

## Indoor localization

**iBeacon-LB** is a microcode (firmware) that allows you to use Motorola MOTOTRBO's portable localization features with all MikadoLT products, as well as all the software applications associated with HFI products: GeoGuardTour (HFI), ALERT (Micromedia International), ... or any other application compatible with the HIP protocol.

**iBeacon-LB** can be used with the MOTOTRBO wireless handhelds supporting the Indoor location, and equipped with a Motorola (GOB), HFI (POB-MD4, RF800-MD4, ...) option card, or the portable option card option. MOTOTRBO SL4010e.

### Main benefits

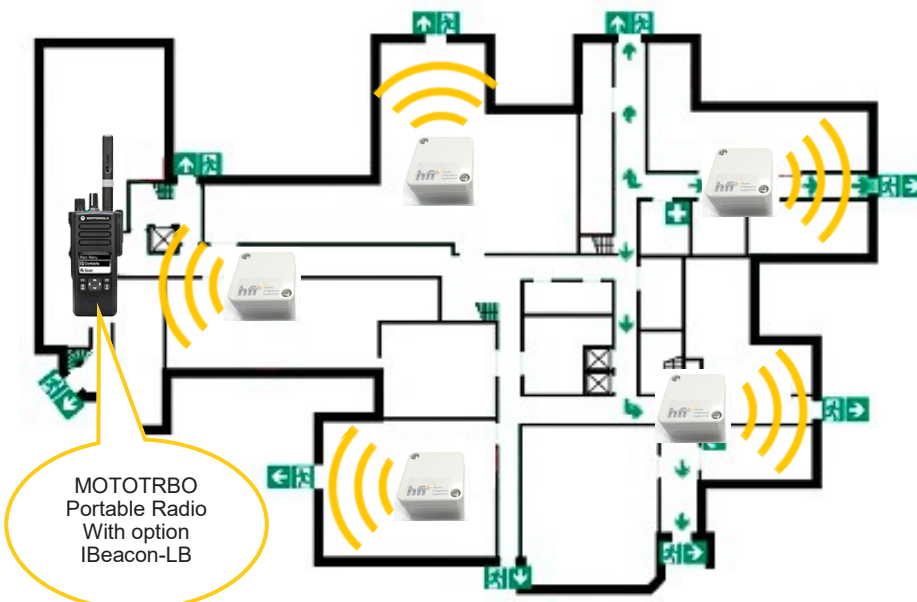
This firmware allows using iBeacon BlueTooth tags to deploy an economical indoor location solution.

The operation is fully compatible with all HFI Indoor location systems and software, which can now be used with either iBeacon tags or RF800 tags operating in the 868 / 915MHz radio band.

Advanced location information processing algorithms are used to optimize communications with applications, allowing better accuracy for limited bandwidth usage.

In addition, all of the standard features of HFI option cards are available to adapt the radio system to the specific needs of each user:

- localization (permanent follow-up mode or simple PTI, indoor iBeacon and RF800, etc.)
- telephony (control of the repeater interface)
- Lone worker safety (advanced accelerometer and alarm control)
- Etc.



### Implementation of beacons :

Beacons can be installed either on compulsory crossing areas or to cover large areas (sheds, workshops, laboratories, etc.)

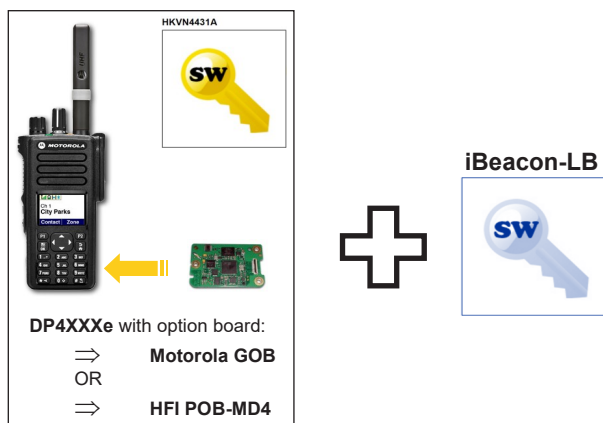
Their configuration settings allow different markup solutions and can be used in many areas.

