

*User Manual for
Anchor Unit AR303
part of
IntraPosition's Indoor Positioning System*

IntraPosition

40 Hatakhana

Binyamina, Israel

<https://www.intraposition.com/>

Tel: +972-52-3331059



1. Revision History

Version	By	Date	Details
1.0	Yaron Shavit	Jul 29, 2018	First Draft

2. Important Information

The AR303 is an anchor, designed to operate as part of a UWB positioning system by IntraPosition.

It should only be installed and operated by a technician certified by IntraPosition.

The device is designed to be installed indoors, typically mounted on the ceiling of a premises in which the positioning system operates.

3. Technical Support

For any issue with the system, please contact support@intraposition.com

4. Introduction

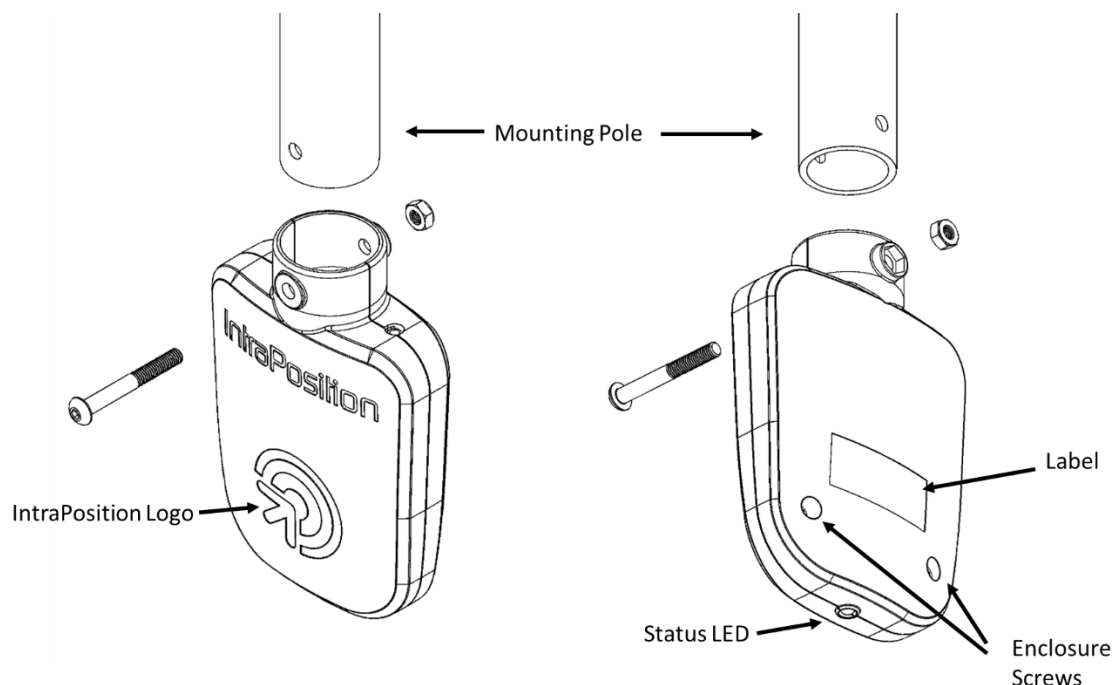
This manual is to be used by certified technician which were specifically authorized by IntraPosition to install and modify its positioning system. Anyone does not qualify as such should not attempt to install, relocate or modify an AR303 device.

The AR303 is one of the devices comprising IntraPosition's positioning system, serving as an anchor either in a time-difference-of-arrival (TDoA) or Two-way-Ranging implementations. The device is stationary, installed in a fixed position and for indoor usage only.

5. Product Overview

The AR303 serves as an anchor in a UWB positioning system. It carries a UWB transceiver and a Wi-Fi transceiver. IntraPosition's positioning system is designed to track objects or people indoors, as long as they carry a designated tag.

6. Product Diagram



7. Technical Specification

AR303 UWB Anchor

Operating Temperature	-20 to 60 °C (-4 to 140 °F)
Power Supply	12V, 0.7W
Frequency	2.4MHz (Wi-Fi), 3.993 GHz (UWB)

8. Usage and Limitations

AR303 is meant to be installed by certified technicians only. The end-user, using the positioning system has no direct interaction with it.

AR303 is meant to operate indoors only and should be kept dry with no exposure to water or moisture.

The device is self-calibrating and designed for over-the-air firmware updates.

9. Regulatory Requirements

This device may only be operated indoors. Operation outdoors is a violation of 47U.S.C 301 and could submit the operator to serious legal penalties.

9.1. FCC Interference Statement (Part 15.105(b))

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.

9.2. FCC Part 15 Clause 15.21:

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

9.3. FCC Compliance

This device FCC ID is 2AN99AR303. 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

In order to comply with FCC RF Exposure requirements, this device must be installed to provide at least 20 cm separation from the human body at all times.