

RF Beacon V3 User Manual	Version:	1.10
	Date:	04-11-2021
	Page:	1 of 7

RF Beacon V3 User Manual

Date:	04-11-2021
Version:	1.0

Owned by:	Brad Buike	Head of Product Engineering
Prepared by:	Brad Buike	Head of Product Engineering
Checked by:	Francesco Mazzei	Electronics Engineer
Approved by:	Charles Lewinton	CTO

COMMERCIAL IN CONFIDENCE

The material contained in this document may not be copied, published, transmitted, reproduced or disclosed, in whole or in part without the prior written permission of buddi Ltd.

© buddi Ltd 2021

Talbot House, 17 Church Street, Rickmansworth, Hertfordshire WD3 1DE.

COMMERCIAL IN CONFIDENCE

RF Beacon V3 User Manual	Version:	1.10
		04-11-
	Date:	202130-05-
		14
	Page:	2 of 7

DOCUMENT HISTORY

Version	Date	Author	Description
1.0	04-11-2021	B Buike	First Release

REFERENCED DOCUMENTS

Ref.	Document Name	Version	Date

COMMERCIAL IN CONFIDENCE

The material contained in this document may not be copied, published, transmitted, reproduced or disclosed, in whole or in part without the prior written permission of buddi Ltd.

© buddi Ltd 2021

Talbot House, 17 Church Street, Rickmansworth, Hertfordshire WD3 1DE.

COMMERCIAL IN CONFIDENCE

RF Beacon V3 User Manual	Version:	1.10
		04-11-
	Date:	202130-05-14
	Page:	3 of 7

CONTENTS

1.	Introduction	4
2.	Equipment Description	4
3.	RF Beacon V3 Installation	5
4.	RF Beacon V3 Operation	5
5.	RF Beacon V3 Collection / Inspection / Cleaning	6
5.1.	Collection	6
5.2.	Inspection	6
5.3.	Cleaning	6
6.	FCC warning statement.....	7

COMMERCIAL IN CONFIDENCE

The material contained in this document may not be copied, published, transmitted, reproduced or disclosed, in whole or in part without the prior written permission of buddi Ltd.

© buddi Ltd 2021

Talbot House, 17 Church Street, Rickmansworth, Hertfordshire WD3 1DE.

COMMERCIAL IN CONFIDENCE

RF Beacon V3 User Manual	Version:	1.10
		04-11-
	Date:	202130-05-14
	Page:	4 of 7

1. Introduction

This document is intended to be the source reference material for using the RF Beacon V3 product, with the exception of electronic configuration (including set-up and interaction with the Smart Tag and on-line monitoring portal). The emphasis here is upon describing the physical features, power source, and correct installation or removal.

2. Equipment Description



The RF Beacon is a plug based device that is inserted into a fixed mains socket, to provide a location reference for the Smart Tag equipment. The device is available in different pin configurations to allow for direct connection to mains supply in the country of use, without the need for an adaptor.

COMMERCIAL IN CONFIDENCE

The material contained in this document may not be copied, published, transmitted, reproduced or disclosed, in whole or in part without the prior written permission of buddi Ltd.

© buddi Ltd 2021

Talbot House, 17 Church Street, Rickmansworth, Hertfordshire WD3 1DE.

COMMERCIAL IN CONFIDENCE

RF Beacon V3 User Manual	Version:	1.10
		04-11-
	Date:	202130-05-14
	Page:	5 of 7

3. RF Beacon V3 Installation

The RF Beacon V3 should be plugged into a fixed power socket in the home of the wearer. A red light on the end of the device will indicate that the unit is powered and working.

The device will not require any servicing, control, adjustment or maintenance during the period of installation. Once installed it should remain in place for the duration of the wearer's time with the Smart Tag.

The RF Beacon V3 should not be installed in a place where it will be exposed to high temperatures, such as near an open flame or heat-emitting equipment.

To avoid interference to nearby appliances, do not place RF Beacon V3 on or near a TV, microwave oven, or VCR. If the RF Beacon V3 does cause harmful interference to radio or television reception, increase the separation between the RF Beacon V3 and receiver.

