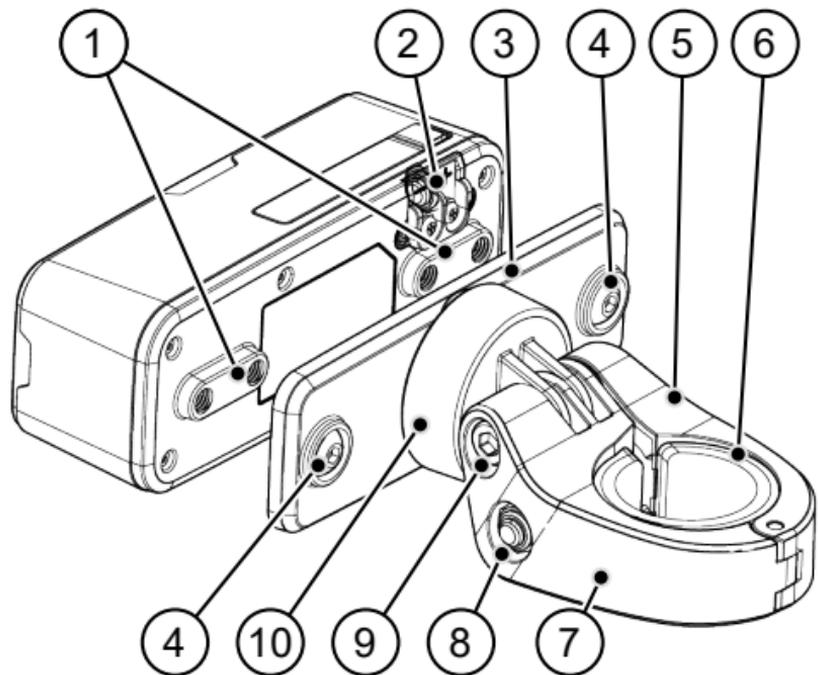
## 2.2 Overviews

### Front



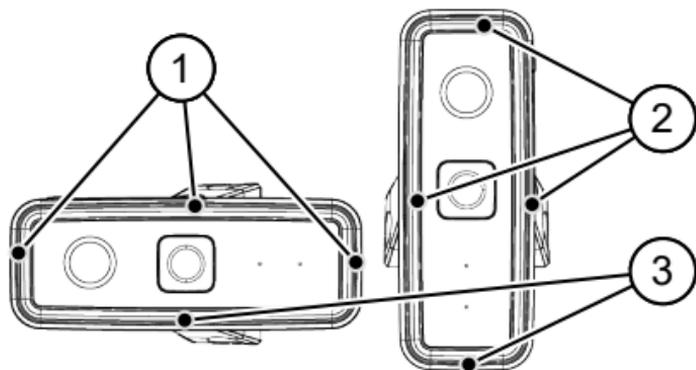
- 1 Bracket (see below)
- 2 Housing
- 3 Light strips on the four sides (2 LEDs each)
- 4 Acoustic signal output
- 5 Microphone
- 6 On/Off-switch
- 7 Camera
- 8 Cover cap for USB connection, memory card and reset button

## Rear and bracket



- 1 4× M5 thread for fastening with 2 screws (not supplied) to the rear light bracket of the bicycle, screw spacing 50 or 80 mm
- 2 DC IN  $-/+$  12 V (see p. 14)
- 3 adapter plate
- 4 screws 4 mm to fasten the adapter plate (alternative to fastening without bracket, see p. 24)
- 5 movable mounting clip
- 6 rubber adapter
- 7 rigid mounting clip
- 8 hexagon socket screw 4 mm to fasten the clip to the seat post
- 9 hexagon socket screw 4 mm to adjust the angle
- 10 Rotating frame holder

## Light strips



- 1 illuminated LEDs with horizontal assembly
- 2 illuminated LEDs with vertical assembly
- 3 weak illumination: indicates low battery level

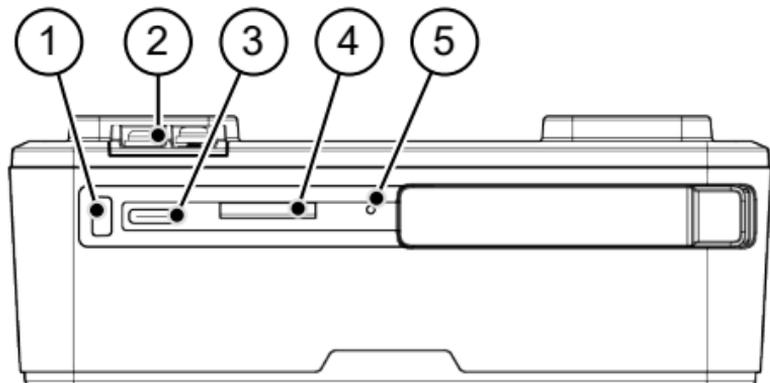
## Lighting behaviour

Lighting behaviour when braking:

- the LEDs light up brighter when braking lightly
- the LEDs flash when braking hard

All 4 light strips light up when the battery is fully charged (for lighting behaviour during the charging process, see also p. 16).

