



TELEMATICS  
MOBILE INFORMATION EXCHANGE

## Tabs Beacon Installation Guide



## Table of Contents

1	Introduction.....	3
2	Environmental Considerations.....	3
3	Regulatory Compliance .....	3
4	Hardware Installation.....	3
4.1	Part numbers.....	4
4.2	Activation Procedure and Beacon Install Mode .....	4
4.3	Installing the Beacon .....	5

## 1 Introduction

The Tabs Beacon is a part of the MiX Tabs solution. The beacon is wireless and battery operated making it easy to install. It is also fitted with a movement sensor and a built-in GPS. The beacon communicates, via a radio link, with a Mobile Base Station (MBS) or a Fixed Base Station (FSB). The MBS and FSB network relay the beacon information to the remote server via a GSM link.



## 2 Environmental Considerations

- The Tabs Beacon can be installed in places where it is exposed to water jets and temporary immersion into water.
- The Tabs Beacon was designed to endure standard transport vibration and shock.
- The Tabs Beacon can endure a limited number of accidental drops.
- The operating temperature for the Tabs Beacon is between -20 and 85 °C.

## 3 Regulatory Compliance

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.

No changes / modifications shall be made to the equipment without the manufacturer's permission as this may void the user's authority to operate the equipment.



This equipment complies with FCC radiation exposure limits for an uncontrolled environment. This equipment shall be installed and operated with a minimum distance of 20 cm (7.9 in) between users and/or bystanders and the device.

## 4 Hardware Installation

The unit is battery operated and no wire connections are needed to install the unit. The Tabs Beacon product has been designed for tracking and locating mobile assets typically in a vehicular environment. The only time this product should come into physical contact with the user is during activation. After activation the Tabs Beacon must be mounted in a suitable location greater than 20cm away from the user and bystanders to prevent tampering.

**IMPORTANT:** This product must not be used for tracking personnel.


## 4.1 Part numbers

Part Number	Name	Description	Picture
440FT0962	Tabs Beacon B59B	Tabs Beacon B59B Electronic Unit (Frequency 915 MHz)	
440FT0997	Tabs Beacon B54B	Tabs Beacon B54B Electronic Unit (Frequency 433 MHz)	

## 4.2 Activation Procedure and Beacon Install Mode




The beacon is supplied in a shipping mode from the factory. In this mode it is completely inactive and needs to be activated before it is installed or it will not be functional. Activation is normally performed automatically during the commissioning process when it is done by the Tabs Technician Tool. There is however also a manual process that can be used to activate the beacon that involves rotating it in a specific way (see step 1 below).

The process of activation causes the Beacon to enter its install mode. Visual confirmation of this is provided by the flashing of the red LED for 10 seconds (see step 2 below). In install mode the beacon will transmit more frequently (every 8 seconds) to assist with confirming the success of the installation process. After 1 hour in Install Mode the Beacon will automatically revert to normal operation. Install Mode can be reactivated at any time simply by repeating the activation process.

Step	Part Number	Picture	Description
1	440FT0962 or 440FT0997		Rotate the Tabs Beacon at least 10 times to the left and right in the longitudinal axis through 180°, changing direction once every second

2	440FT0962 or 440FT0997		<p>After about 10 rotations through 180°, the LED beneath the window will flash for about 10seconds to indicate that the Beacon has activated and entered its install mode.</p>
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### 4.3 Installing the Beacon

Step	Part Number	Picture	Description
1	440FT0962 or 440FT0997		<p>For a vertical mount: The Tabs Beacon must be installed with the GPS side, the side where the lid is, pointing towards the sky.</p>
2	440FT0962 or 440FT0997		<p>For a horizontal mount, the label side should point towards the ground.</p>
3	440FT0962 or 440FT0997		<p>Attach the beacon securely to the asset using at least two (2) cable ties such as RS Pro Black Nylon Non-Releaseable Cable Tie, 300mm x 4.8mm RS Stock no.233-487 or similar. Cable tie size may vary based on installation requirement.</p> <p>Ensure that the location selected allows the beacon to</p>

					<p>be mounted without any metal obscuring its view of the sky.</p> <p>Care should also be taken to select a location on the asset where the beacon is least likely to be damaged during day-to-day use of the asset</p>
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