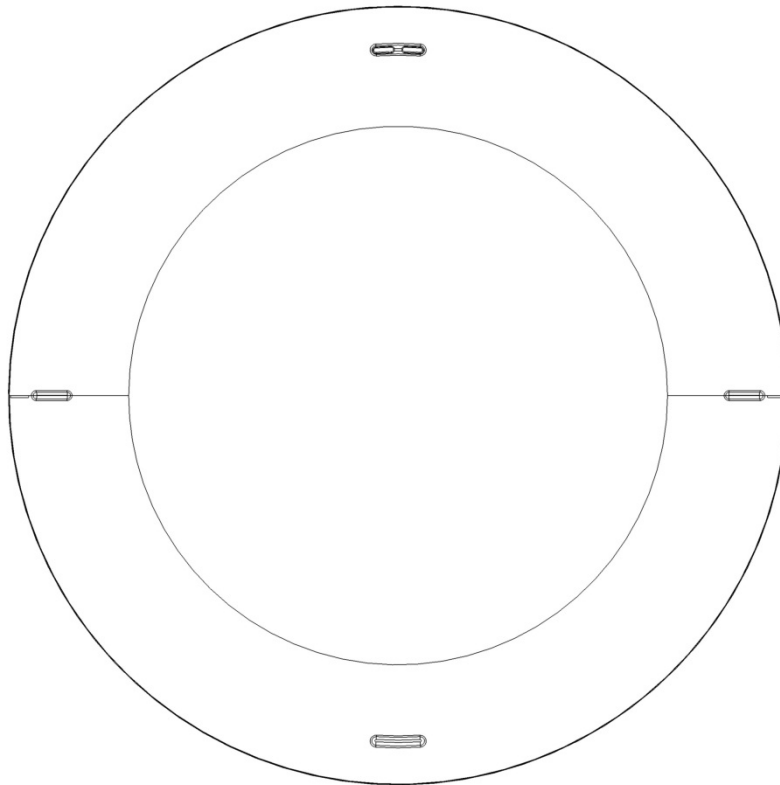


## Quuppa LD-6L

# Installation Guide and Safety Information



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## For your safety

Read these simple guidelines. Not following them may be dangerous or illegal. Read the complete installation guide for further information.

### **SWITCH ON SAFETY**

**Do not switch the device on when the use of wireless devices is prohibited or when it may cause interference or danger**

### **INTERFERENCE**

**All wireless devices may be susceptible to interference, which could affect performance**

### **QUALIFIED SERVICE**

**Only qualified personnel may install, configure, or repair this product**

### **ACCESSORIES**

**Use only approved accessories. Do not connect incompatible products**

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When connecting to any other device, read its user guide for detailed safety instructions. Do not connect incompatible products.

# 1. Introduction

Quuppa LD-6L (HAIP Locator) is a part of the Quuppa HAIP System. Other parts of the Quuppa HAIP system are Quuppa LD-6T (HAIP Tag) and Quuppa Positioning Engine software. The Quuppa HAIP System allows you to locate and track any objects equipped with HAIP Tags in an environment equipped with HAIP Locators.

Read this guide carefully before having the Quuppa LD-6L professionally installed. Also, watch the Quuppa Site Planner and Quuppa Deployment tutorial videos before starting to use the HAIP system. For the latest guides, additional information, and downloads related to your Quuppa product, go to [www.quuppa.com/support](http://www.quuppa.com/support).

This product may contain small parts. Keep them out of reach of small children.

