Excellence in Compliance Testing

Certification Exhibit

FCC ID: Z9O-FAS1533
IC: 10060A-FAS1533

FCC Rule Part: 15.209, 15.231, 15.249
IC Radio Standards Specification: RSS-210

ACS Project: 13-2145

Manufacturer: UltraClenz, LLC
Models: FAS1533-00, FAS1533-01,
FAS1533-02, FAS1533-03

User Manual

FAS1533 Smart Link Dispenser Beacon Module User's Guide

Revision 2
04/08/14

UltraClenz, LLC

Table of Contents

Revision History

Revision	Date	By	Description
0	11/22/13	JH	Initial Release
1	01/16/14	JH	Changed title and changed the purpose
2	04/08/14	AP	Add Appendix A

1.0 Purpose

To explain how the FAS1533 functions. The detailed procedures demonstrate how the led's, service flag, range switches and dispense activation work.

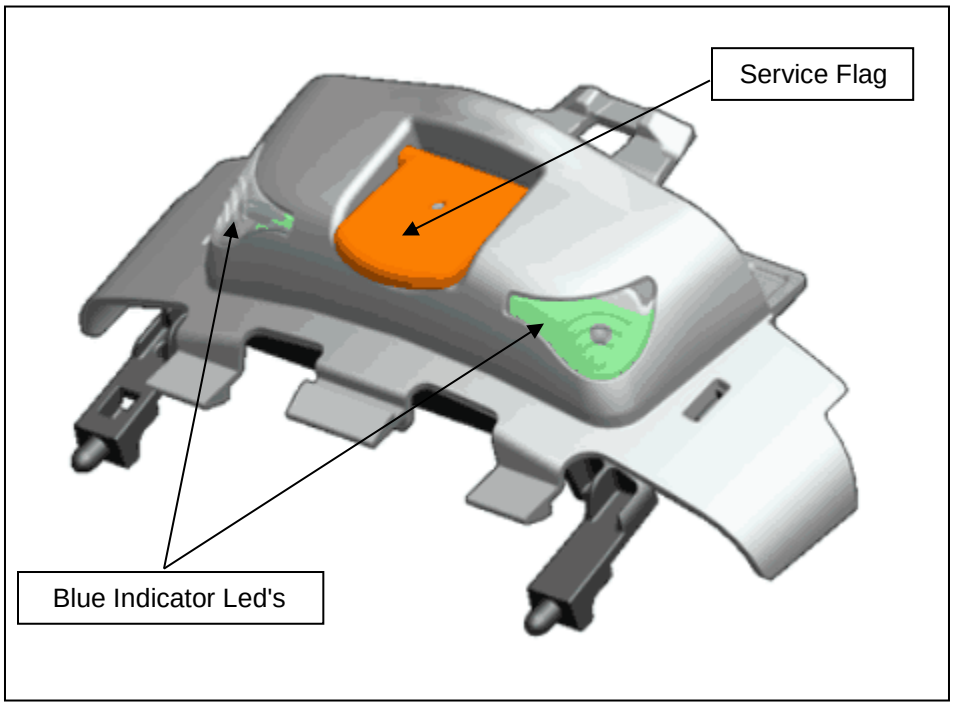

Fig.1 - FAS1533 Compact Dispenser Beacon

2.0 Applying Power

2.1 Procedure

1. The dispenser power is disabled to prevent the phono jack contacts from the shorting out the gearbox.

2. Insert the phono jack and verify the connection is fully engaged.

3. If a Patient Safeguard Badge (PSS) is within the low frequency field (approximately 24" or 61cm) the FAS1533 will detect the badge and alternately flash the blue led's twice. This is a firmware power reset and brownout condition that will only happen on the first time power is applied. The power cycle will transmit (via the high frequency - PCB8001 tag) as an activation along with the detected badge address.

   If there is no badge present the power cycle will transmit (via the high frequency - PCB8001 tag) as an activation and no badge address will be displayed (00,00,00,00).

3.0 Service Flag

3.1 Purpose

The service flag is used to indicate the dispenser needs a replacement cartridge. When the service flag is moved from the down (resting)position to the up (latched) position (seeFig.2),the replace cartridge bit will be set and transmitted on the next heartbeat message. When the attendant has replaced the cartridge the service flag will be returned to the down position the replace cartridge bit will be cleared and transmitted on the next heartbeat.