• **Compatible MOTOTRBO radio handhelds:**

⇒ **DP4401e, DP4601e, DP4801e, DP3441e ou DP3661e with options :**

- ◇ Motorola Indoor Location Tracking - Licence Key
- ◇ Motorola Generic Option Board or HFI Option Board (any type)
- ◇ **HFI iBeacon-LB** - Microcode

*Note: the « man-down » feature is provided by HFI microcode iBeacon-LB*



⇒ **SL4010e with options :**

- ◇ Motorola Indoor Location Tracking - Licence Key
- ◇ Integrated Mandown - Licence Key
- ◇ **HFI iBeacon-LB** - Microcode



• **iBeacon :**

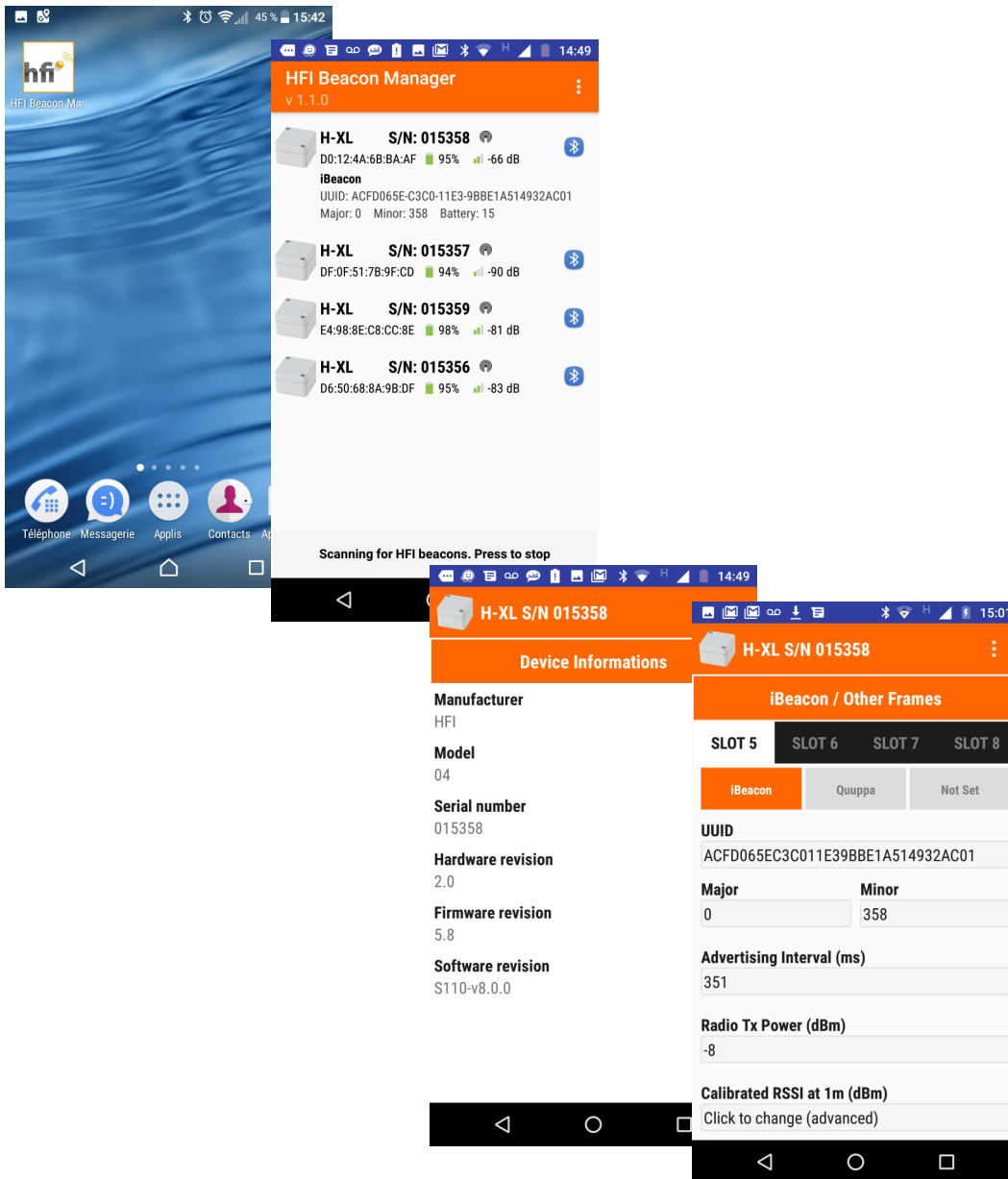
- ◇ Dimensions : 50 x 52 x 35
- ◇ IP65 / UL94 HB
- ◇ Battery : Lithium CR17345
- ◇ Certification CE (Directive 1995/5/CE R&TTE, 2011/65/UE RoHS2) iBeacon



## Setting iBeacons :

The different parameters of the tags are adjustable using an Android application:

- ◇ Transmit power
- ◇ Transmit period
- ◇ RSSI / 1 m
- ◇ Etc...



Some features are optimized for use with MOTOTRBO radios :

- Programmable transmit time in mS to meet Motorola recommendations for indoor location deployment
- Permanently broadcast battery status (4-bit MSB from Minor field)
- Etc ...