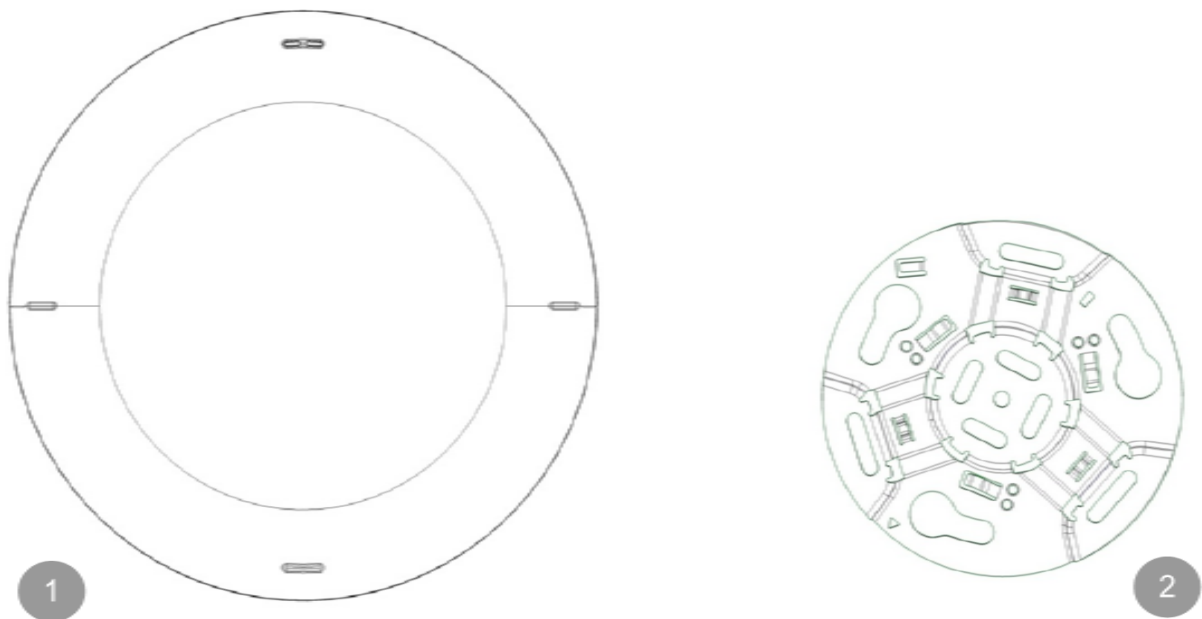
## About this document

Main features and first use of the Quuppa LD-6L are described in “Get started”, page 5. Installation to an indoor space is described in “Installation”, page 9. Quuppa LD-6L should only be installed by a qualified service technician using the original Quuppa parts supplied in the sales package.