## Connections under the side cover cap



- 1 Opening for fixing the cover cap
- 2 DC IN +/- 12 V: For cable connection to the E-bike's battery
- 3 USB socket for supplied USB-C cable
- 4 Slot for memory card (Micro SD)
- 5 Reset opening

## 2.3 Technical data

Dimensions:	105 × 33 × 40 mm
Weight:	160 g
Camera:	Full HD
Memory capacity:	32 GB
Connectivity:	WiFi
Interfaces:	USB-C microphone memory card SD 3.0, 16 to max. 512 GB* DC IN
Ambient temperature:	-10...50 °C
Protection class:	IP 55 and IP 57

\*Recommended map standard for the camera function: at least UHS U3

### 3 Mounting the RS-1000

#### **⚠ DANGER**



**The RS-1000 can come loose if mounted incorrectly.**

Danger to life!

- ▶ Mount the RS-1000 following these instructions.

#### 3.1 Recharge before mounting

If the RS-1000 is not supplied with power from an e-bike battery, you must charge it before mounting.

- ▶ Connect the RS-1000 via the supplied USB-C cable with a charger.

The LEDs indicate the battery level: The first light strip flashes when charging starts. As the charge increases, the other light strips flash one after the other. When fully charged, all 4 light strips light up

permanently.

The battery power last for at least 2 hours of use.

### **3.2 Choose the type and location of mounting**

The RS-1000 can be mounted as follows:

- with bracket, vertically or horizontally, on the seat post
- without bracket horizontally on the luggage rack.

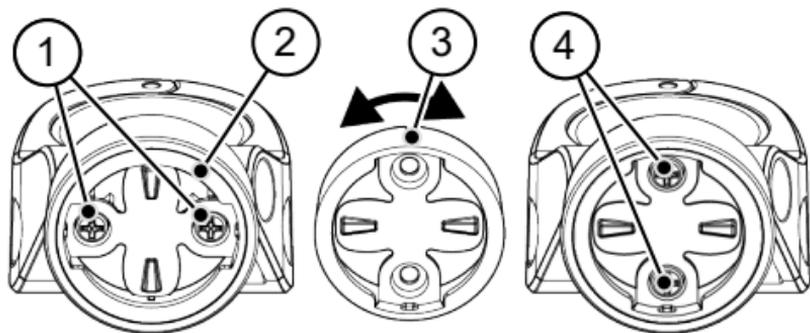
The diameter of the mounting rods can be 25 to 32 mm.

After mounting, the RS-1000 must:

- be vertical to the roadway
- have a distance of 25 to 120 cm to the ground
- be clearly visible from the rear.

### 3.3 Mounting with bracket

The rotating frame (3) in the rotating frame holder (2) has two screws (1, 4).



#### Selecting the alignment

The two screws must be

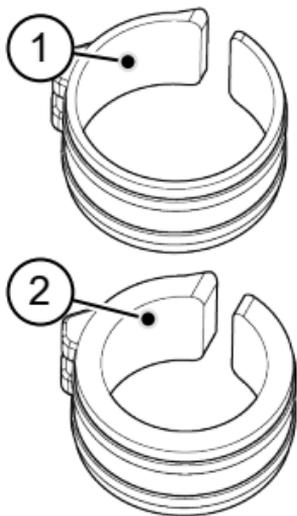
- mounted vertically if the RS-1000 is to be positioned horizontally,
- mounted horizontally if the RS-1000 is to be positioned vertically.

## Remounting the rotating frame:

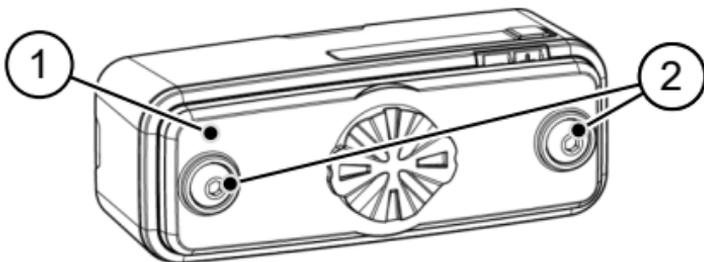
- ▶ Loosen the screws (1) in the rotating frame (2).
- ▶ Turn the rotating frame by 90° (3).
- ▶ Insert it in the holder and screw down the screws (4) again.