4. RF Beacon V3 Operation

The Smart Tag makes a wireless connection to an RF Beacon V3 when it is detected in proximity to the Smart Tag. Each RF Beacon V3 has its own unique ID, and the location of the subject residence is associated to that unique RF Beacon V3, as the RF Beacon V3 is not a GPS receiver in its own right. In this way the monitoring authority can be assured that the subject is at the home location at all times the Smart Tag is in range of the RF Beacon V3.

When the subject is at home the Smart Tag would continue to seek GPS locations at the intervals set by the monitoring authority, the use of the RF Beacon V3 is intended to reduce the need for repeated GPS fixes while the subject is known to be at home, resulting in significantly less demand on battery power.

The RF Beacon V3 does not have a battery back-up, therefore in cases of power interruption or deliberate disconnection location fixes by GPS will continue from the Smart Tag when it cannot see the RF Beacon V3.

COMMERCIAL IN CONFIDENCE

The material contained in this document may not be copied, published, transmitted, reproduced or disclosed, in whole or in part without the prior written permission of buddi Ltd.

© buddi Ltd 2021

Talbot House, 17 Church Street, Rickmansworth, Hertfordshire WD3 1DE.

COMMERCIAL IN CONFIDENCE

RF Beacon V3 User Manual	Version:	1.10
		04-11-
	Date:	202130-05- 14
	Page:	6 of 7

5. RF Beacon V3 Collection / Inspection / Cleaning

5.1. Collection

When collecting an RF Beacon V3 from a subject, protective gloves should be worn.

- Note any obvious sign of damage.
- Return the RF Beacon V3 to the vehicle for inspection and cleaning.

5.2. Inspection

The RF Beacon V3 should be inspected for signs of damage, units with damage should be dealt with in accordance with local protocols. Damage includes any significant surface marking which may be indicative of the unit being exposed to high impacts or tampering. Special care should be taken to inspect the following areas;

- Any seams between plastics, check for loose fits or evidence of attack by screwdriver or similar.
- Pins for insertion into the mains electrical socket are undamaged.

5.3. Cleaning

If there is any heavy soiling or biological matter on the unit that is unlikely to be easily removed by a sanitising wipe, then the unit should be cleaned thoroughly in line with local protocol. It should be noted that the RF Beacon V3 is only a splash proof product and therefore it is important not to fully immerse the unit in any liquid.

To sanitise an RF Beacon V3 in the field the following process should be followed;

- Wear gloves.
- Rub the unit vigorously with an approved sanitising wipe, ensuring all surfaces receive a good covering of alcohol.
- Allow to dry in a well-ventilated area.

The unit can then be returned to stock for re-use.

COMMERCIAL IN CONFIDENCE

The material contained in this document may not be copied, published, transmitted, reproduced or disclosed, in whole or in part without the prior written permission of buddi Ltd.

© buddi Ltd 2021

Talbot House, 17 Church Street, Rickmansworth, Hertfordshire WD3 1DE.

COMMERCIAL IN CONFIDENCE

RF Beacon V3 User Manual	Version:	1.10
		04-11-
	Date:	202130-05- 14
	Page:	7 of 7

6. FCC warning statement

- 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 complies with FCC radiation exposure limits set forth for an uncontrolled environment. End users must follow the specific operating instructions for satisfying RF exposure compliance. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.
- Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment
- Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
- Note: 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.

COMMERCIAL IN CONFIDENCE

The material contained in this document may not be copied, published, transmitted, reproduced or disclosed, in whole or in part without the prior written permission of buddi Ltd.

© buddi Ltd 2021

Talbot House, 17 Church Street, Rickmansworth, Hertfordshire WD3 1DE.

COMMERCIAL IN CONFIDENCE

RF Beacon V3 User Manual	Version:	1.10
		04-11-
	Date:	202130-05- 14
	Page:	8 of 7

7. IC Warning

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions:

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

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

- (1) l'appareil ne doit pas produire de brouillage, et
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement

COMMERCIAL IN CONFIDENCE

The material contained in this document may not be copied, published, transmitted, reproduced or disclosed, in whole or in part without the prior written permission of buddi Ltd.

© buddi Ltd 2021

Talbot House, 17 Church Street, Rickmansworth, Hertfordshire WD3 1DE.

COMMERCIAL IN CONFIDENCE