## 2. Get started

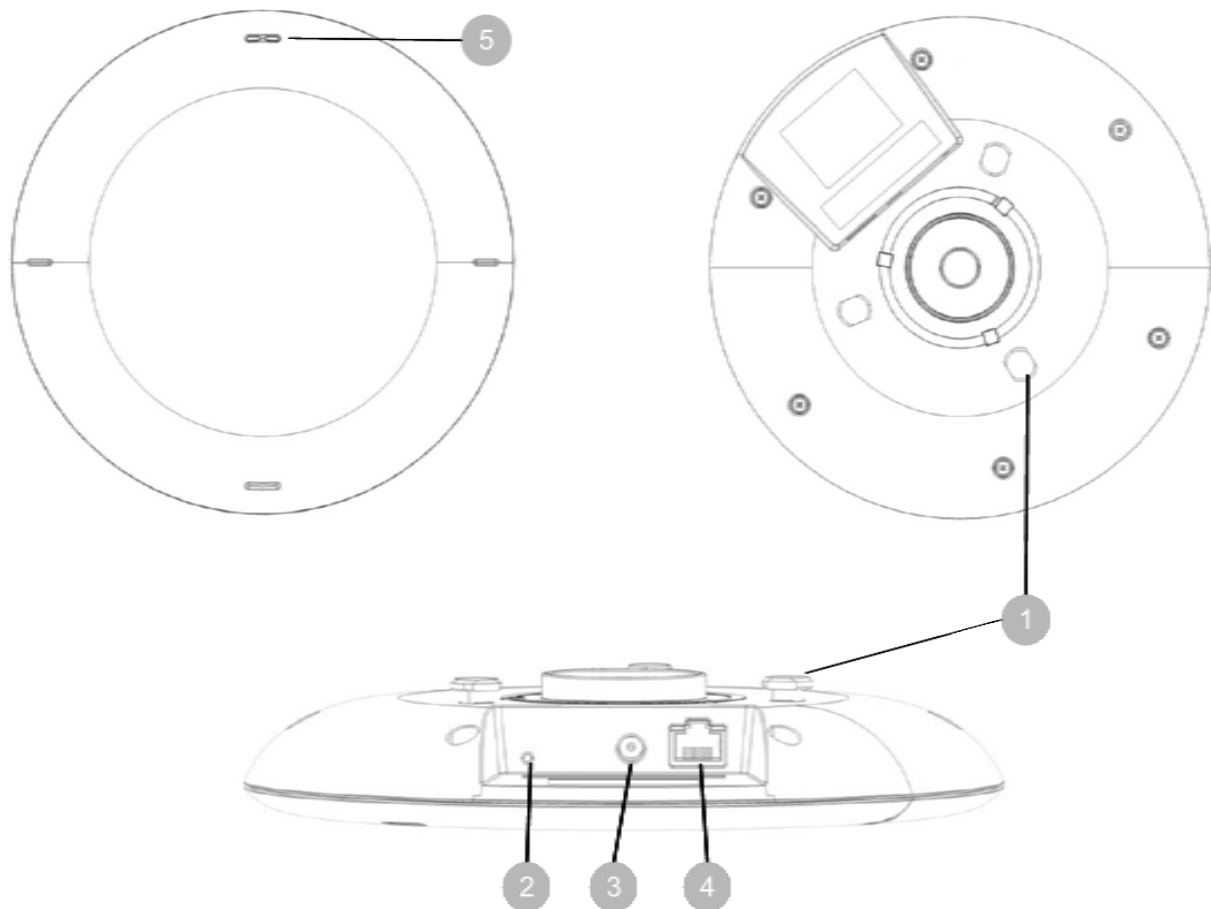
### Parts

Quuppa LD-6L contains the following parts:



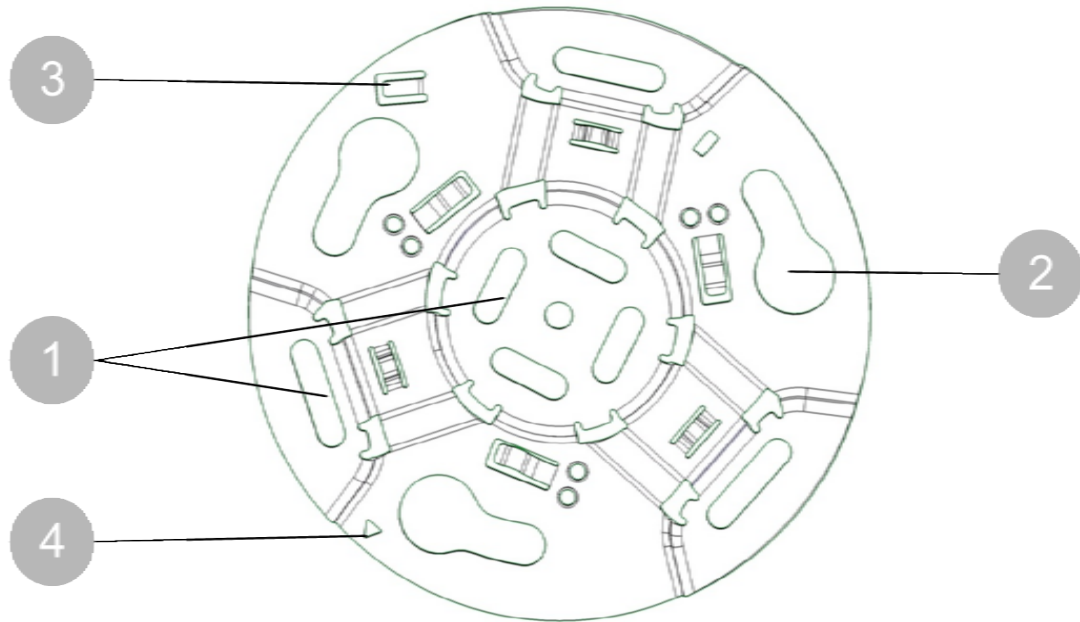
1. Quuppa LD-6L main unit
2. Quuppa LD-6L mounting bracket