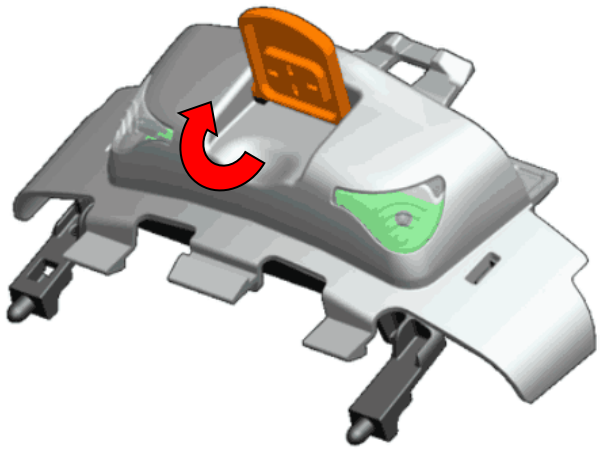

Fig.2 - Service Flag Latched in the Up Position

3.2 Procedure

1. Apply power to the FAS1533.
2. Move the service flag from the down to the latched up position.
3. Both led's will flash twice.
4. Wait a few seconds.
5. Move the service flag from the up position to the down.
6. Both led's will flash once.

4.0 Range Buttons

4.1 Purpose

The purpose of the Range switches is to increase (+) or decrease (-) the low frequency communications distance between the dispenser beacon and badge.

4.2 Procedure

1. Apply power to the dispenser beacon
2. Push and release the + range switch four times
3. The blue led will flash once with each activation
4. Push and release the + range switch once (fifth position)
5. The led will flash twice indicating the range is set to maximum. If this does not occur depress both the + and - simultaneously to set to factory default . The blue led will flash 4 times to indicate factory default range. Test again.
6. Push and release the - range switch four times
7. The blue led will flash once with each activation
8. Push and release the - range switch once (fifth position)
9. The led will flash twice indicating the range is set to maximum. If this does not occur depress both the + and - simultaneously to set to factory default . The blue led will flash 4 times to indicate factory default range. Test again.

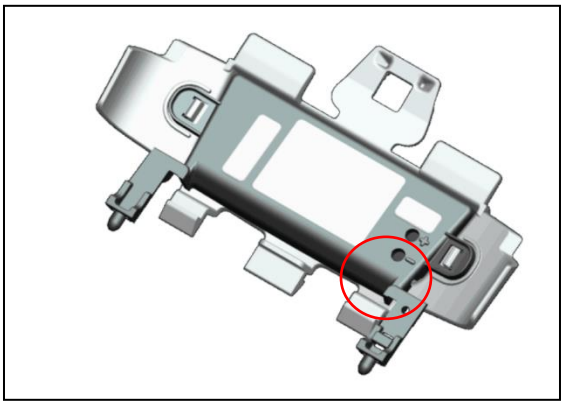

Fig.3 - Range Switches

5.0 Event Activation

5.1 Procedure with a Badge

1. Apply power
2. Place a test badge 24" or 61 cm or less near the beacon
3. Trigger a dispense event on the phono jack
4. The blue led's will alternate twice indicating a badge was detected
5. The event will be transmitted with the badge address

5.2 Procedure without a Badge

1. Apply power
2. Trigger a dispense event on the phono jack
3. The blue led's not light
4. The event will be transmitted without a badge address

Appendix A – FCC and Industry Canada Statements

Warning: Changes or modifications to this device not expressly approved by UltraClenz, LLC could void the user's authority to operate the equipment.

Class B Devices:

"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."*

RF Exposure

"This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter."

Industry Canada Statements:

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

Conformément à la réglementation d'Industrie Canada, le présent émetteur radio peut fonctionner avec une antenne d'un type et d'un gain maximal (ou inférieur) approuvé pour l'émetteur par Industrie Canada. Dans le but de réduire les risques de brouillage radioélectrique à l'intention des autres utilisateurs, il faut choisir le type d'antenne et son gain de sorte que la puissance isotrope rayonnée équivalente (p.i.r.e.) ne dépasse pas l'intensité nécessaire à l'établissement d'une communication satisfaisante.

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.