## Selecting the rubber adapter

- ▶ Select the correct rubber adapter:
  - thin rubber adapter (1) for a bar with a diameter of 26–28 mm,
  - thick rubber adapter (2) for a bar with a diameter of 30–32 mm.

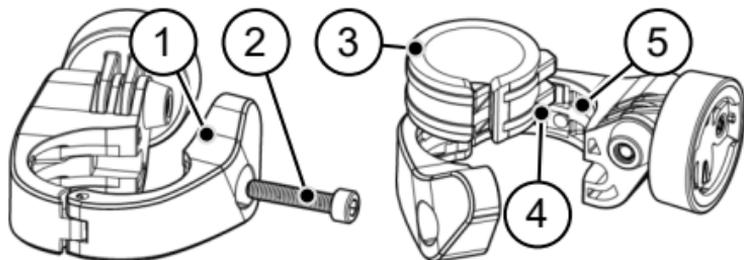


## Mounting the adapter plate



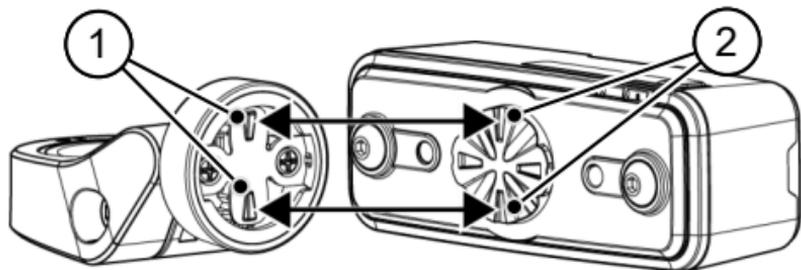
- ▶ Mount the adapter plate (1) with the two hexagon socket screws (2).

## Mounting the bracket to the bicycle



- ▶ Loosen the hexagon socket screw 4 mm (2).
- ▶ Open the movable clip (1).
- ▶ Insert the rubber adapter (3) so that the two lugs (4) engage in the recesses (5) on the rigid clip.
- ▶ Place the bracket with rubber adapter around the seat post or a bar on the luggage carrier.
  - The rotating frame points to the back.
- ▶ Close the movable clip and screw down the screw with 8 Nm (hand-tight).
  - ✓ The bracket is mounted.

## Attaching the RS-1000



- ▶ Attach the RS-1000 to the rotating frame so that both lugs (1) on the rotating frame engage in the corresponding recesses (2) on the adapter plate.
  - The RS-1000 must click into place.
- ▶ Turn the RS-1000 by 90° to the left or right.
  - The RS-1000 must click into place.
  - ✓ The RS-1000 is fastened.

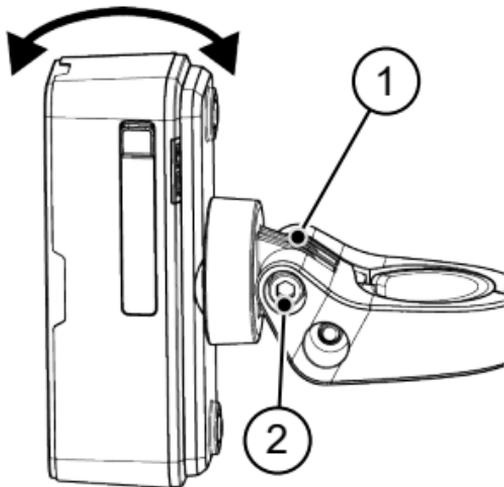
## Adjusting the angle

If the RS-1000 is not vertical to the road, correct the angle setting as follows:

- ▶ Loosen the screw 4 mm (2).

The RS-1000 can now be rotated via the hinge (1).

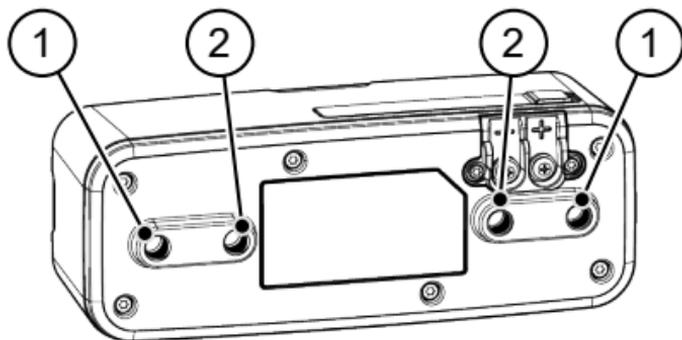
- ▶ Turn the RS-1000 vertical.
- ▶ Tighten the screw.