## Quuppa LD-6L main unit



1. Bracket mounting pins
2. Reset button
3. 12V DC connector
4. Ethernet connector
5. Indicator lights

## Mounting Bracket



1. Holes for ceiling/wall mounting screws
2. Holes for mounting bracket mounting pins
3. Safety lock
4. Orientation indicator

## Connect to power supply

### *Option 1: Use Power over Ethernet (PoE)*

Quuppa LD-6L supports the use of standard PoE (Power over Ethernet) components, e.g. PoE switch or power injector, as its power source. Only use standard certified PoE devices.

When using PoE, a separate DC power supply is not required.

### *Option 2: Use separate 12V DC power supply*

If you are not using PoE components, connect Quuppa LD-6L to an approved DC power supply using the DC connector. Only use compatible power supplies. Contact Quuppa in case of any uncertainty regarding compatible power supplies.

When the power supply is connected Quuppa LD-6L automatically switches on. The blue indicator light flashes once, after which the red indicator light turns constantly on, until Quuppa LD-6L is connected to the HAIP System.

## Connect to HAIP network

Connect Quuppa LD-6L to the HAIP System with Ethernet CAT5 UTP cable using the RJ-45 Ethernet socket. For your safety and to prevent any damage to Quuppa LD-6L, only connect Quuppa LD-6L to standard certified network components.

The red indicator light is flashing when Quuppa LD-6L is properly connected to the HAIP System but not activated by the HAIP Positioning Engine software.

Follow the Quuppa Deployment tutorial video to configure your Quuppa LD-6L. The blue indicator light is flashing or constantly lit



when Quuppa LD-6L is activated by the HAIP system.

## Reset factory settings

To reset factory settings, press the reset button while connecting power supply and keep it pressed for approximately three seconds until the red indicator light stops flashing. After that the Quuppa LD-6L switches on normally with the default factory settings.

# 3. Installation

## Safety Information

Observe the following safety guidelines when installing Quuppa LD-6L.

- Only a qualified service technician should install or service Quuppa LD-6L using the approved original Quuppa parts supplied in the sales package. Faulty installation or service may be dangerous and may invalidate any warranty which may apply to Quuppa LD-6L.
- End users should remember that Quuppa LD-6L comprises of complex technical equipment that requires professional installation using special tools and expert know-how.
- Instructions given in this guide are general guidelines that apply to the installation of Quuppa LD-6L in an indoor environment. However, due to the wide variety of indoor environments and mounting surfaces, this guide cannot consider the individual technical requirements relevant for any particular installation. Consult Quuppa in case you are uncertain about installation in a specific indoor environment.
- Quuppa LD-6L is designed to operate either with a compatible 12V DC power supply, or by using a standard PoE (Power over Ethernet) compatible network component connected at the

Ethernet socket.

- For your safety, and to prevent any damage to Quuppa LD-6L, only use a compatible power supply. Contact Quuppa in case of any uncertainty regarding compatible power supplies. When using a PoE compatible network component as a power source, only use standard certified network components.
- Quuppa LD-6L has in-built protection for over voltage, but a connection using the wrong polarity might damage the unit.
- When installing Quuppa LD-6L, make sure the installation surface can safely carry the weight of the equipment.
- Your service technician or dealer may be able to provide you with information on alternatives for mounting the equipment suitably in different types of indoor environments.
- Do not smoke when installing the equipment. Make sure there is no source of fire or flame nearby.
- Make sure cables are placed so that they will not be subject to mechanical wear and tear.

