NavLive

NavLive Radius v3

Regulatory & Safety Information

User Manual — RADv3

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1. Safety Directions

1.1 General Introduction

The following directions enable the person responsible for the product and the person who uses the equipment to anticipate and avoid operational hazards. The person responsible for the product must ensure that all users understand these directions and adhere to them.

This manual must be made available to all persons performing any tasks described herein. Warning messages are an essential part of the safety concept — they alert users to direct and indirect hazards and contain general rules of behaviour. All safety instructions shall be strictly observed.

1.2 Definition of Use

Intended Use

- Collection of 3D spatial data by means of LiDAR, optical camera, and inertial data inputs.
- Surveying and documentation of construction, architecture, and engineering sites.
- Operation in dry, non-hazardous indoor and outdoor environments.

Reasonably Foreseeable Misuse

- Use of the product without instructions.
- Use outside of the intended limits.
- Disabling safety systems.
- Opening the product using tools unless explicitly permitted by NavLive Ltd for specific maintenance.
- Use of the product with recognisable damage or defects.
- Use with accessories or batteries from other manufacturers without prior explicit approval from NavLive.

1.3 Limits of Use

- **Environment:** Suitable for use in an atmosphere appropriate for permanent human habitation. The device is not suitable for use in aggressive or explosive environments.
- **Operating Temperature:** −5°C to +35°C.
- **Storage Temperature:** 0°C to +40°C.
- **Ingress Protection:** IP42. The device body is rated for dry environments. Do not use in heavy rain or submerge in water.

1.4 Responsibilities

Manufacturer:

NavLive Ltd is responsible for supplying the product, including the User Manual and original accessories, in a safe condition.

Person Responsible for the Product:

Must ensure that the equipment is used in accordance with these instructions. This person is accountable for the training of personnel and for the safety of the equipment when in use.

1.5 Hazards of Use

> **WARNING**
>
> **Distraction:** Walking while scanning can lead to tripping or collision hazards. Always pay attention to the environment, obstacles, excavations, or traffic.

> **WARNING**
>
> **Working Site Security:** Ensure the working site is adequately secured. Adhere to regulations governing safety, accident prevention, and road traffic.

> **CAUTION**
>
> **Rotating Parts:** The LiDAR sensor contains a rotating mirror. Do not touch the sensor window during operation. Mechanical stress or impact to the sensor head can permanently damage the calibration.

> **NOTICE**
>
> **Disposal:** The product must not be disposed of with household waste. Dispose of the product appropriately in accordance with the national regulations in force in your country. Always prevent access to the product by unauthorised personnel.

1.6 Laser Classification

The NavLive Radius v3 contains a rotary LiDAR sensor.

- **Classification:** Class 1 Laser Product (Eye Safe).
- **Wavelength:** 885 nm
- **Frame Rate:** 10 Hz
- **Scanning Method:** Mechanical Rotation

Compliance statement:

This LiDAR contained within this product complies with IEC 60825-1: 2014, EN 60825-1: 2014 + A11: 2021 and complies with FDA performance standards for laser products except for conformance with IEC 60825-1 Ed.3., as described in Laser Notice No.56, dated May 8, 2019.

1.7 Electromagnetic Compatibility (EMC)

> **WARNING**
> Electromagnetic radiation can cause disturbances in other equipment. Although the product meets the strict regulations and standards which are in force in this respect, NavLive Ltd cannot completely exclude the possibility that other equipment — such as medical devices including pacemakers and hearing aids — may be disturbed, or that humans or animals may be affected.

1.7.1 Use of Product with Radio or Digital Cellular Phone Devices

- Do not operate the product with radio or digital cellular phone devices in the vicinity of filling stations or chemical installations, or in other areas where an explosion hazard exists.
- Do not operate the product with radio or digital cellular phone devices in close proximity to medical equipment.
- Do not operate the product with radio or digital cellular phone devices in aircraft.
- Do not operate the product with radio or digital cellular phone devices for long periods with the product immediately next to your body.

2. Battery Safety & Power

The NavLive Radius v3 is powered by a Lithium-ion battery (V-Mount).

> **WARNING**
> Risk of Fire and Electric Shock. Follow all battery handling instructions below carefully. Misuse of lithium-ion batteries can result in fire, electric shock, or personal injury.

Charging

Offline Charging Only:
The battery must be removed from the scanner to be charged. The scanner device does not charge the battery in situ.

Direct Power:
The scanner may be powered directly via its USB-C port during operation, but this will not charge the attached battery.

Charging Instructions

- Disconnect the battery from the NavLive Radius v3.
- Connect a compliant USB-C PD (Power Delivery) charger directly to the USB-C port on the battery itself.
- Ensure the battery is fully charged before re-attaching it to the scanner.