### 3.4 Mounting without bracket

You can mount the RS-1000 directly on a standard luggage rack mount without a bracket. The 4 mm screws for fastening the adapter plate (see p. 11) can be used for this, provided they are long enough.

- ▶ Unscrew the adapter plate (see p. 20).
  - There are 4 screw threads on the back of the RS-1000.



- ▶ Use the two outer screw threads (1) for mounting with a screw spacing of 80 mm.
- ▶ Use the two inner screw threads (2) for mounting with a screw spacing of 50 mm.

### **3.5 Connecting the cable (e-bikes only)**

- ▶ Connect the 12 V cable of the e-bike to the + and - connections of the DC IN input with the correct polarity.
  - The RS-1000 is powered up. All light strips light up. After approx. 1 minute, the light strip currently at the bottom goes out.
  - ✓ The RS-1000 is operational.

## 4 Operation and care

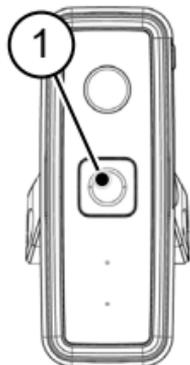
### 4.1 Switching On and Off

When connected to an e-bike battery, the RS-1000 switches itself on.

- ▶ To switch on without the e-bike battery, press the button (1) for approx. 3 seconds.

#### Powering up:

- The RS-1000 is powered up. All light strips light up. After approx. 1 minute, the light strip currently at the bottom goes out.
- ✓ The RS-1000 is operational.



- ▶ To switch off, press the button (1) for approx. 3 seconds.
  - ✓ The RS-1000 is powered down.

### **Switching to and from standby:**

- ▶ Briefly press the button (1).

The RS-1000 switches off after a few minutes in standby mode.

## **4.2 Performing a reset**

The Reset opening is located under the cover cap (see p. 14).

- ▶ Press a pointed object (e.g. a bent paper clip) into the reset opening.
  - Press for approx. 3 sec.: The RS-1000 switches to the pairing mode. Existing connections remains stored.

- Press for approx. 10 sec.: The system is reset to the factory setting. Any WiFi connection is also deleted.

### **4.3 Taking care of the RS-1000**

The RS-1000 is maintenance-free.

#### **Clean regularly**

- ▶ Ensure that the LEDs in the light strip can be clearly seen at all times.
- ▶ If necessary, wipe the RS-1000 with a dry or slightly damp cloth.

## **5 Disposing of the packaging and device**

### **Disposing of the packaging**

The packaging consists of paper.

- ▶ Dispose of the packaging in accordance with the regulations for the disposal of waste paper applicable at the place of use.

### **Disposing of the RS-1000**



- ▶ Dispose of the RS-1000 in accordance with the regulations for electrical waste applicable at the place of use.

# EU Declaration of Conformity

Hereby we,

Name of manufacturer: Alps Alpine Europe GmbH.  
Address: Ohmstr. 4, 85716 Unterschleissheim  
Zip code & City: 85716 ,Unterschleissheim  
Country: Germany  
Telephone number: +49 89 324264 668

declare that this DoC is issued under our sole responsibility and that this product:

Product description: RIDE SAFETY SYSTEM  
Type designation(s): RS-1000  
Trademark: Alps Alpine Europe GmbH  
Batch / Serial number: NA

**Object of the declaration** (further identification of the radio equipment allowing traceability; it may include a color image for the identification of the radio equipment):

*This bike camera can record the road conditions behind you while you are riding.*

**is in conformity with the relevant Union harmonization legislation:**

Radio Equipment directive: **2014 / 53 / EU**

and other Union harmonization legislation where applicable:

with reference to the following standards applied:

EN 50566: 2017, EN 62209-2:2010/A1:2019

EN 62368-1:2014+A11:2017 EN 62471: 2008

EN301489-1 V2.2.3 , EN301489-17 V3.2.4 EN 55032: 2015 + A11: 2020

EN 55035: 2017+A11 :2020

EN 300 328 V2.2.2

EN 301 893 V2.1.1

EN 300 440 V2.1.1

**The Notified Body KIWA, with Notified Body number 0063 performed:**

B+C

**Where applicable:**

The issued EU-type examination certificate: 232140239/AA/00

Description of accessories and components, including software, which allow the radio equipment to operate as intended and covered by the DoC:

**Signed for and on behalf of:**



Germany, 2023-06-08

*Place and date of issue*

*(Name), (title) signature*

## **Manufacturer**

ALPS ALPINE EUROPE GmbH

Ohmstraße 4 | 85716 Unterschleißheim | Germany

089-3214210 | [ride-safety@alpsalpine.com](mailto:ride-safety@alpsalpine.com)

[www.alpsalpine.com](http://www.alpsalpine.com)

---