## Installing Quuppa LD-6L

This section describes how to install the Quuppa LD-6L onto a ceiling or wall of an indoor environment. The parts are described in “Parts”, p.5.

### Install mounting bracket to the ceiling/wall

The installation begins with the installation of the mounting bracket.

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**TIPS:** the mounting bracket has several holes for mounting screws. Use at least 60mm spacing between the holes to ensure a stable installation.

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The orientation indicator in the mounting bracket (p.7) may be used to align Quuppa LD-6L according to a defined orientation in the environment.

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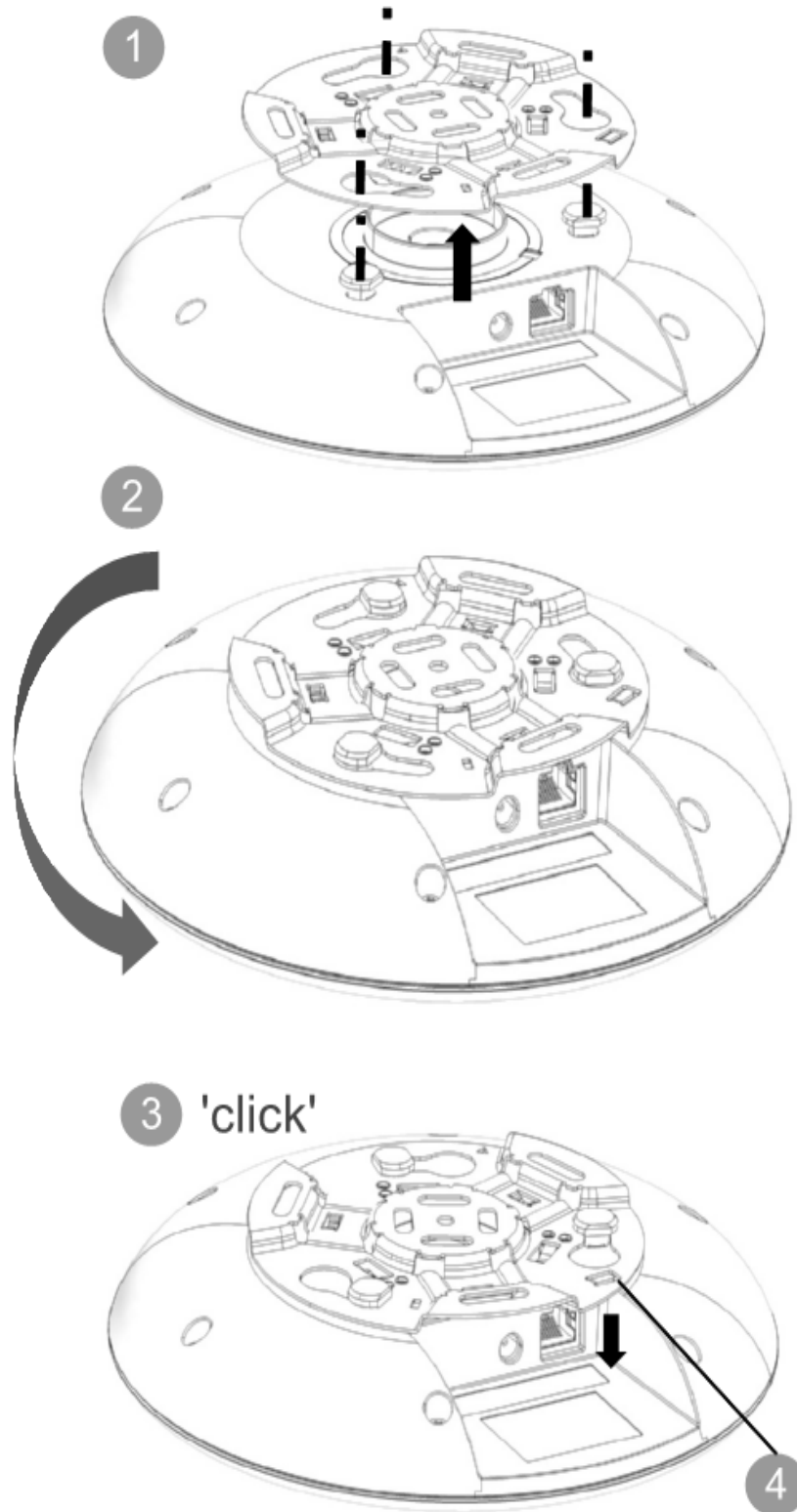
**WARNING:** Never attach, mount, or connect the mounting bracket to hot surfaces. Always make sure that the surface can carry the weight of the equipment before installation.