Battery Handling

- Do not use the battery if it shows signs of damage, swelling, leakage, or deformation.
- Do not short-circuit the contacts. Keep the battery away from metal objects (keys, coins) when not in use.
- Do not expose the battery to temperatures above 60°C or incinerate.

Transport

Lithium-ion batteries are subject to Dangerous Goods Regulations (IATA / IMDG / ADR) for transport.

> **WARNING**
> Damaged or defective batteries are strictly prohibited from air transport. Contact your airline or freight forwarder before travelling.

3. Product Overview

3.1 Intended Use

The NavLive Radius (RADv3) is a portable, battery-powered handheld sensor scanner designed for architects, engineers, and surveyors to capture building data.

It is intended for use in residential, commercial, and industrial environments.

3.2 Technical Specifications

Feature	Specification
Model Name	Radius (RADv3)
Power Input	20V DC, 3A (via Adapter) or 14.8V DC (via Battery)
Battery Type	Rechargeable Li-ion (14.8V, 3400mAh, 50Wh)
Weight	2.25 kg
Dimensions	~113 mm × 108 mm × 272 mm
Operating Temperature	Max 35°C
IP Rating	IP40 — No water protection
Connectivity	USB-C tethered to mobile device running the NavLive app
Laser Classification	Class 1 (IEC 60825-1) — Eye Safe

4. Installation & Operation

4.1 Setup

1. Attach Battery:

Slide the fully charged ZG-V50 battery onto the V-mount interface on the back of the scanner until it clicks securely.

2. Connect Phone:

Attach your Android device to the mount and connect it to the Radius using the provided USB-C cable.

3. Power On:

Press the power button to turn on the unit. Wait for the device status indicator to confirm readiness before scanning.

4.2 Performing a Scan

- Open the NavLive App on your mobile device.
- Walk through the target environment at a steady, consistent pace.
- Ensure sufficient clearance around the device for cooling ventilation — do not obstruct airflow around the sensor head.
- To stop, press the stop button in the app.
- Shutdown: Turn off the device and remove the battery when transporting by air or storing for extended periods.

5. Conformity to National Regulations

5.1 EU & UK Declaration of Conformity

NavLive Ltd declares that the radio equipment type NavLive Radius v3 is in compliance with Directive 2014/53/EU (Radio Equipment Directive) and the Radio Equipment Regulations 2017 (S.I. 2017/1206).

Manufacturer Address:

NavLive Ltd
Oxford Eco Centre, Osney Mead
Oxford, OX2 0ES, United Kingdom

5.2 Wireless Module

The device contains an Intel Wireless-AC 9260 module. The integrated Wi-Fi radio module is included in the device for manufacturing and internal configuration purposes only. During production, this interface may be used by NavLive to perform software installation, system configuration, and verification activities.

In the final shipped configuration:

- The Wi-Fi interface is not accessible to end users.
- The device provides no user interface, software control, or external interface enabling operation of the Wi-Fi radio.
- The device does not rely on the integrated Wi-Fi radio for any functional or operational use.
- All normal device operation is performed without use of the integrated Wi-Fi radio.

Network connectivity in normal operation is achieved via a wired USB connection to an external mobile device, which provides network access independently of the integrated Wi-Fi module. The integrated Wi-Fi radio is not intended for use in the field, and no functionality is provided to enable or control radio operation during normal use.

5.3 FCC Statement (USA)

FCC Supplier's Declaration of Conformity

- **Product Name:** Radius, RADv3
- **Component ID:** Contains FCC ID: PD99260NG (Intel Wireless-AC 9260 Module)

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

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

RF Exposure Compliance

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. An RF exposure evaluation has been performed for the integrated radio module under controlled operating conditions. Based on this evaluation, the device is exempt from SAR evaluation requirements in accordance with FCC guidance. The integrated radio module is not intended for use during normal operation of the device and is not accessible to end users.

> **CAUTION**
> Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

5.4 RCM Certification of Compliance

Hereby, NavLive Ltd declares that the Radius v3 device is in compliance with RCM legislation.

- **Certificate No.:** MA260304.01
- **Model:** Radius v3
- **Manufacturer:** NavLive Ltd

5.5 Waste Electrical & Electronic Equipment (WEEE)

The product must not be disposed of with household or general municipal waste. The product must be collected separately to allow for the recovery and recycling of the materials used. Please contact your local authority or dealer for information on the correct disposal method.

6. Maintenance & Warranty

6.1 Cleaning

Procedure:

A microfibre cloth is provided with the device for cleaning. Clean only with a dry cloth. Do not use liquid cleaners or solvents.

Maintenance:

The system does not require user preventive maintenance. Do not attempt to open the device casing.

6.2 Warranty

The manufacturer's warranty is valid for one year from the date of purchase. Warranty is void if instructions for usage are not followed, or if the device is opened by unauthorised personnel.

For warranty enquiries, contact:

customersupport@navlive.ai