Not following general safety regulation can cause damage to objects or injuries to people. Rely on qualified personnel for carrying out the installation of Quuppa LD-6L.

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## Install Quuppa LD-6L main unit to the mounting bracket

1. Align Quuppa LD-6L main unit with the bracket by ensuring the orientation mark in the mounting bracket is aligned with the indicator lights on the Quuppa LD-6L main unit.
2. Lift Quuppa LD-6L main unit so that the mounting pins go through the holes in the bracket (1).
3. Rotate the Quuppa LD-6L main unit (2) until you hear a 'click' (3).
4. Bend the safety lock down with a tip of a screwdriver to prevent Quuppa LD-6L main unit being accidentally detached (4).



## 4. Product information

- Operating frequency range: 2400...2483 MHz
- Maximum transmit power: +4 dBm EIRP
- Operating temperature range: 0°C...+60°C
- Storage temperature range: -10°C...+70°C
- Input rating when using DC power supply: 12 V / 500 mA DC
- Operating voltage when using PoE: 48 V
- Typical power consumption: 2 W
- Dimensions Locator main unit: Ø: 202 mm, h: 40 mm
- Dimensions Locator mounting bracket: Ø: 120 mm, h: 5 mm
- Weight: 500g

## 5. Care and Maintenance

Your Quuppa LD-6L is a product of superior design and craftsmanship and should be treated with care. The following suggestions will help you protect your warranty coverage.

- Keep Quuppa LD-6L dry. Precipitation, humidity and all types of liquids or moisture can contain minerals that will corrode electronic circuits.
- Do not use or store Quuppa LD-6L in dusty, dirty areas. Its moving parts and electronic components can be damaged.
- Do not attempt to open the Quuppa LD-6L.
- Do not use harsh chemicals, cleaning solvents, or strong detergents to clean the locator. Only use a soft, clean, dry cloth to clean the surface of Quuppa LD-6L.
- Do not paint Quuppa LD-6L.

## Recycle

Always return your used electronic products, batteries, and packaging materials to dedicated collection points. This way you help prevent uncontrolled waste disposal and promote the recycling of materials.



The crossed-out wheeled-bin symbol on your product, battery, literature, or packaging reminds you that all electrical and electronic products, batteries, and accumulators must be taken to separate collection at the end of their working life. This requirement applies in the European Union. Do not dispose of these products as unsorted municipal waste.

## 6. Copyright and other notices

### DECLARATION OF CONFORMITY

Hereby, Quuppa Oy declares that this Quuppa LD-6L product is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC. A copy of the Declaration of Conformity can be found at

<http://www.quuppa.com/declaration-of-conformity>

**CE 0560**

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### FCC NOTICE

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; and 2. This device must accept any interference received, including interference that may cause undesired operation. 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. NOTE: FCC Radiation Exposure Statement: This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter. NOTE: Changes or modifications not expressly approved by Quuppa could void the user's authority to operate the equipment.

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